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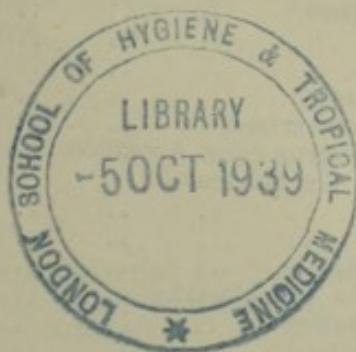
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CITY OF LEEDS



REPORT
ON THE
Health & Sanitary
Administration
OF THE CITY
FOR THE YEAR 1938

By J. JOHNSTONE JERVIS, M.D., D.P.H.,
Medical Officer of Health.

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Councillor D. BEEVERS	„ GERTRUDE WARDLE.
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„ ADA HEWITT.	„ J. W. BOOTH.
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Councillor GERTRUDE WARDLE.	„ Z. P. FERNANDEZ, M.D.
„ LIZZIE NAYLOR, J.P.	„ ADA HEWITT.
„ D. BEEVERS.	„ W. SPENCE.
„ H. M. G. MCKAY.	

CO-OPTED MEMBERS.

Mrs. R. H. BLACKBURN.	Mrs. AUSTYN BARRAN.
Mrs. D. BEEVERS.	Mrs. E. A. SMITH.

CO-OPTED MEMBERS FOR INFANTS' HOSPITAL, WYTHIER.

Mrs. B. M. DAVID.	Mrs. T. L. E. SPILMONT.
Dr. CLARA STEWART.	

TUBERCULOSIS.

Chairman : Councillor D. BEEVERS.

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„ BEATRICE C. IVES.	„ ADA HEWITT.

JOINT DAY NURSERIES.

Chairman : Alderman A. E. WEAVER.

<i>Representing Maternity and Child Welfare Committee.</i>	<i>Representing Education Committee.</i>
Councillor GERTRUDE WARDLE.	Mrs. D. MURPHY, J.P.
Mrs. D. BEEVERS.	

Representing Leeds Day Nurseries Association :

Councillor GERTRUDE HALBOT, J.P.	Councillor BEATRICE C. IVES.
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CATTLE DISEASES, MILK AND MEAT.

Chairman : Councillor BEATRICE C. IVES.

Alderman Sir GEORGE MARTIN, K.B.E., J.P.	Councillor ADA HEWITT.
„ ELIZABETH BOOTH.	„ WINIFRED SHUTT.
Councillor J. W. HEMINGWAY.	„ LIZZIE NAYLOR, J.P.
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„ WINIFRED SHUTT.	„ GERTRUDE WARDLE.
„ W. SPENCE.	

PUBLIC HEALTH STAFF.

Medical Officer of Health and Chief Tuberculosis Officer	J. JOHNSTONE JERVIS, M.D., Ch.B., D.P.H.
*Deputy Medical Officer of Health ..	J. SHARPE, M.B., F.R.F.P.S., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare and Medical Officer of Infants' Hospital	GLADYS J. C. RUSSELL, M.B., Ch.B., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare	SARAH N. S. BARKER, M.B., Ch.B., L.R.C.P., M.R.C.S. MARIA L. GAUNT, M.B., Ch.B. EUGENIE CLARE ILLINGWORTH, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P. MARION KNOWLES, M.B., Ch.B. MARGARET S. M. REID, M.D., D.P.H. (to May). MARGARET F. ROBERTSON, M.B., Ch.B. (from June). JESSIE I. ROSIE, M.B., Ch.B., D.P.H.
Chief Clinical Tuberculosis Officer ..	N. TATTERSALL, M.D., B.S.
Assistant Clinical Tuberculosis Officer	A. G. EVANS, M.R.C.S., L.R.C.P. (to September). W. GUTHRIE, M.B., Ch.B. (from November).
Assistant Clinical Tuberculosis Officer	S. THOMPSON, M.B., Ch.B., L.M.S.S.A.
Dental Officer for Maternity and Child Welfare and Tuberculosis ..	W. L. FLEMING, L.D.S.
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Medical Superintendent ..	J. DICK, M.B., Ch.B., D.P.H.
St. James's Hospital—	
Deputy Medical Superintendent	W. McINTOSH, M.B., Ch.B.
St. George's Infirmary—	
Visiting Medical Officer ..	M. MELVIN, M.D., Ch.B.
Medical Superintendents—	
Infectious Disease Hospital .. (Seacroft).	E. C. BENN, M.B., Ch.B., D.P.H.
Killingbeck Sanatorium ..	W. S. GILMOUR, M.B., Ch.B.
Gateforth Sanatorium—	
Resident Medical Officer ..	A. C. MEEK, M.A., M.B., Ch.B., D.P.H.

Venereal Diseases Officer	..	..	..	J. P. BIBBY, M.B., Ch.B., M.R.C.P.
Assistant Medical Officer for Venereal Disease	..	..	..	M. STODDART-SCOTT, M.D., Ch.B.
Do.	do.	do.	..	DOROTHY PRIESTLEY, M.D., B.S.
City Bacteriologist	..	..	..	J. W. McLEOD, F.R.S., M.B., Ch.B.
Public Vaccinators and District Medical Officers	..	..	..	E. S. G. FOWLER, M.R.C.S., L.R.C.P.
Do.	do.	..	..	A. A. ROBERTS, M.B., Ch.B.
Do.	do.	..	..	N. F. WINDER, M.B., Ch.B.
Do.	do.	..	..	H. B. POPE, M.A., M.R.C.S., L.R.C.P.
Do.	do.	..	..	J. E. MIDDLEMISS, F.R.F.P.S., M.R.C.S.
Do.	do.	..	..	J. CARDIS, M.D.
Do.	do.	..	..	C. P. KELLY Jun., M.B., Ch.B., B.A.O.
Do.	do.	..	..	J. J. REYNOLDS, M.B., Ch.B.
Do.	do.	..	..	W. H. BEAN, M.B., Ch.B.
Do.	do.	..	..	J. E. RUSBY, L.M.S.S.A.
Do.	do.	..	..	J. H. WAY, M.R.C.S., L.R.C.P.
Do.	do.	..	..	W. MURISON SMITH, M.B., Ch.B.
Do.	do.	..	..	T. D. PRATT, M.B., Ch.B., M.R.C.S., L.R.C.P.
Do.	do.	..	..	W. G. PLATT, M.B., Ch.B., M.R.C.S., L.R.C.P.
Do.	do.	..	..	J. H. E. MOORE, M.A., M.B., Ch.B.
Do.	do.	..	..	F. DANKS, M.B., Ch.B.
Do.	do.	..	..	H. F. HOLLIS, M.B., Ch.B.
Do.	do.	..	..	J. A. YOUNG, M.R.C.S., L.R.C.P.
Do.	do.	..	..	J. P. G. DALY, M.B., Ch.B., B.A.O.
Public Vaccinators	..	..	..	M. SHERWIN, M.B., Ch.B.
Do.	do.	..	..	W. PEARCE, M.R.C.S., L.R.C.P.
Do.	do.	..	..	J. DICK, M.B., Ch.B., D.P.H.
Do.	do.	..	..	M. MELVIN, M.D., Ch.B.
District Medical Officers	..	..	..	R. H. OLVER, M.B., Ch.B.
Do.	do.	..	..	L. BRILL, M.B., Ch.B., F.R.C.S.
Do.	do.	..	..	M. J. COOKE, M.B., Ch.B., B.A.O.
Do.	do.	..	..	W. ADAMS, M.B., Ch.B.
Chief Veterinary Officer	..	..	..	J. A. DIXON, M.R.C.V.S.
City Analyst	..	..	..	C. H. MANLEY, M.A., F.I.C.
Assistant City Analyst	..	..	..	A. HOULBROOKE, M.Sc., F.I.C.
Chief Sanitary Inspector	..	..	..	E. STANDISH, M.R.San.I.
Divisional Sanitary Inspector	..	..	..	G. F. MARSHALL.
Do.	do.	..	..	J. RICHARDSON.
Removal Officer	..	..	..	D. FERGUSON.

Chief Health Visitor	ANNIE H. BEESLEY (to April).	
	MATHILDE BURKE (from June).	
Supervisor of Midwives	ELIZABETH F. GORE (to November).	
Principal Clerks—		
Finance	A. R. BEST.	
Statistics	J. P. MOIR.	
Sanitary	A. SPARKS.	
Infectious Diseases	H. O. PEAKE.	
Secretarial	P. A. WOODCOCK.	
Food and Drugs	C. STEAD.	
Health Clinic	F. H. WOOD.	
Hospitals	J. FOLKARD.	
Special Inspectors including Smoke, Lodging-houses, Food and Drugs, Dairies, Meat, Workshops and Diseases of Animals		18
Laboratory Assistant		1
Sanitary Inspectors		19
Vaccination Officers (2 part-time)		4
Female Sanitary Inspectors		2
Health Visitors		37
Midwives		24
Sunlight, Orthopædic and Dental Nurses		1
Chief Health Visitor		1
Supervisor of Midwives		1
Tuberculosis Nurses		11
Dispensers		8
Masseuses		4
Clerical Staff and Almoners		67
Maintenance Staff		52
Ambulance and Disinfecting Staff		23
Central Ambulance Station		48
Flushing Staff		5
Disinfestation		27
St. James's Hospital (9 Consulting Surgeons, 7 Consulting Physicians, 1 Consulting Pathologist, 4 Visiting Anæsthetists, 1 Pathologist, 1 Radiologist, 1 Resident Surgical Officer, 1 Resident Medical Officer, 4 House Physicians, 3 House Surgeons, 1 Chaplain, 3 Religious Instructors, 1 Dentist (part time), 1 Matron, 2 Assistant Matrons, 1 Home Sister, 2 Sister Tutors, 1 Housekeeper Sister, 3 Masseuses, 1 Masseuse, 2 Dispensers, 3 Lady Almoners, 1 X-Ray Sister, 1 Radiographer, 36 Nursing Sisters, 4 Staff Nurses, 30 Staff Nurses and Pupil Midwives, 165 Probationer Nurses, 2 Resident Nurse Attendants (Female), 35 Non-resident Nurse Attendants (Female), 1 Male Charge Attendant, 12 non-resident Nurse Attendants (Male), 2 Charge Attendants (Mental Wards), 16 Mental Ward Attendants (Female), 17 Mental Ward Attendants (Male), 1 Steward, 1 Assist- ant Steward, 13 Clerks, 5 Laboratory Assistants, 1 Post-Mortem Assistant, 33 Male Servants (Porters, etc.), 1 Children's Attendant, 41 Female Servants (Sewing Room), 73 Cleaners)		544

St. Mary's Infirmary (1 Resident Medical Officer, 3 Religious Instructors, 1 Matron, 1 Assistant Matron, 1 Home Sister and Sister Tutor, 7 Nursing Sisters, 1 Staff Nurse, 2 Staff Nurses and Pupil Midwives, 3 Pupil Midwives, 34 Probationer Nurses, 1 Steward, 2 Clerks, 1 Engineer, 20 Male Servants, 24 Female Servants, 20 Cleaners)	122
St. George's Infirmary (1 Part-time Medical Officer, 1 Matron, 1 Assist- ant Matron, 7 Nursing Sisters, 17 Resident Nurse Attendants (Female), 27 Non-resident Nurse Attendants (Female), 1 Steward, 2 Clerks, 2 Engineers, 16 Male Servants, 21 Female Servants, 14 Cleaners)	110
Seacroft Hospital (3 Assistant Medical Officers), 1 Matron, 3 Assistant Matrons, 1 Sister Tutor, 106 Nurses, 46 Resident Female Servants, 18 Non-resident Female Servants, 1 Chief Engineer, 1 Steward, 49 Male Servants, including Engineers, Porters, etc., 1 Dispenser, 2 Clerks, 1 Typist)	233
Killingbeck Sanatorium (2 Assistant Medical Officers, 1 Matron, 2 Assistant Matrons, 1 Dispenser, 1 Steward, 2 Clerks, 21 Porters, etc., 6 Sisters, 62 Nurses, 61 Maids, 2 Teachers, 1 Handicrafts Instructor)	162
Gateforth Sanatorium (1 Matron, 1 Sister, 2 Assistant Nurses, 2 Probationer Nurses, 1 Cook, 7 Maids, 1 Bailiff, 1 Handyman, 1 Gardener, 1 Gardener's Labourer and 2 Porters)	20
The Hollies Children's Sanatorium (1 Matron, 1 Sister, 4 Assistant Nurses, 2 Teachers, 1 Cook, 3 Maids, 1 Handyman)	13
Infants' Hospital, Wyther (1 Matron, 1 Sister, 1 Masseuse, 5 Staff Nurses, 18 Probationer Nurses, 1 Nursery Attendant, 1 Cook, 2 Maids, 3 Laundresses, 1 Handyman, 1 Gardener)	35
Spring Bank Residential Nursery (1 Matron, 1 Assistant Matron, 1 Staff Nurse, 12 Probationer Nurses, 2 Housemaids, 1 Laundress, 1 Gardener, 1 Assistant Gardener, 1 Cook)	21
Blenheim Lodge Day Nursery and Blenheim Hostel (1 Matron, 1 Sister, 1 Staff Nurse, 10 Probationer Nurses, 1 Cook, 2 Maids)	16
The Factory-in-the-Field (1 Manager, 1 Clerk. Firewood Depart- ment :—(1 Foreman, 11 Men, 3 Drivers, 5 Travellers). Brush Department :—(1 Foreman, 4 Brushmakers, 1 Traveller). Printing Department :—(1 Foreman, 4 Printers, 4 Female Feeders), 1 Gardener, 1 Caretaker and Cook, 1 Assistant Cook)	40

City of Leeds.

To the Chairman and Members of the Health Committee.

Ladies and Gentlemen,

Statistics.

The year which closed on December 31st, 1938, was one of the best in its history so far as the health of the city is concerned. For that reason I have more than ordinary pleasure in presenting this report of its achievements.

The birth-rate continued the upward trend begun in 1934 and reached the figure of 15·4 which is higher than in any year since 1930 when it was 15·8. On the other hand the death-rate fell to 12·7, a figure equalled in 1923, surpassed in 1930 and therefore ranking as one of the lowest on record.

The infant mortality rate was 64, the same as in 1935, and also the lowest on record.

Similarly the death-rate from tuberculosis (all forms) 0·80 created a new low record, the previous lowest figure being 0·83 in 1937.

The most notable achievement of the year, however, was the fall of the maternal mortality rate to the remarkably low figure of 1·76 per thousand total (live and still) births. Not only is this the lowest rate recorded for the city but it is the lowest of all the large towns as well as of England and Wales as a whole.

Unusually low figures of mortality were also recorded for scarlet fever, pneumonia, influenza and bronchitis. It was to the comparatively small number of deaths in the group of respiratory diseases that the decline in the general mortality was largely due.

There was, however, one disappointing feature in the vital statistics for the year and that was the sudden and somewhat alarming increase in the mortality from cancer. In 1937 the number of deaths due to this cause was 777 and in the year under review 879, an increase of 102 in a period of one year. The previous peak figure was 843 in 1936 so that a new high record has been established. With small intermissions in certain years the mortality rate from cancer has been steadily rising for the past decade. In 1929 it was 1.43 per thousand of the population, in 1932, 1.57; in 1935, 1.65 and in 1938, 1.78, an increase in the whole period of 24.5 per cent. The increase is unaccountable, though an analysis of the sites of the disease leaves one with the impression that by earlier diagnosis and treatment some, at least, of the deaths might have been avoided. The public are slow to respond to the oft repeated advice to consult a doctor as soon as they observe anything unusual in any part of the body. Obviously further education is required as well as better facilities for the examination and investigation of early cases. The Cancer Act recently passed into law is directed towards this end and, when in full operation, one hopes, may have the desired effect.

The city was remarkably free from infectious disease during the year. With the exception of measles which is more or less always with us there were no serious epidemics. The incidence of diphtheria remained much the same as last year though there was a slight reduction in the death-rate from 0.09 to 0.07. As a result of a special campaign in which the Director of Education and his staff co-operated, 9,626 children attending the infant departments of the elementary schools were immunised against the disease. Apart from this special effort the number immunised at the ordinary clinic was inconsiderable, only a matter of 1,447 children, making a total of 11,073 for the year. Good though the figure is it is not sufficient to ensure the safety of the population. Parents must realise that if the dismal experience of the epidemic of 1933-35 is not to be repeated they must do better than this. The facilities are there for every parent to make use of. There is no compulsion but there is a duty, to the children on the one hand and to the community on the other, and a grave responsibility rests on those who refuse or neglect to discharge that duty.

**Infectious
Diseases.**

Tuberculosis.

In addition to the fall in the death-rate from tuberculosis (all forms) already alluded to there was a decrease in the number of new cases notified. This decrease amounted to 75 as compared with the previous year and includes both the pulmonary and non-pulmonary types of disease. Even so, we are still experiencing difficulty in finding accommodation in Killingbeck Sanatorium for all the cases requiring it. This applies particularly to male pulmonary cases, the requirements of the female having been met by the construction of the new 100 bed block in 1936. There are three possible solutions to the difficulty (1) by building a block for men similar to that erected for women patients in the grounds of Killingbeck Sanatorium, (2) by transferring the children from Killingbeck to accommodation elsewhere, and (3) by hiring beds in a sanatorium or sanatoria outside the city. Which of the three should be adopted will be a matter for careful consideration, always having in mind the present downward trend in the incidence of the disease. The question may be asked why, with the fall in the number of notified cases, there should be any need for this additional accommodation. The answer is that in modern sanatorium practice the period of treatment has been more than doubled compared with what it was even as recently as ten years ago with the result that the turn-over of patients has been reduced by one-half. The subject is further dealt with on pages 125 and 135.

Maternity and Child Welfare.

The Maternity and Child Welfare service continues to grow and with this growth the need for better and more convenient clinic premises becomes more clamant. The movement of the population from the slum areas to the new housing estates has accentuated rather than eased the situation. Certain of the centres have become redundant and either have been or will be discontinued while others are taxed to the utmost to accommodate all who wish to take advantage of the services offered. New centres will have to be found, but for the moment, the selection of sites for these is held up pending a decision as to whether in future the school and infant welfare clinics are to be housed in the same or in separate buildings. I have already in previous reports and elsewhere expressed my views on this subject and there is no need for me to reiterate them here. Suffice it to say

that this important question of policy should be settled without delay so that a building scheme can be prepared and suitable sites for the new premises selected.

The decision of the Council to exclude the proposed new maternity block from the five years' programme of capital expenditure is to be regretted not so much because, with the new midwifery service now in full operation, there is any risk of women in childbirth being without adequate skilled attention, as because the lying-in accommodation at St. James's Hospital is unsuitable, out-of-date and insufficient to meet the evergrowing demands for in-patient beds. Much as one may deplore the tendency for women, however satisfactory the home conditions may be, to prefer to be confined in hospital, one cannot adopt an arbitrary attitude in such a matter and insist that every woman shall be confined in her own home. There are and always will be cases who, for one reason or another, must be confined in hospital, and it is for such that accommodation must be provided.

Plans for the new cubicle wards at Seacroft Hospital have now been completed and approved by the Ministry of Health. Tenders for the constructional work will be accepted at an early date and building operations should be started before the year end. When completed these new wards will be a great acquisition to the hospital and will remove a handicap under which it has laboured ever since it was built more than 30 years ago.

At St. James's Hospital the work on the new extensions, after many interruptions and delays, is now in full swing. The Nurses' Home and the Admission Block should be completed and in occupation before the end of the year, though it will be some time yet before the operating theatres, pathological block and other buildings included in the scheme are ready for use. When the scheme is complete a reorganisation of the staff will be necessary which will certainly entail additional appointments if full advantage is to be taken of the new departments.

A children's hospital is at long last about to become a fait accompli. Perhaps in no branch of the hospital services of the city has the lack of proper facilities been so much felt as in

the treatment of sick children. I do not say that the existing provision is inadequate, but it is neither of the proper kind nor well situated. One cannot expect the best results from the hospitalisation of ailing children, especially those requiring prolonged treatment, in large down-city hospitals where the air is so smoke-laden that only the merest fraction of the ultra violet rays of the sun can filter through and where the air itself has been robbed of most of its revivifying qualities. Preliminary plans of the new hospital, which will provide accommodation for 158 children and is to be built on a site in the vicinity of King Lane on the Moortown Estate, have been passed by the Council and informally approved by the Ministry of Health. The date of the commencement of building operations will depend on how soon final plans can be prepared and tenders accepted. A detailed description of the hospital will be included in my next report.

I very much regret that it has been found necessary to postpone the building of a Central Laundry. The provision of a separate laundry for each medical institution under the control of the Health Committee is administratively bad and economically unsound. At a time when the Health services are making such a heavy demand on the public purse it becomes more and more imperative to cut down expenses wherever possible and this surely is one of the directions in which a definite saving can be affected.

**Advisory
Committee.**

The Joint Hospitals Advisory Committee had another fruitful year. Besides the Children's hospital already alluded to, which was one of its conceptions, it had under consideration a scheme for the building of a Radium Institute in Leeds. A special committee consisting of representatives for the West Riding County Council, the Leeds General Infirmary, the Yorkshire Branch of the British Empire Cancer Campaign, the Leeds Division of the British Medical Association and the Leeds City Council was formed to explore the subject and formulate proposals. Unfortunately, before the proposals could take concrete shape the Government introduced its Cancer Bill into Parliament and further consideration of the matter was postponed until the extent and nature of the new legislation were made known. Now that the Bill has become an Act, and seeing that its provisions

definitely include the radio-electric treatment of the disease it may be assumed that the committee will resume its work. A site for the Institute is available close to the Leeds General Infirmary and preparation of plans and other formalities can be proceeded with as soon as the Special Committee is in a position to report.

The claims of civil defence have made heavy demands on **Staff.** *the time of the staff during the year and, though every effort has been made to maintain the efficiency of the various sections of the Department, this has been achieved only by the sacrifice of leisure and the putting in of much overtime. At the beginning of the current year, it became obvious that work at this extreme pressure could not continue, and with the consent of the Committee it was decided to form a completely new section and to staff it with temporary officers under the supervision of a member of the regular staff. Since then conditions have improved though the pressure has not been entirely relaxed. Few can have any conception of the magnitude of the task set the Department in organizing and perfecting the health defences of the city. The selection and training of personnel alone has been a formidable undertaking, calling for both resource and physical endurance. The responsibility for this side of the work has rested almost entirely on the shoulders of my personal clerk, Mr. P. A. Woodcock, whose zeal and untiring efforts have earned the warmest eulogies from all quarters. To him I owe a very deep debt of gratitude for his successful handling of a very difficult task.*

In my last report I called attention to the shortage of nurses which was seriously hampering the work of the various hospitals and institutions. That shortage has persisted throughout the year and indeed has been accentuated by the ever increasing demand of industry for female labour. The interim report of the Special Committee set up by the Government to consider the question makes certain recommendations for improving the pay and conditions of service of nurses. Some of these, as you are aware, have already been adopted and others are under consideration. It remains to be seen whether the new and improved conditions will have the effect of making the service more attractive and increasing the number of recruits.

In conclusion I wish to express my warm appreciation of the loyal and devoted services of all sections of my staff during a year of exceptional strain and anxiety. If the Department has carried on with its efficiency unimpaired, notwithstanding the many heavy calls on their time and energy, and, if the Health Services to-day are in such a state of preparedness as to meet any emergency that may arise, the credit is largely due to their willing and unremitting efforts.

My thanks are also due to my deputy, Dr. James Sharpe, and my other senior officers for their assistance in compiling this Report.

I am,

Ladies and Gentlemen,

Your obedient servant,

J. JOHNSTONE JERVIS.

Public Health Department,

Leeds, 1,

August, 1939.

SUMMARY, 1938.

LATITUDE 53°48' North. LONGITUDE 1°32' West.

AVERAGE HEIGHT ABOVE SEA LEVEL 250 feet.

AREA OF CITY 38,296·5 Acres.

POPULATION (Registrar-General's estimate) 494,000

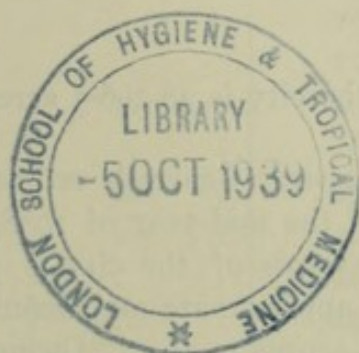
ESTIMATED NUMBER OF HOUSES 150,262

RATEABLE VALUE £3,705,640

SUM REPRESENTED BY A PENNY RATE £14,375

	Average. 1938. 1928-37.	
BIRTH RATE (births per 1,000 living)	15·41	14·98
MARRIAGE RATE (persons married per 1,000 living)..	18·14	17·11
DEATH RATE (deaths per 1,000 living)	12·66	13·52
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year)	1,359	707
INFANT MORTALITY RATE (Deaths under 1 year per 1,000 births).	64	76
DEATH RATE from Pneumonia and Bronchitis.. 	1·04	1·64
" " Cancer.. 	1·78	1·56
" " Diarrhoea and Enteritis (under 2 years) per 1,000 births	12·35	10·71

	Cases	Case- rate	Deaths.	Death rate.
SCARLET FEVER	1,717	3·48	8	0·02
DIPHTHERIA	948	1·92	33	0·07
TYPHOID FEVER	3	0·01	..	..
MEASLES	8,065	16·33	18	0·04
PULMONARY TUBERCULOSIS	511	1·03	336	0·68
OTHER FORMS OF TUBERCULOSIS	176	0·36	61	0·12



Natural and Social Conditions.

NATURAL AND SOCIAL CONDITIONS.

Area.—The area of the city is 38,296·5 acres.

Population.—The Registrar General's estimate of the resident population of the city at the mid-year of 1938 was 494,000, and the allocation to the 26 wards of the city is given on page 3. This allocation is purely approximate and definite figures will not be available till the next census in 1941. Owing to the re-housing activities in connection with the slum clearance programme of the Corporation, the movement of the population has been greatly increased, the wards on the outskirts of the city being filled up at the expense of those round the centre where most of the slums are located. Allowance for this movement has been made in the table, but even so, the figures cannot be regarded as accurate. The estimate for the previous year was 491,880, or 2,120 less than the estimate for 1938.

Dwelling-houses.—The total number of dwelling-houses in the city at December, 1938, is shown below and for a comparison the corresponding figures at the date of the 1931 census are included.

Year.	Houses.	Occupied.	Unoccupied.	
			Vacant.	Vacant but furnished.
1938 ..	150,262	146,442	3,820	*
1931 ..	128,913	126,056	1,816	1,041

* The number of houses vacant but furnished at the end of 1938 is not known.

Rateable Value.—The rateable value of the city in 1938 was £3,705,640 and the estimated product of a penny rate £14,375. The corresponding figures for 1937 were £3,597,891 and £14,108.

POPULATION IN WARDS.

MUNICIPAL WARD.	Census, April 26th, 1931	Estimated Population middle of 1938.
Mill Hill and South	15,672	13,678
Westfield	19,455	14,151
Blenheim	22,947	20,541
Central	20,985	17,566
Woodhouse	18,689	15,563
North	15,475	21,072
Far Headingley	18,251	21,950
Hyde Park	16,548	15,513
Kirkstall	19,582	23,481
Burmantofts	22,974	18,095
Harehills	19,724	23,003
Potternewton	19,631	19,012
Roundhay	15,151	29,369
Cross Gates and Temple Newsam	14,439	22,336
Richmond Hill	24,260	14,516
Osmondthorpe	21,570	20,843
East Hunslet	18,370	17,202
Hunslet Carr and Middleton	19,916	25,582
West Hunslet	18,044	16,445
Beeston	15,220	17,489
Holbeck (South)	14,324	13,280
Holbeck (North)	18,241	10,760
Armley and New Wortley ..	20,181	19,224
Upper Armley	16,953	17,660
Bramley	17,631	23,998
Farnley and Wortley	18,576	21,671
City	482,809	494,000

Principal Industries.—The principal industries in the city have not changed to any great extent during the year but remain much as they were in previous reports.

During the year unemployment showed an increase as compared with the previous year. The average number of persons registered as wholly or partially unemployed was 22,331 as compared with 17,633 for 1937, an increase of 4,698. In January, 1938, the number was 23,536, in May 19,674, in September 24,670, and in December 22,001.

The following table shows the average number of persons on the unemployment register for the years 1931 to 1938.

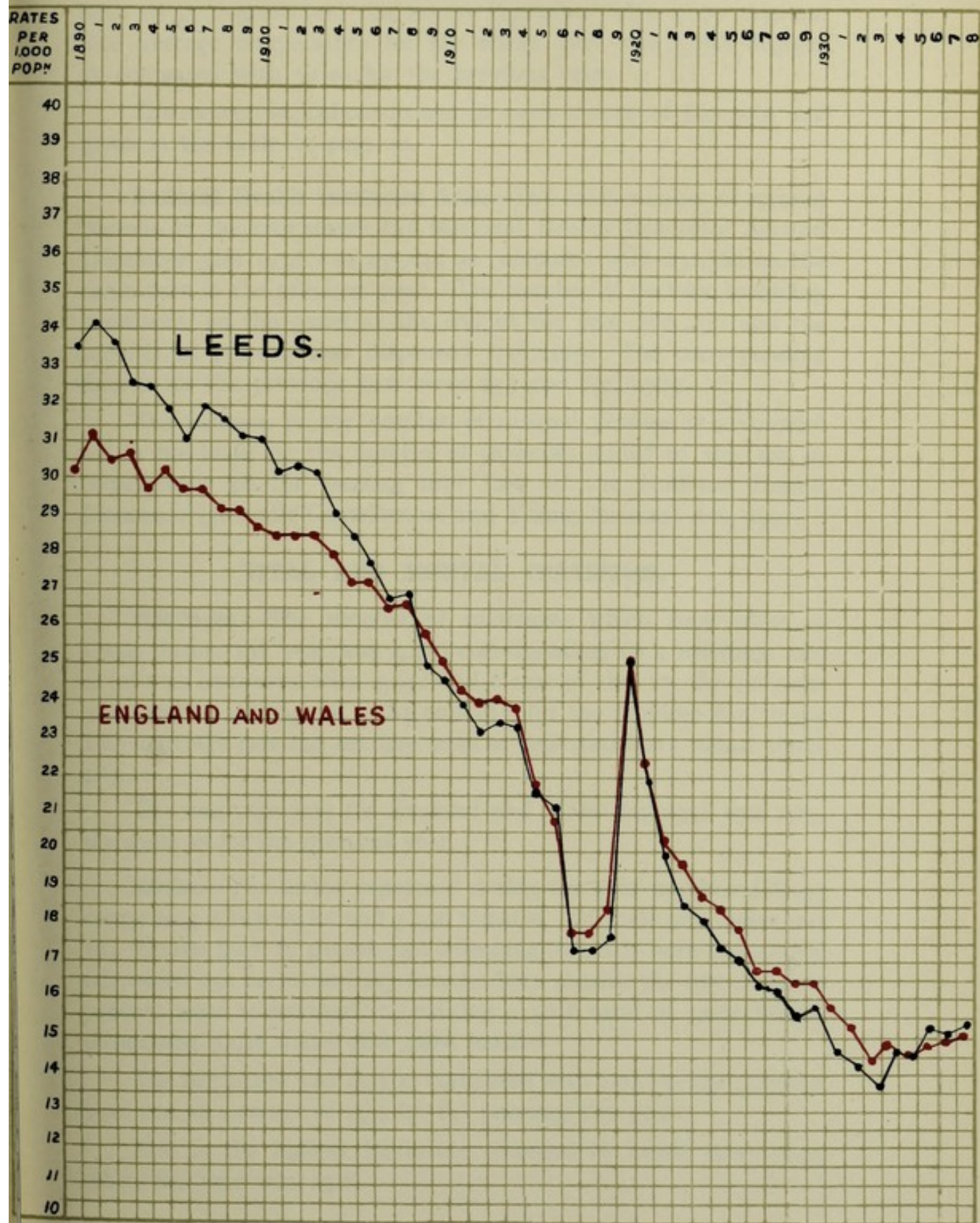
Year.	Average number of persons on the Unemployment Register.			
	Males.	Females.	Juveniles.	Total.
1931 ..	26,098	10,200	1,099	37,397
1932 ..	27,363	8,699	855	36,917
1933 ..	24,853	6,034	475	31,362
1934 ..	20,347	5,648	373	26,368
1935 ..	18,911	4,676	259	23,846
1936 ..	16,236	4,546	283	21,065
1937 ..	13,340	4,065	228	17,633
1938 ..	15,762	6,234	335	22,331

At a time when the output of war material has been so greatly increased it is strange that in an industrial centre like Leeds the number of unemployed should have reached such a high figure. It should be observed that the manufacture of armaments was not speeded up until the first quarter of the current year.

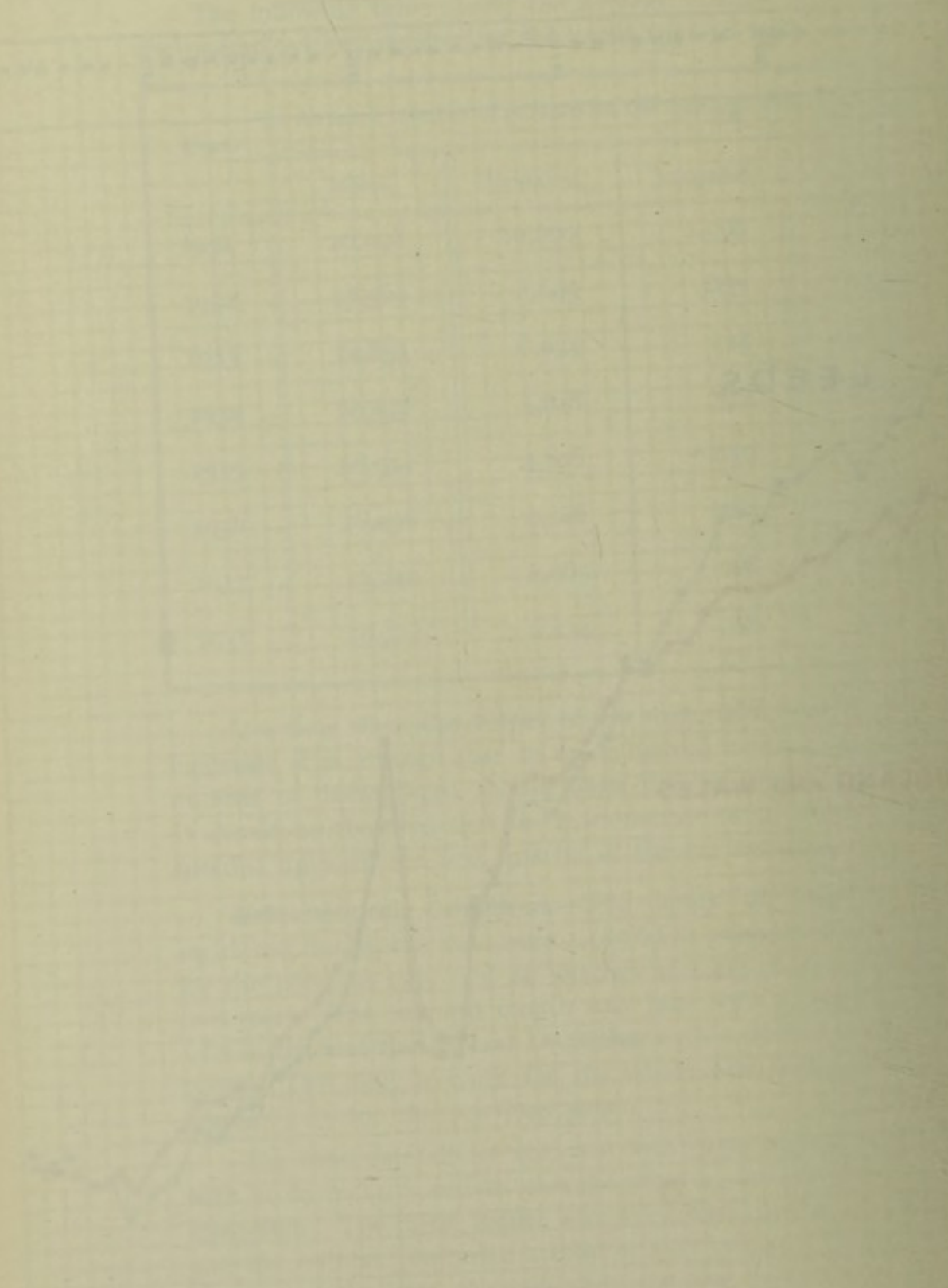
Meteorological Conditions.—The hours of bright sunshine registered during the year were 1,185·69 as compared with 1,031·83 for the previous year and an average of 1,215·36 for the previous five years. The sunniest month was June with a daily average of 5·61 hours, and the darkest December with a daily average of 0·95 hours. The daily average for the whole year was 3·23 hours as against 2·83 for the previous year.

The total rainfall for the year was 32·74 inches as compared with 29·67 in 1937 and an average of 28·44 for the previous quinquennium. The driest month was April with a total of 0·04 inches and the wettest June with a total of 5·63 inches. Taking the four quarters of the year, the rainfall in the first quarter was 4·64 ; in the second 8·12 ; in the third 9·70 ; and in the fourth 10·28 inches.

BIRTH RATE, 1890 - 1938



BIRTH RATE 1890-1928



The month with the highest average temperature was August with 63.55 degrees and the lowest December with 41.77 degrees. The average temperature for the whole year was 53.58 degrees as compared with 52.40 for the previous year.

The meteorological conditions in each month of the year are given in the table on page 42.

National Health Insurance Acts.—The total number of insured persons in the city under the National Health Insurance Acts on December 31st 1938 was 245,241 as compared with 231,361 on the same date in the previous year. The number of doctors, including assistants, on the panel at the end of the year was 230 and the number of prescriptions dispensed 1,187,475. The corresponding figures for the previous year were 233 and 1,210,789.

The increase in the number of insured persons is accounted for in the main by the number of juveniles added to the list in consequence of the passing into Law of the National Health Insurance (Juvenile Contributors and Young Persons) Act, 1937.

VITAL AND MORTAL STATISTICS.

Marriages.—The number of marriages which took place in Leeds during the year was 4,480 corresponding to a marriage rate of 18.1 as compared with 4,542 and a rate of 18.5 for the previous year, and an average of 4,384 and 18.0 for the previous five years. The marriage rate has become more or less stationary round about 18.0.

The marriage rate for England and Wales for 1938 was 17.5, the same as for the previous year.

Births.—The births registered during the year numbered 8,159 comprising 4,203 males and 3,956 females. Of these 425 males and 383 females born to parents not belonging to Leeds were transferred out whilst 150 males and 113 females born outside the city to Leeds parents were transferred in, making a nett total of 7,614 births, comprising 3,928 males and 3,686 females.

The birth-rate was 15.4 as compared with 14.8 for the previous year and an average of 14.6 for the previous five years.

This is the highest birth-rate recorded in Leeds since 1930, when the rate was 15.8.

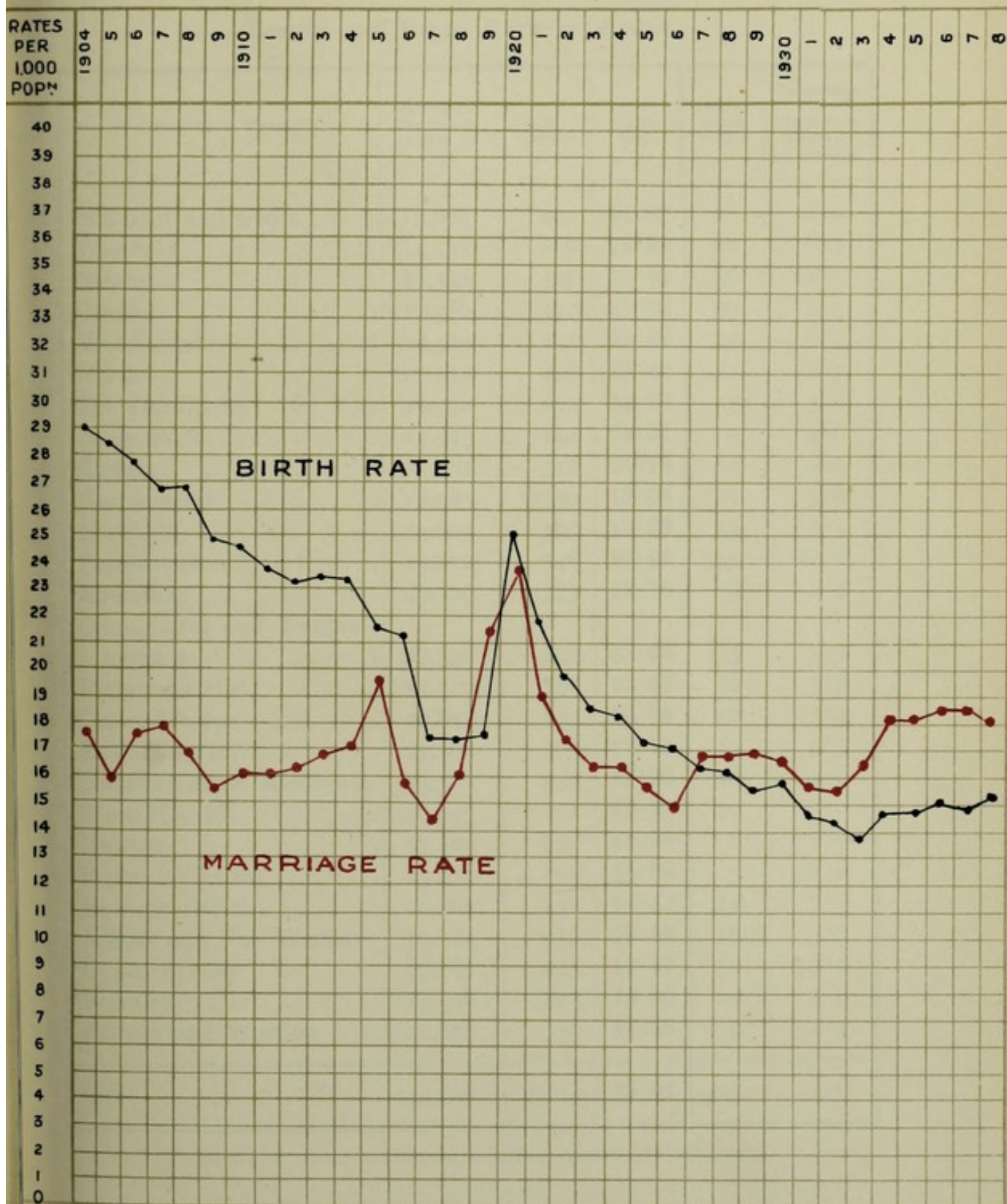
BIRTH RATE.

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
1915-1919	41,831	19.0	19.4
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
1924	8,558	18.1	18.8
1925	8,180	17.3	18.3
1926	8,065	17.0	17.8
1927	7,790	16.3	16.7
1928	7,665	16.1	16.7
1929	7,426	15.5	16.3
1930	7,568	15.8	16.3
1931	7,219	14.8	15.8
1932	7,004	14.4	15.3
1933	6,643	13.7	14.4
1934	7,190	14.8	14.8
1935	7,211	14.8	14.7
1936	7,340	15.0	14.8
1937	7,279	14.8	14.9
1938	7,614	15.4	15.1

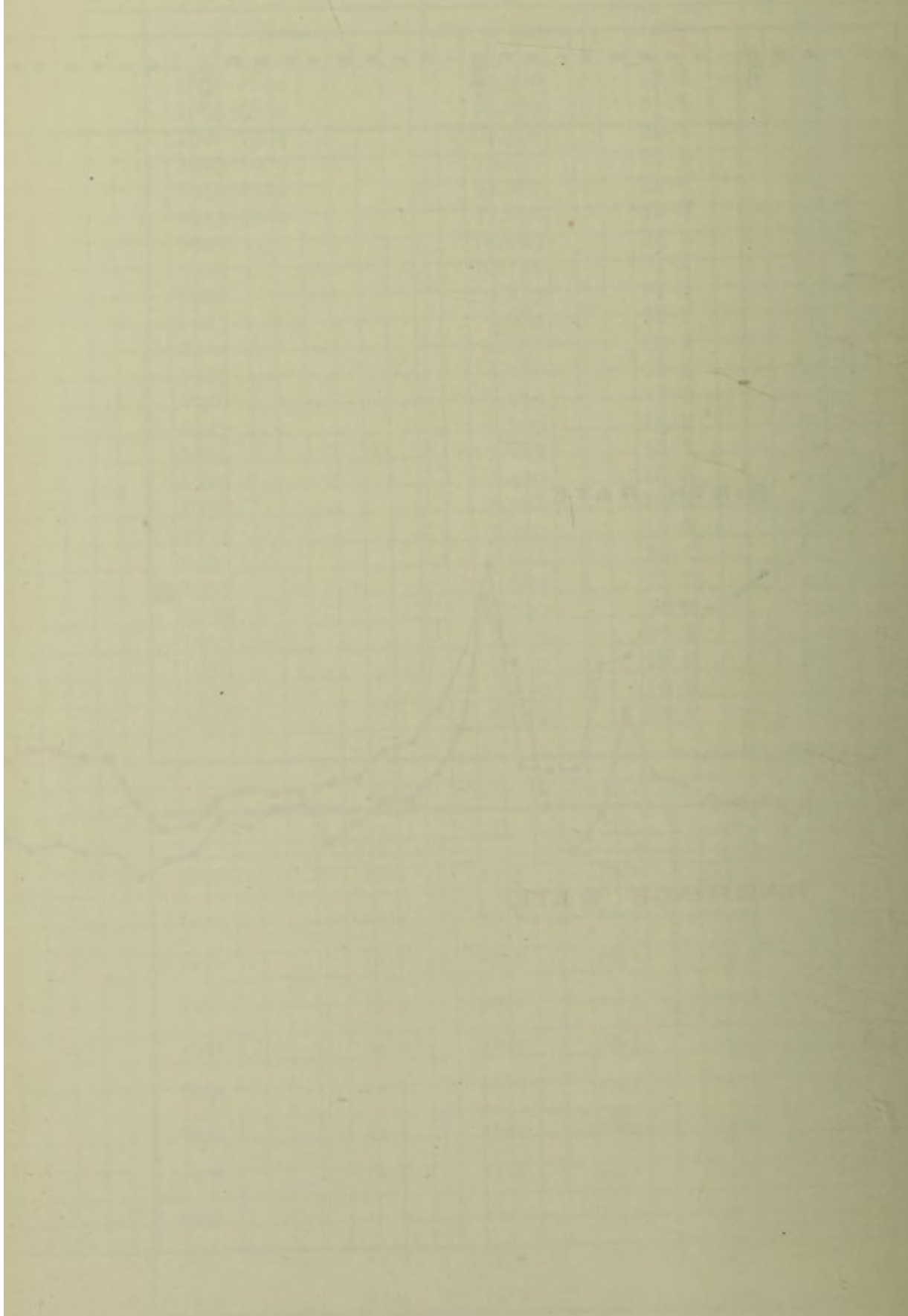
BIRTH RATE IN QUARTERS.

	I.	II.	III.	IV.	Year.
1928	16.0	17.6	16.1	14.9	16.1
1929	15.7	16.2	16.2	14.0	15.5
1930	16.0	16.6	16.1	14.6	15.8
1931	15.3	16.2	14.7	13.2	14.8
1932	14.2	16.0	14.5	13.2	14.4
1933	14.1	14.6	14.5	11.7	13.7
1934	15.1	16.1	14.2	13.8	14.8
1935	14.5	15.4	14.9	14.5	14.8
1936	14.6	16.2	15.3	13.9	15.0
1937	14.2	15.9	15.7	13.4	14.8
1938	15.5	16.1	16.1	14.0	15.4

BIRTH RATE AND MARRIAGE RATE. 1904 - 1938



BIRTH RATE AND MARRIAGE RATE 1904-1938



BIRTHS AND BIRTH RATE IN WARDS.

MUNICIPAL WARD.	Estimated Population middle of 1938.	Nett births.	Birth- rate.	Illegiti- mate births.	Percentage of illegitimate births to total births.
Mill Hill and South ..	13,678	200	14.62	16	8.0
Westfield	14,151	267	18.87	22	8.2
Blenheim	20,541	321	15.63	58	18.1
Central	17,566	372	21.18	39	10.5
Woodhouse	15,563	241	15.49	15	6.2
*North	21,072	410	19.46	11	2.7
*Far Headingley ..	21,950	259	11.80	13	5.0
Hyde Park	15,513	194	12.51	9	4.6
*Kirkstall	23,481	346	14.74	14	4.0
Burmantofts	18,095	330	18.24	12	3.6
*Harehills	23,003	361	15.69	19	5.3
Potternewton	19,012	246	12.94	31	12.6
*Roundhay	29,369	373	12.70	9	2.4
*Cross Gates and Temple- newsam	22,336	290	12.98	5	1.7
Richmond Hill	14,516	181	12.47	10	5.5
*Osmondthorpe	20,843	333	15.98	18	5.4
East Hunslet	17,202	305	17.73	10	3.3
*Hunslet Carr & Middleton	25,582	435	17.00	18	4.1
West Hunslet	16,445	201	12.22	10	5.0
*Beeston	17,489	250	14.29	8	3.2
Holbeck (South)	13,280	195	14.68	5	2.6
Holbeck (North)	10,760	152	14.13	12	7.9
Armley and New Wortley	19,224	317	16.49	18	5.7
*Upper Armley	17,660	215	12.17	16	7.4
*Bramley	23,998	444	18.50	22	5.0
Farnley and Wortley ..	21,671	376	17.35	9	2.4
City	494,000	7,614	15.41	429	5.6

*Wards in which municipal housing estates are situated.

The table appended gives the marriage and birth-rates for the years 1911-1938.

MARRIAGE AND BIRTH-RATES 1911-1938.

Year.	No. of Marriages.	Marriage rate per 1,000 Population.	No. of Births.	Birth-rate per 1,000 Population.
1911	3,717	15.7	10,562	23.8
1912	3,801	16.0	10,309	23.1
1913	3,925	16.4	10,877	23.4
1914	4,008	16.6	10,652	23.3
1915	4,858	20.2	9,877	21.5
1916	3,701	15.5	9,432	21.1
1917	3,300	14.2	7,566	17.3
1918	3,710	15.5	7,392	17.3
1919	5,083	21.2	7,564	17.6
1920	5,620	23.5	11,229	25.0
1921	4,566	18.7	10,144	21.8
1922	4,183	17.2	9,253	19.8
1923	4,001	16.3	8,684	18.5
1924	4,023	16.3	8,558	18.1
1925	3,807	15.4	8,180	17.3
1926	3,644	14.8	8,065	17.0
1927	4,028	16.7	7,790	16.3
1928	3,927	16.5	7,665	16.1
1929	3,990	16.7	7,426	15.5
1930	3,948	16.5	7,568	15.8
1931	3,802	15.6	7,219	14.8
1932	3,851	15.9	7,004	14.4
1933	3,994	16.5	6,643	13.7
1934	4,395	18.1	7,190	14.8
1935	4,446	18.3	7,211	14.8
1936	4,544	18.6	7,340	15.0
1937	4,542	18.5	7,279	14.8
1938	4,480	18.1	7,614	15.4

The chart opposite page 6 shows the marriage and birth-rates for the years 1904-1938.

An examination of the tables on pages 7 and 22, in which are set out the birth and death-rates for the 26 wards of the city, discloses the fact that in three of the wards, viz., Blenheim, Hyde Park and Upper Armley the death-rate was higher than the birth-rate. The estimated population of these three wards is 53,714 or

10.9 per cent. of the population of the city. Taking the three wards as a whole the birth-rate was 13.6 and the death-rate 14.6. It may be pointed out, however, that in two of the wards, the deaths only exceeded the births by one and two respectively. In 1937 the wards with a death-rate higher than the birth-rate were eight with a total estimated population of 141,961 or 28.9 per cent. of the population of the city.

Compared with the other large towns in England and Wales, Leeds occupied ninth place, the towns with lower rates being Manchester, Bristol, Bradford and London.

Births in Wards.—The distribution of the births in the various wards is shown in the table on page 7. In thirteen of the wards, namely, Central, North, Westfield, Bramley, Burmantofts, East Hunslet, Farnley and Wortley, Hunslet Carr and Middleton, Armley and New Wortley, Osmondthorpe, Harehills, Blenheim and Woodhouse, the birth-rate was higher than that for the city as a whole, while in the remainder, Kirkstall, Holbeck (South), Mill Hill and South, Beeston, Holbeck (North), Cross Gates and Templenewsam, Potternewton, Roundhay, Hyde Park, Richmond Hill, West Hunslet, Upper Armley and Far Headingley, it was lower. The wards with the highest rates were in order, Central, North, Westfield, Bramley and Burmantofts, all of which were above 18 and averaged 19.2, whilst that with the lowest was Far Headingley with a rate of 11.80. The existence of municipal housing estates has had an effect on the birth-rate in certain wards. The wards so effected are shown in the table on page 7.

Excess of Births over Deaths.—The excess of births over deaths or what is generally spoken of as the "natural increase of population" was 1,359 as compared with 706 in 1937 and an average of 707 for the previous ten years. The increase for 1938 is the highest "natural increase of population" since 1930, when the figure was 1,638.

Births into Families.—For the last thirteen years investigations have been made as to the size of family into which children have been born and the table on page 10 gives the results of those investigations. It will be observed that whereas in 1926, 71.4 per cent. of the births investigated were into families of two children and under the percentage in 1938 rose to 80.1; on the other hand the

BIRTHS OCCURRING IN ORDER OF SIZE OF FAMILY.

	1926.		5 yrs. 1926—1930		5 yrs. 1931—1935.		1935.		1936.		1937.		1938	
	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.	Births.	Percent-age.
No children	2,645	33.03	13,191	34.68	13,210	38.31	2,784	39.02	2,971	40.92	2,917	40.42	3,099	41.23
1 child	1,924	24.03	8,991	23.64	8,570	24.85	1,840	25.79	1,850	25.48	1,831	25.37	1,968	26.18
2 children	1,152	14.39	5,501	14.46	4,663	13.52	937	13.13	927	12.77	933	12.93	953	12.68
3 "	771	9.63	3,512	9.23	2,819	8.18	565	7.92	503	6.93	526	7.29	522	6.94
4 "	498	6.22	2,306	6.06	1,683	4.88	344	4.82	344	4.74	319	4.42	357	4.75
5 "	325	4.06	1,528	4.02	1,192	3.46	218	3.06	224	3.09	238	3.30	178	2.37
6 "	196	2.45	994	2.61	853	2.47	165	2.31	144	1.98	153	2.12	166	2.21
7 "	166	2.07	679	1.79	578	1.68	97	1.36	105	1.45	119	1.65	104	1.38
8 "	122	1.52	498	1.31	365	1.06	89	1.25	97	1.34	72	1.00	65	0.86
9 "	86	1.07	324	0.85	233	0.68	44	0.62	39	0.54	44	0.61	53	0.71
10 "	54	0.67	232	0.61	123	0.36	25	0.35	25	0.34	25	0.35	30	0.40
11 "	35	0.44	136	0.36	81	0.23	12	0.17	15	0.21	18	0.25	13	0.17
12 "	20	0.25	75	0.20	58	0.17	7	0.10	7	0.10	9	0.12	5	0.07
13 "	3	0.04	24	0.06	33	0.10	5	0.07	3	0.04	5	0.07	2	0.03
14 "	4	0.05	18	0.05	10	0.03	2	0.03	3	0.04	5	0.07	1	0.01
15 "	4	0.05	11	0.03	4	0.01	..	..	1	0.01	2	0.03	..	..
16 "	3	0.04	8	0.02	5	0.01	..	..	..	0.03	..	..	1	0.01
17 "	..	..	3	0.01	..	..	..	..	..	..	..	..	..	..
Total births investigated	8,008	100	38,031	100	34,480	100	7,134	100	7,260	100	7,216	100	7,517	100

percentage of births occurring in families of more than six children fell from 6.2 in 1926 to 3.6 in 1938. The percentage of first births in 1938 was 41.2 as compared with 40.4 in 1937 and 33.0 in 1926.

Illegitimate Births.—Of the 7,614 (nett) births registered 7,185 (3,708 males, 3,477 females) or 94.4 per cent. were legitimate and 429 (220 males, 209 females) or 5.6 per cent. were illegitimate. The percentage of illegitimate births is the highest since 1921 when the percentage was 5.6.

The ratio of illegitimate to legitimate was 1 to 17, the same as for the previous year.

ILLEGITIMATE BIRTHS.

Year.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1928 ..	390	5.1%	0.82
1929 ..	410	5.5%	0.86
1930 ..	374	4.9%	0.78
1931 ..	358	5.0%	0.74
1932 ..	370	5.3%	0.76
1933 ..	335	5.0%	0.69
1934 ..	381	5.3%	0.78
1935 ..	360	5.0%	0.74
1936 ..	385	5.2%	0.79
1937 ..	400	5.5%	0.81
1938 ..	429	5.6%	0.87

Reference to the illegitimate death-rate will be found on pages 149 and 152.

Stillbirths.—The number of stillbirths registered during the year was 418, comprising 240 males and 178 females. The inward transfers numbered three, namely two males and one female, and

the outward transfers 92, namely 53 males and 39 females which after adjustment leaves a nett total of 329 made up of 189 males and 140 females. The rate per thousand of the population was 0.67 as compared with 0.64 for the previous year. The rate for England and Wales was 0.60. Expressed as a percentage of the total births (nett) the rate was 4.1 as compared with 4.1 for the previous year. Of the 329 (nett) stillbirths 310 or 94.2 per cent. were legitimate and 19 or 5.8 per cent. were illegitimate. The ratio of registered "still" to registered "live" births was 1 to 23, the same as for the previous year.

Details respecting the notification and visitation of births and stillbirths are given on pages 168 and 172.

Comparative Statistics of the larger English Cities, 1938.

	RATE PER 1,000 POPULATION.						DEATH RATE PER 1,000 BIRTHS.
	Population.	Birth Rate.	Death Rate.	Adjusted Death Rate.	Pnthisis. Death Rate.	Other Tuberculosis. Rate.	Deaths under One Year.
London ..	4,062,800	13.4	11.4	11.7	0.64	0.09	57
Birmingham ..	1,041,000	16.6	10.9	12.0	0.70	0.08	61
Liverpool ..	827,400	18.7	12.3	14.1	0.77	0.12	73
Manchester ..	747,318	14.75	12.35	14.08	0.83	0.14	69
Sheffield ..	520,000	15.7	11.4	12.8	0.50	0.08	50
Leeds ..	494,000	15.4	12.7	13.5	0.68	0.12	64
Bristol ..	415,500	14.6	11.7	11.4	0.56	0.10	42
Hull ..	318,700	18.1	12.2	13.4	0.77	0.12	69
Bradford ..	288,700	13.5	13.8	13.8	0.53	0.10	58
Newcastle ..	291,300	16.1	12.4	14.0	0.85	0.15	66
Nottingham ..	278,300	15.6	12.7	13.1	0.69	0.13	71
Stoke-on-Trent	272,000	16.3	11.3	14.2	0.665	0.13	52
West Ham ..	254,900	16.2	10.9	12.5	0.68	0.08	57

Deaths.—The gross number of deaths registered during the year was 6,592, comprising 3,479 males and 3,113 females, giving a gross death-rate of 13·3 as compared with 14·1 for the previous year and an average of 14·0 for the previous five years. The inward transfers numbered 260, namely 107 males and 153 females, and the outward transfers 597, namely 348 males and 249 females, which after adjustment leaves a nett total of 6,255 deaths debitable to the city, made up of 3,238 males and 3,017 females. The corresponding nett or recorded death-rate was 12·7 as compared with 13·4 for the previous year and an average of 13·3 for the previous five years.

The death-rate for the year was the lowest recorded in Leeds since 1930 when it was 12·4.

Comparison with other Towns.—Amongst the thirteen large towns in England and Wales, the only town having a higher death-rate than Leeds was Bradford.

Standardized Death-rate.—The areal comparability factor (A.C.F.) for the year 1938 was 1·07 and this when applied to the crude rate (12·7) gives a standardized rate of 13·5.

The following table gives the crude and standardized death-rates of Leeds compared with the death-rate of England and Wales.

Year.	Population.	*Crude Death-rate.	Standardized Death-rate.	Death-rate England and Wales.
1931 ..	486,400	13·4	14·3	12·3
1932 ..	484,900	13·3	14·2	12·0
1933 ..	485,000	13·6	14·6	12·3
1934 ..	486,250	12·9	13·8	11·8
1935 ..	487,200	13·2	14·1	11·7
1936 ..	489,800	13·6	14·6	12·1
1937 ..	491,860	13·4	14·3	12·4
1938 ..	494,000	12·7	13·5	11·6

* The term crude death-rate used by the Registrar General when applied to a local area is what is generally spoken of as the recorded or nett death-rate.

The death-rate for England and Wales was 11·6 or 8·7 per cent. less than the crude rate of Leeds and 14·1 per cent. less than the standardized death-rate.

Standardized Death-rates. (Comparison with other Towns).—An examination of the table on page 12 shows that, judged by the standardized death-rate, Leeds occupies a more favourable position among the large towns than when judged by the crude death-rate.

Death-rates in Quarters.—The death-rate for the first quarter was 13·8; for the second 12·6; for the third 11·1; and for the fourth 13·2.

DEATH RATE IN QUARTERS.

(Comparison with the previous 10 years).

	I.	II.	III.	IV.	Year.
1928	14·6	13·0	10·2	13·9	12·9
1929	29·2	14·2	11·0	11·9	16·5
1930	14·1	11·8	10·5	13·2	12·4
1931	17·4	13·1	10·6	12·5	13·4
1932	15·8	13·3	10·6	13·6	13·3
1933	19·0	12·3	10·0	13·0	13·6
1934	16·2	12·8	10·5	12·3	12·9
1935	14·5	14·3	11·1	13·0	13·2
1936	17·4	12·9	10·7	13·5	13·6
1937	16·7	12·7	10·6	13·5	13·4
1938	13·8	12·6	11·1	13·2	12·7

Death-rates in Wards.—The table on page 22 gives the deaths and death-rates of the 26 wards of the city. The wards with the highest rates were in order Hyde Park (15·92), Blenheim (15·68), Central (15·54) and Westfield (15·05), whilst those with the lowest were Mill Hill and South (10·02), Roundhay (10·21), Richmond Hill (10·68), Cross Gates and Templenewsam (10·70), and Kirkstall (10·90). The difference between the highest and the lowest, that is Hyde Park and Mill Hill and South, amounted to 5·90 or 58·9 per cent., whilst that between the highest and the city was 3·26 or 25·8 per cent.

Causes of Death.—The principal causes of death were in order of numerical importance, organic heart disease, cancer, arterio sclerosis, cerebral hæmorrhage, pneumonia and pulmonary tuberculosis which together accounted for 3,782 deaths or 60·5 per cent. of the total deaths. Last year (1937) this group of diseases was responsible for 3,909 or 59·5 per cent. of the total deaths.

Diseases of the respiratory system, including pneumonia, bronchitis and influenza, but excluding pulmonary tuberculosis, accounted for 625 or 9·99 per cent. of the total deaths from all causes. In 1937 this group of diseases was responsible for 959 or 14·59 per cent. of the total deaths and the average of the previous five years was 879 or 13·50 per cent.

The number of children under five years of age who died from respiratory diseases in 1938 was 113 or 17·8 per cent. of the total deaths under five, as compared with 170 or 26·7 per cent. for the previous year, and an average of 148 or 21·2 per cent. for the previous five years.

The principal changes in the list of important causes of death were an increase in cancer (102) and decreases in influenza (153), pneumonia (105) and bronchitis (69).

For detailed information on infantile diarrhoea, bronchitis, pneumonia and tuberculosis see pages 41, 42, 43, and 114.

Deaths from Street Accidents.—The number of street accidents having a fatal termination during the year was 73 of which 63 or 86·3 per cent. were due to motor vehicles. Last year the number was 61 of which 54 or 88·5 per cent. were due to this cause.

On reference to the table on page 24 it will be seen that 37 or 50·7 per cent. of the total deaths were amongst children under 15 years and adults over 65, whilst 36 or 49·3 per cent. were in the age groups between 15 and 65. These figures represent an increase of 2 in the number of deaths of children and adults over 65, and an increase of 10 in the age groups between 15 and 65 as compared with the previous year.

Deaths in Age Groups.—The table on page 23 sets out the deaths according to age groups. The aggregate number of deaths of children in the age groups 0-1, 1-2, and 2-5 was 635 or 10·2 per cent. of the total deaths, as compared with 636, or 9·7 per cent., for the

previous year and an average of 698, or 10.7 per cent. for the previous five years.

The table also shows that the deaths of persons under 45 years numbered 1,490 or 23.8 per cent. of the total deaths, as compared with 1,550 or 23.6 per cent. for the previous year. The deaths in the remaining age groups, that is 45 and over, totalled 4,765 or 76.5 per cent. of which 1,802 or 28.8 per cent. occurred in the age group 45-65, whilst 2,963 or 47.4 per cent. were in the age group 65+.

COMPARISON OF PERCENTAGES OF DEATHS IN THE VARIOUS AGE GROUPS OF 1938, AS COMPARED WITH THE PREVIOUS DECENNIAL.

Period.	-1	1-2	2-5	5-15	15-25	25-45	45-65	65+
1928—1937 ..	8.4	1.9	2.0	2.4	3.7	10.5	28.6	42.5
Year 1938 ..	7.8	1.0	1.3	1.6	2.7	9.4	28.8	47.4
Decrease -	0.6	0.9	0.7	0.8	1.0	1.1	—	—
Increase +	—	—	—	—	—	—	0.2	4.9

Infant Mortality.—The number of deaths of children under one year was 490, or 7.8 per cent. of the total deaths. The infant mortality rate corresponding was 64, or three less than in the previous year (67) and six less than the average for the previous five years (70).

This subject is dealt with in greater detail on page 144.

Cremation.—Out of a total of 6,255 Leeds deaths during the year 1938, the number of bodies disposed of by cremation was 172, or 2.75 per cent., as compared with 130, or 1.98 per cent. for the previous year. A decade ago the number of cremations in Leeds was only 36 so that in ten years there has been an increase of 377.8 per cent. It may therefore be deduced that cremation is gaining in popularity and that the traditional prejudice against this method of disposal is slowly breaking down. To those who, like myself, believe that cremation is the best and most hygienic method of disposing of the dead this must be a source of gratification and though progress continues to be slow it is nevertheless in the right direction and encourages the hope that the future will show an even greater and more rapid advance.

It should be observed that the increase in the number of cremations is accounted for partly by the opening of the new Crematorium at Cottingley Hall on July 28th. The number of Leeds people cremated at this Crematorium was 12 and there were 3 cremations of persons who were not residents of Leeds, making a total of 15. These figures are disappointing and indicate that the appreciation of the advantages of cremation have not yet extended to the working class districts of the city. No doubt, as the new crematorium becomes better known and interest in the subject expands, as I think it is bound to do, among the working class, greater use will be made of this important civic provision.

AIR RAID PRECAUTIONS.

This year on account of the unsettled state of Europe and the possibility of international conflict it is necessary to add a new section to this report describing the measures taken to deal with an international emergency, should such unfortunately arise. This is the first occasion on which the Annual Report of the Medical Officer of Health of this city has included a section of this kind, which only goes to show how great has been the change in the methods of warfare since the days when the sea was regarded as Britain's surest bulwark against invasion by a foreign foe.

The year under review has been one of extraordinary activity in civil defence matters. The inception of the National Recruitment Scheme at the beginning of the year and the rapid development of the national organisation of Air Raid Precautions placed upon the department a task of some magnitude including not only the completion of schemes for the organization, staffing and control of the various branches of the first-aid and hospital services, but also the recruitment and training of the necessary personnel. The pressure on the department due to these additional duties was later greatly increased as a result of the International crisis which occurred in September. That the progress made up to that time was satisfactory is evidenced by the fact that while the lack of personnel prevented the scheme being operated in its entirety, nevertheless all the first-aid services were substantially ready to function at very short notice had the emergency developed. This result was achieved without serious detriment to the efficient performance

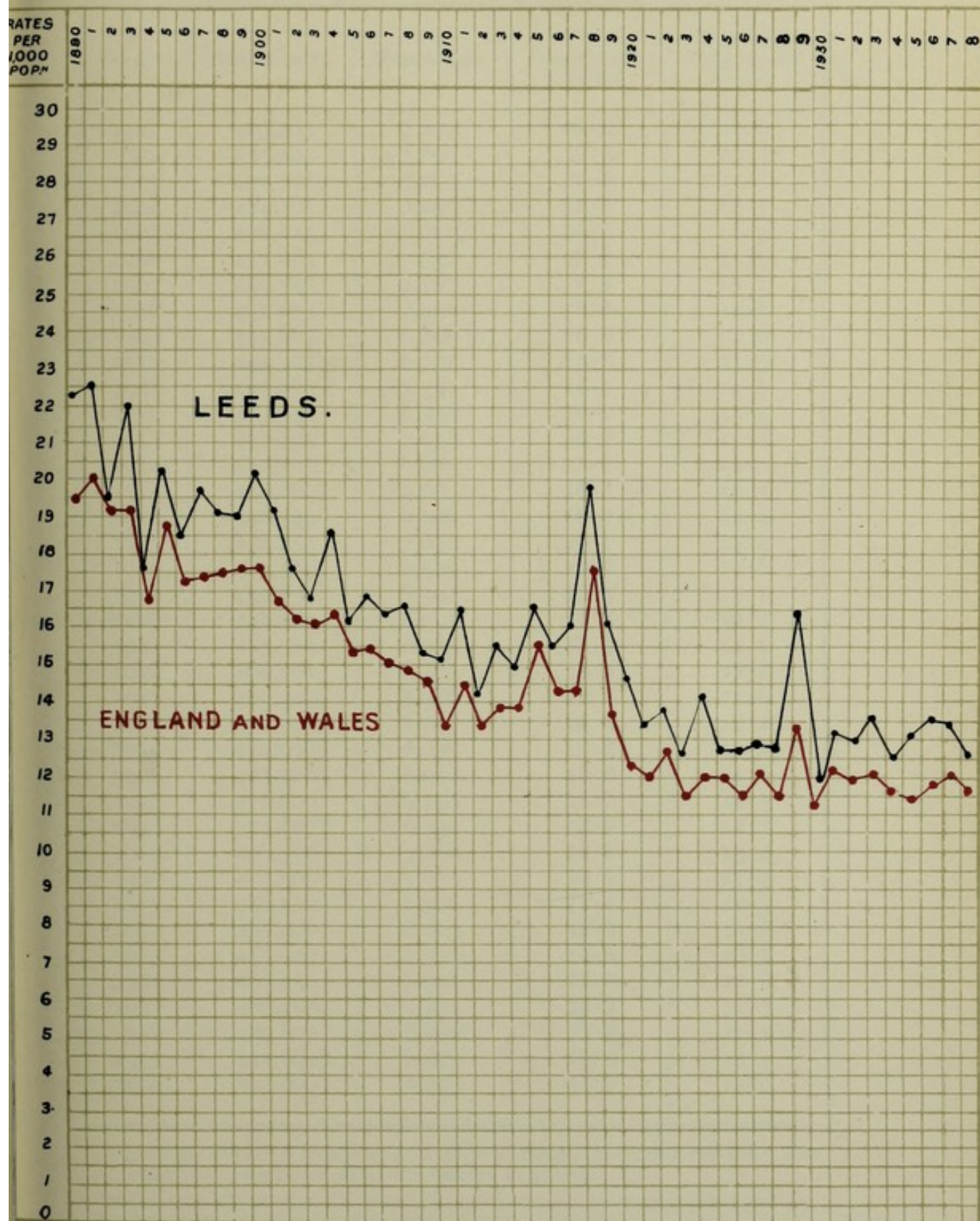
of other departmental activities, due entirely to the interest and enthusiasm of the staff and their willingness to undertake these additional duties outside official hours. The complexity, scope and volume of Air Raid Precautions duties, which are greatly in excess of anything experienced since the last war, show no signs of diminishing ; indeed for some time to come, they may well grow heavier. In such event it will undoubtedly be necessary to have additional assistance as the present staff cannot continue indefinitely under the pressure and strain of past months without jeopardizing the efficiency of the many other important health services for which the Department is responsible.

One of the effects of civil defence activity has been to emphasise the need for larger and more suitable offices. Opportunities for expansion in the present building are nil, which means that as soon as an emergency, such as the present one, arises it is quite impossible to find room for the additional staff required. During the current year, owing to the necessity for setting up an organisation to deal with the immense volume of air raid precautions work, it became necessary to establish an entirely new section, and in order to house this section the suite of offices occupied by the Parks Department was taken over, the Parks Committee agreeing to transfer their staff to the Civic Hall where through the generosity of the Sewerage Committee accommodation had been found for them.

Details of the various branches of the Casualty Services are given in the subjoined table :—

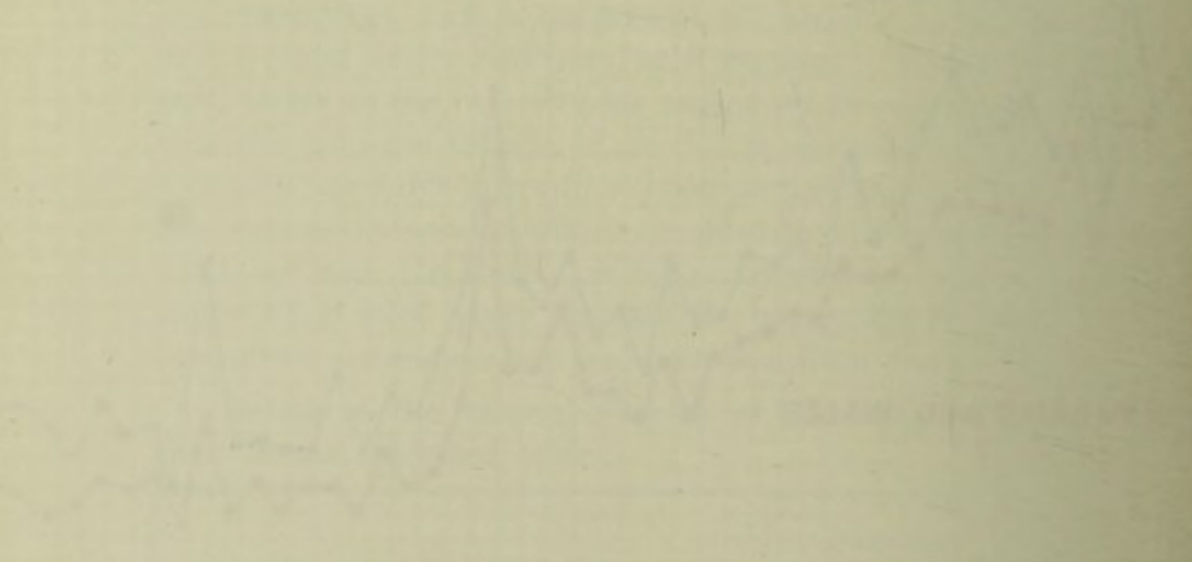
	Personnel.	Vehicles.
3 Casualty Clearing Hospitals	Approx. 2,000 additional nurses	—
4 Base Hospitals		
21 Fixed First Aid Posts	2,079	—
4 Mobile First Aid Posts	60	4
5 First Aid Points	75	—
163 First Aid Parties	2,445	163
163 Cars for sitting casualties	612	163
245 Ambulances	1,838	245
6 Mortuaries	186	20
1 Casualty Services Headquarters	59	—
5 Divisional Report Centres		
General Transport (Stores, breakdown and service vehicles, garage staffs, etc.)	154	42
Blood Transfusion	29	2
Evacuation of hospitals	200	100

DEATH RATE, 1890 - 1938



DEATH RATE, 1930 - 1939

1930



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
1924	471,600	6,747	14.3	12.2
1925	472,900	6,037	12.8	12.2
1926	473,400	6,062	12.8	11.6
1927	477,600	6,198	13.0	12.3
1928	474,800*	6,133	12.9	11.7
1929	478,500	7,898	16.5	13.4
1930	478,500	5,930	12.4	11.4
1931	486,400	6,506	13.4	12.3
1932	484,900	6,469	13.3	12.0
1933	485,000	6,574	13.6	12.3
1934	486,250	6,291	12.9	11.8
1935	487,200	6,432	13.2	11.7
1936	489,800	6,666	13.6	12.1
1937	491,860†	6,573	13.4	12.4
1938	494,000	6,255	12.7	11.6

* Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 476,500.

† Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 491,880.

PRINCIPAL CAUSES OF DEATH.

Death rate.	Diseases.	No. of deaths in 1938 (nett).	Increase or decrease compared with 1937.	Houses.	
				Through.	Back-to-back.
..	Enteric Fever	..	- 3	..	..
..	Small-pox	..	..	..	..
0.04	Measles	18	+ 9	10	8
0.02	Scarlet Fever	8	+ 3	7	1
0.03	Whooping Cough	13	- 6	8	5
0.07	Diphtheria	33	- 11	13	20
0.06	Influenza	28	- 153	13	15
0.02	Erysipelas	9	+ 2	6	2
0.68	Pulmonary Tuberculosis ..	336	- 18	217	118
0.12	Other Tuberculous Diseases	61	+ 9	26	35
1.78	Cancer, malignant disease	879	+ 102	468	409
0.05	Rheumatic Fever	27	- 12	12	15
0.03	Meningitis	13	- 8	7	6
0.72	Cerebral Hæmorrhage ..	355	- 24	188	163
2.74	Organic Heart Disease ..	1,355	- 29	708	635
1.03	Arterio-sclerosis	509	- 53	260	246
0.34	Bronchitis	167	- 69	82	85
0.70	Pneumonia (all forms) ..	348	- 105	182	164
0.17	Other diseases of respiratory organs	82	- 7	49	33
0.23	Diarrhœa and Enteritis ..	114	+ 31	51	63
0.06	Appendicitis and Typhlitis	32	+ 4	18	14
0.03	Cirrhosis of Liver	17	- 2	10	7
0.44	Nephritis and Bright's Disease	215	+ 14	117	97
0.00	Puerperal Fever	2	- 4	..	2
0.02	Other accidents and diseases of Pregnancy and Parturition	12	+ 1	10	2
0.40	Congenital Debility and Malformation, including Premature Birth ..	198	+ 5	96	102
0.43	Violent Deaths, excluding Suicide	210	+ 11	119	91
0.13	Suicide	64	- 2	43	21
2.32	Other Defined Diseases ..	1,147	- 3	639	505
0.01	Diseases ill-defined or unknown	3	- +	2	1
12.66	Totals	6,255	- 318	3,361	2,865

Of the 6,255 deaths, 29 had no home.

CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR, 1938.

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	..	..	..	..	..	..	..	..	..	..
2. Small-pox	..	..	..	..	..	..	..	..	..	..
3. Measles	18	6	7	3	1	..	..	..	1	5
4. Scarlet Fever	8	..	1	2	3	1	1	..	..	5
5. Whooping Cough	13	6	4	3	..	..	..	..	..	4
6. Diphtheria	33	3	2	15	13	..	..	..	..	34
7. Influenza	28	..	..	1	2	..	5	9	11	4
8. Erysipelas	9	1	..	..	..	..	..	4	4	9
9. Pulmonary Tuberculosis ..	336	1	1	2	2	67	129	115	19	180
10. Other Tuberculous Diseases	61	5	7	10	13	6	14	4	2	69
11. Cancer, malignant disease	879	..	1	..	3	2	68	399	406	459
12. Rheumatic Fever	27	..	..	1	5	3	10	6	2	20
13. Meningitis	13	2	1	..	4	..	4	1	1	17
14. Cerebral Hæmorrhage, &c... 355	..	..	..	..	1	..	5	109	240	149
15. Organic Heart Disease ..	1,355	2	1	2	6	11	65	328	940	445
16. Arterio-sclerosis	509	..	..	..	..	..	1	77	431	285
17. Bronchitis	167	7	..	1	1	1	9	63	85	50
18. Pneumonia (all forms) ..	348	59	21	16	4	8	42	109	89	208
19. Other diseases of respiratory organs	82	2	2	4	..	2	12	31	29	44
20. Diarrhoea and Enteritis ..	114	87	7	1	..	2	3	7	7	106
21. Appendicitis and Typhlitis	32	..	..	1	5	2	9	9	6	38
22. Cirrhosis of Liver	17	..	..	..	..	..	2	8	7	12
23. Nephritis and Bright's Disease	215	2	..	..	..	6	30	82	95	130
24. Puerperal Fever	2	..	..	..	..	1	1	..	..	5
25. Other accidents and diseases of Pregnancy and Parturition	12	..	..	..	..	1	11	..	..	19
26. Congenital Debility and Malformation, including Premature Birth ..	198	192	..	2	2	1	1	..	..	195
27. Violent Deaths, excluding Suicide	210	15	2	5	14	21	28	38	87	188
28. Suicide	64	..	..	..	..	3	18	29	14	10
29. Other Defined Diseases ..	1,147	99	7	11	21	33	116	374	486	765
30. Diseases ill-defined or unknown	3	1	..	1	..	..	..	..	1	4
Totals	6,255	490	64	81	100	171	584	1,802	2,963	3,459

DEATHS AND DEATH RATE IN WARDS.

MUNICIPAL WARD.	Area in Acres.	Estimated population middle of 1938.	Nett deaths.	Death- rate.
Mill Hill and South.. ..	574	13,678	137	10·02
Westfield	234	14,151	213	15·05
Blenheim	443	20,541	322	15·68
Central	312	17,566	273	15·54
Woodhouse	436	15,563	220	14·14
North	5,080·5	21,072	253	12·01
Far Headingley	5,386	21,950	253	11·53
Hyde Park	468	15,513	247	15·92
Kirkstall	1,071	23,481	256	10·90
Burmantofts	274	18,095	234	12·93
Harehills	655	23,003	332	14·43
Potternewton	470	19,012	245	12·89
Roundhay	3,901	29,369	300	10·21
Cross Gates and Temple- newsam	5,619	22,336	239	10·70
Richmond Hill	260	14,516	155	10·68
Osmondthorpe	1,455	20,843	242	11·61
East Hunslet	366	17,202	222	12·91
Hunslet Carr and Middleton	2,657	25,582	338	13·21
West Hunslet	206	16,445	198	12·04
Beeston	1,166	17,489	205	11·72
Holbeck (South)	306	13,280	181	13·63
Holbeck (North)	383	10,760	131	12·17
Armley and New Wortley ..	565	19,224	271	14·10
Upper Armley	945	17,660	217	12·29
Bramley	2,213	23,998	293	12·21
Farnley and Wortley ..	2,851	21,671	278	12·83
City	38,296·5	494,000	6,255	12·66

DEATHS IN AGE GROUPS (NETT), 1928-1938.

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.
1928	606 <i>9.9%</i>	122 <i>2.0%</i>	113 <i>1.8%</i>	155 <i>2.5%</i>	230 <i>3.8%</i>	725 <i>11.8%</i>	1,792 <i>29.2%</i>	2,390 <i>39.0%</i>	6,133
1929	722 <i>9.1%</i>	291 <i>3.7%</i>	258 <i>3.3%</i>	160 <i>2.0%</i>	349 <i>4.4%</i>	851 <i>10.8%</i>	2,113 <i>26.8%</i>	3,154 <i>39.9%</i>	7,898
1930	512 <i>8.6%</i>	84 <i>1.4%</i>	117 <i>2.0%</i>	156 <i>2.6%</i>	253 <i>4.3%</i>	667 <i>11.2%</i>	1,813 <i>30.6%</i>	2,328 <i>39.3%</i>	5,930
1931	552 <i>8.5%</i>	137 <i>2.1%</i>	154 <i>2.4%</i>	169 <i>2.6%</i>	275 <i>4.2%</i>	701 <i>10.8%</i>	1,902 <i>29.2%</i>	2,616 <i>40.2%</i>	6,506
1932	617 <i>9.5%</i>	109 <i>1.7%</i>	144 <i>2.2%</i>	155 <i>2.4%</i>	246 <i>3.8%</i>	659 <i>10.2%</i>	1,791 <i>27.7%</i>	2,748 <i>42.5%</i>	6,469
1933	537 <i>8.2%</i>	105 <i>1.6%</i>	130 <i>2.0%</i>	184 <i>2.8%</i>	285 <i>4.3%</i>	702 <i>10.7%</i>	1,825 <i>27.8%</i>	2,806 <i>42.7%</i>	6,574
1934	513 <i>8.2%</i>	104 <i>1.6%</i>	164 <i>2.6%</i>	205 <i>3.3%</i>	225 <i>3.6%</i>	653 <i>10.4%</i>	1,792 <i>28.5%</i>	2,635 <i>41.8%</i>	6,291
1935	463 <i>7.2%</i>	99 <i>1.5%</i>	91 <i>1.4%</i>	167 <i>2.6%</i>	198 <i>3.1%</i>	656 <i>10.2%</i>	1,805 <i>28.1%</i>	2,953 <i>45.9%</i>	6,432
1936	476 <i>7.1%</i>	84 <i>1.3%</i>	90 <i>1.4%</i>	109 <i>1.6%</i>	187 <i>2.8%</i>	628 <i>9.4%</i>	1,991 <i>29.9%</i>	3,101 <i>46.5%</i>	6,666
1937	491 <i>7.5%</i>	72 <i>1.1%</i>	73 <i>1.1%</i>	102 <i>1.5%</i>	190 <i>2.9%</i>	622 <i>9.5%</i>	1,926 <i>29.3%</i>	3,097 <i>47.1%</i>	6,573
1938	490 <i>7.8%</i>	64 <i>1.0%</i>	81 <i>1.3%</i>	100 <i>1.6%</i>	171 <i>2.7%</i>	584 <i>9.4%</i>	1,802 <i>28.8%</i>	2,963 <i>47.4%</i>	6,255

DEATHS FROM VEHICULAR TRAFFIC OF LEEDS PEOPLE IN AGE
GROUPS, 1911-1938.

Year.	-5	5-15	15-25	25-45	45-65	65+	Totals.
1911	4	6	2	2	1	2	17
1912	2	3	2	3	2	2	14
1913	1	5	2	6	9	5	28
1914	1	2	4	4	7	7	25
1915	1	11	2	5	8	7	34
1916	2	4	2	3	10	6	27
1917	4	8	3	7	8	7	37
1918	3	4	3	2	11	6	29
1919	1	8	—	1	13	7	30
1920	—	3	6	8	5	5	27
1921	3	9	3	3	1	7	26
1922	3	10	2	5	8	2	30
1923	2	6	7	7	12	6	40
1924	5	9	6	5	7	7	39
1925	5	7	6	5	6	5	34
1926	6	12	7	8	17	12	62
1927	4	20	9	6	13	5	57
1928	2	10	6	14	14	12	58
1929	2	11	13	10	9	10	55
1930	8	12	9	8	19	19	75
1931	4	10	12	14	19	12	71
1932	6	10	10	15	18	19	78
1933	5	9	8	12	14	17	65
1934	8	9	14	15	30	15	91
1935	6	9	8	13	10	25	71
1936	5	7	10	7	9	16	54
1937	2	9	8	7	11	24	61
1938	2	7	9	11	16	28	73

CREMATIONS IN LEEDS, 1905-1938.

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
1924	24	6,747	0·36
1925	26	6,037	0·43
1926	14	6,062	0·23
1927	32	6,198	0·52
1928	31	6,133	0·51
1929	36	7,898	0·46
1930	26	5,930	0·44
1931	54	6,506	0·83
1932	55	6,469	0·85
1933	66	6,574	1·00
1934	71	6,291	1·13
1935	96	6,432	1·49
1936	93	6,666	1·40
1937	130	6,573	1·98
1938	172†	6,255	2·75
Total	1,154	229,600	0·50

† Including 12 people cremated at Cotingley Hall Cemetery and Crematorium,
opened 28th July, 1938.

Observations on the ...

Time	Latitude	Longitude	Altitude	Distance	Direction	Remarks
1.00	42.15	71.30	10.0	1.0	N	
1.10	42.15	71.30	10.0	1.0	N	
1.20	42.15	71.30	10.0	1.0	N	
1.30	42.15	71.30	10.0	1.0	N	
1.40	42.15	71.30	10.0	1.0	N	
1.50	42.15	71.30	10.0	1.0	N	
2.00	42.15	71.30	10.0	1.0	N	
2.10	42.15	71.30	10.0	1.0	N	
2.20	42.15	71.30	10.0	1.0	N	
2.30	42.15	71.30	10.0	1.0	N	
2.40	42.15	71.30	10.0	1.0	N	
2.50	42.15	71.30	10.0	1.0	N	
3.00	42.15	71.30	10.0	1.0	N	
3.10	42.15	71.30	10.0	1.0	N	
3.20	42.15	71.30	10.0	1.0	N	
3.30	42.15	71.30	10.0	1.0	N	
3.40	42.15	71.30	10.0	1.0	N	
3.50	42.15	71.30	10.0	1.0	N	
4.00	42.15	71.30	10.0	1.0	N	
4.10	42.15	71.30	10.0	1.0	N	
4.20	42.15	71.30	10.0	1.0	N	
4.30	42.15	71.30	10.0	1.0	N	
4.40	42.15	71.30	10.0	1.0	N	
4.50	42.15	71.30	10.0	1.0	N	
5.00	42.15	71.30	10.0	1.0	N	
5.10	42.15	71.30	10.0	1.0	N	
5.20	42.15	71.30	10.0	1.0	N	
5.30	42.15	71.30	10.0	1.0	N	
5.40	42.15	71.30	10.0	1.0	N	
5.50	42.15	71.30	10.0	1.0	N	
6.00	42.15	71.30	10.0	1.0	N	
6.10	42.15	71.30	10.0	1.0	N	
6.20	42.15	71.30	10.0	1.0	N	
6.30	42.15	71.30	10.0	1.0	N	
6.40	42.15	71.30	10.0	1.0	N	
6.50	42.15	71.30	10.0	1.0	N	
7.00	42.15	71.30	10.0	1.0	N	
7.10	42.15	71.30	10.0	1.0	N	
7.20	42.15	71.30	10.0	1.0	N	
7.30	42.15	71.30	10.0	1.0	N	
7.40	42.15	71.30	10.0	1.0	N	
7.50	42.15	71.30	10.0	1.0	N	
8.00	42.15	71.30	10.0	1.0	N	
8.10	42.15	71.30	10.0	1.0	N	
8.20	42.15	71.30	10.0	1.0	N	
8.30	42.15	71.30	10.0	1.0	N	
8.40	42.15	71.30	10.0	1.0	N	
8.50	42.15	71.30	10.0	1.0	N	
9.00	42.15	71.30	10.0	1.0	N	
9.10	42.15	71.30	10.0	1.0	N	
9.20	42.15	71.30	10.0	1.0	N	
9.30	42.15	71.30	10.0	1.0	N	
9.40	42.15	71.30	10.0	1.0	N	
9.50	42.15	71.30	10.0	1.0	N	
10.00	42.15	71.30	10.0	1.0	N	

Infectious and Other Diseases.

INFECTIOUS AND OTHER DISEASES

BY

JAMES SHARPE, M.B., F.R.F.P.S., D.P.H.,

Deputy Medical Officer of Health.

Statistics for the year 1938 show a welcome fall in the incidence of the commoner infectious diseases, the only increases of any moment being in measles and German measles.

Deaths from diphtheria numbered 33 as against 44 in the previous year though the incidence was practically the same, 948 cases compared with 941.

Decreases in the incidence of scarlet fever, enteric fever and pneumonia are recorded.

Cancer created another high record claiming 879 victims as against 843 in 1936 which was the highest number recorded up to that year.

On the other hand influenza accounted for only 28 deaths, which is the lowest number recorded since 1896.

A complete summary of all cases of notifiable infectious diseases notified to this Department will be found in the Appendix Table 2.

Smallpox.—No case of this disease was notified in the city during 1938. This makes the seventh consecutive year in which the city has been entirely free from smallpox.

Contacts from Other Areas and Abroad.—One contact from another area was kept under observation during the quarantine period. On two occasions information was received regarding the occurrence of smallpox on ships returning from foreign countries and two contacts coming into the city were kept under observation. None of the three contacts developed the disease.

Cases referred for Second Opinion.—During the year six cases were referred to the Department as "doubtful smallpox" by general medical practitioners as compared with eight for the preceding year. The diagnosis was chickenpox 3, urticaria 1, psoriasis 1, food rash 1. None of these cases was admitted to hospital.

Vaccination.—During 1937, the last year for which statistics are available, 7,846 births were registered of which 3,521 or 44·9 per cent. were successfully vaccinated; 9 were found to be in-susceptible to vaccination and 3,155 statutory exemptions were issued on account of conscientious objections by parents and guardians.

The appended table shows the number of children vaccinated from year to year.

VACCINATION.

Year.	Number of children born.	Number of successful primary vaccinations during year.	Number granted exemption certificates during year.	Percentage successfully vaccinated.
1925	8,576	5,919	2,477	69·0
1926	8,515	6,045	2,348	71·0
1927	8,129	6,590	2,016	81·1
1928	7,978	5,828	2,387	73·1
1929	7,727	4,127	2,423	53·4
1930	7,902	4,275	2,558	54·1
1931	7,555	3,963	2,511	52·5
1932	7,369	3,692	2,635	50·1
1933	7,071	3,390	2,598	47·9
1934	7,693	3,669	2,930	47·7
1935	7,745	3,517	3,010	45·4
1936	7,849	3,644	2,997	46·4
1937	* 7,846	3,521	3,155	44·9

*Quite an appreciable number of these children may be vaccinated in 1938.

Diphtheria.—The number of cases notified during the year was 948 of which 939 or 99·0 per cent. were removed to hospital as compared with 941 and 933 or 99·1 per cent. in 1937. The deaths numbered 33 giving a death-rate of 0·07 as compared with 44 deaths and a death-rate of 0·09 last year. The comparative rates for England and Wales are 0·07 in 1938 and 0·07 in 1937.

In addition to the above 948 cases notified as diphtheria, 85 cases were found on admission to hospital to be suffering from other diseases although a throat swab had shown the diphtheria bacillus to be present. These cases are regarded as carriers and have been excluded from the statistics.

DIPHTHERIA AND MEMBRANOUS CROUP.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1928	634	1.34	21	0.04	0.08
1929	536	1.12	26	0.05	0.09
1930	994	2.08	54	0.11	0.09
1931	995	2.05	86	0.18	0.07
1932	889	1.83	48	0.10	0.06
1933	1,057	2.18	88	0.18	0.07
1934	2,231	4.59	156	0.32	0.10
1935	1,335	2.74	60	0.12	0.09
1936	799	1.63	36	0.07	0.08
1937	941	1.91	44	0.09	0.07
1938	948	1.92	33	0.07	0.07

Diphtheria Immunisation.—During the year 11,073 children were immunised by medical officers of this Department. During the Spring a special campaign was undertaken in the Infant Departments of the Schools and with the help of the Director of Education, the School Medical Department and the teachers 9,626 children were protected. As formerly the work was carried out at no great cost to the Health Committee and with a minimum of disturbance of school routine.

In strong contrast I have to draw your attention to the paucity of numbers attending the *ad hoc* clinic during the year. The number immunised at this clinic in 1938 was 1,447 or 312 more than in 1937. That is certainly an improvement but still very far short of what is necessary to protect the population. If only

parents would accept the free treatment offered and bring their children, especially those under five years of age, to the clinic and continue attending until the prescribed course of injections is completed there should be no difficulty in reaching and maintaining an output each year of 5,000.

Material for immunisation was issued to general medical practitioners on request, and sufficient to immunise 518 children was distributed during 1938.

The appended table shows the number of children immunised since the inauguration of our scheme in the year 1928.

DIPHTHERIA IMMUNISATION IN LEEDS.

Year.	Immunised by Medical Officers of the Health Department.	Immunised by General Medical Practitioners.	Total.
1928	65	27	92
1929	73	28	101
1930	152	22	174
1931	202	400	602
1932	1,379	495	1,874
1933	1,027	345	1,372
1934	2,217	556	2,773
1935	28,973	2,193	31,166
1936	1,938	212	2,150
1937	1,135	206	1,341
1938	11,073	518	11,591
Total	48,234	5,002	53,236

Diphtheria in the Inoculated.—Of the 53,236 children known to be immune or immunised since 1928, 85 lost their immunity and developed clinical diphtheria or showed lesions from which diphtheria bacilli were isolated during 1938. Twenty-three immunised children notified as suffering from diphtheria during the year were found to have tonsillitis only.

In the last eleven years 289 of the 53,236 children immunised or thought to be naturally immune have developed clinical diphtheria. All recovered. This is surely a very satisfactory result and one which amply justifies the confidence placed in immunisation and the action of the Corporation in commending this method of protection to the public.

It can be justly claimed for immunisation that it protects without risk to the child and at little cost to the community. But the measure of protection enjoyed by a community is the number of immune children under school age. This should not be less than one-third of the total. At this age, nine out of every ten children in Leeds appear to be susceptible and when they contract the disease the fatality rate is usually high. An immune infant population would mean an immediate and very definite reduction both in the number of cases and in the death rate. It is for this we must strive.

Institutional Outbreaks.—During the year 72 cases of diphtheria were notified from six institutions in the city. Cases among the staff numbered twelve, all females. None died. Of the 60 remaining cases, 30 males and 24 females recovered and 4 males and 2 females died.

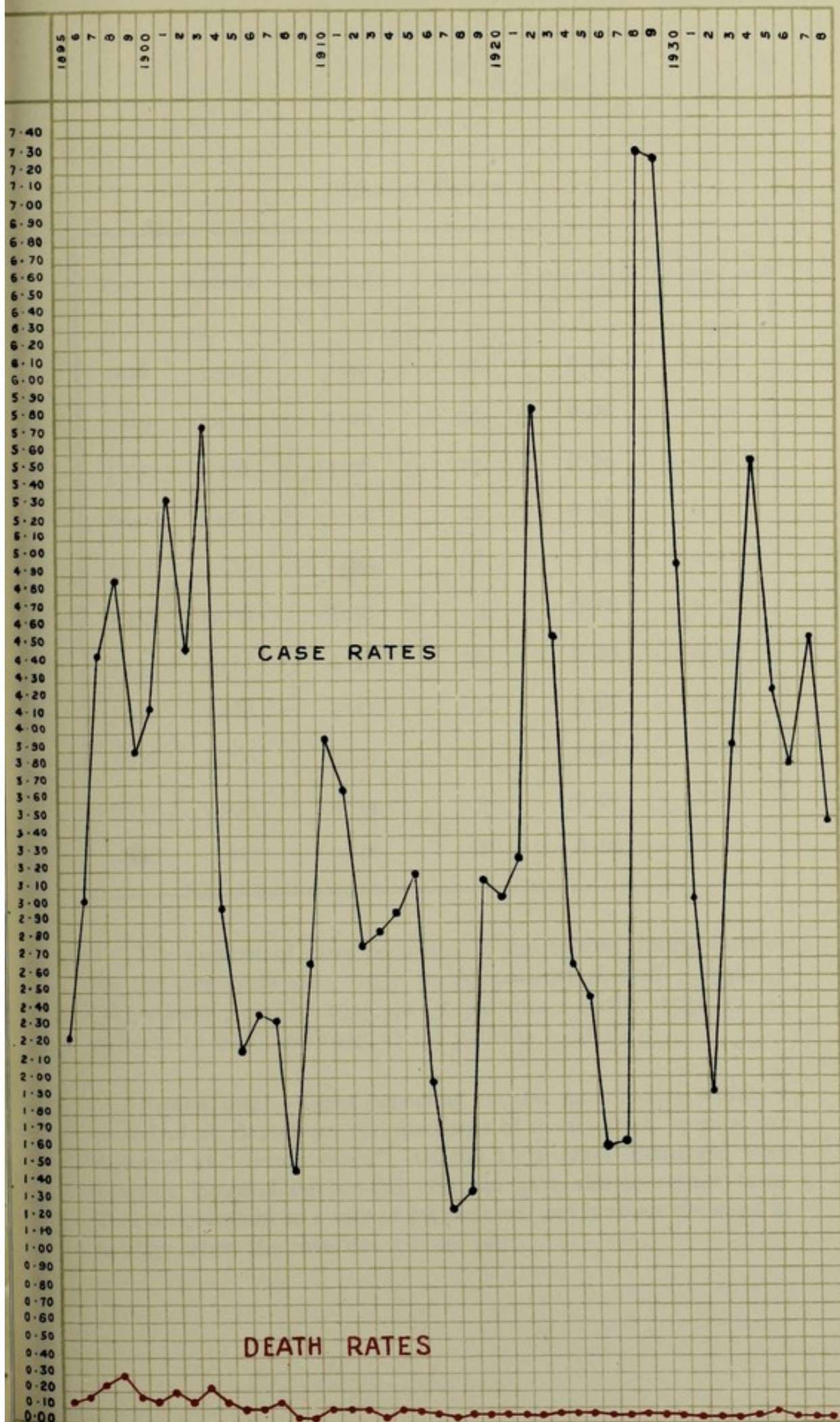
The number of cases occurring in institutions during each of the last five years are: 1937, 70 (61 patients, 9 staff), 1936, 80 (72 patients, 8 staff); 1935, 82 (66 patients, 16 staff); 1934, 107 (99 patients, 8 staff), and 1933, 123 (105 patients, 18 staff).

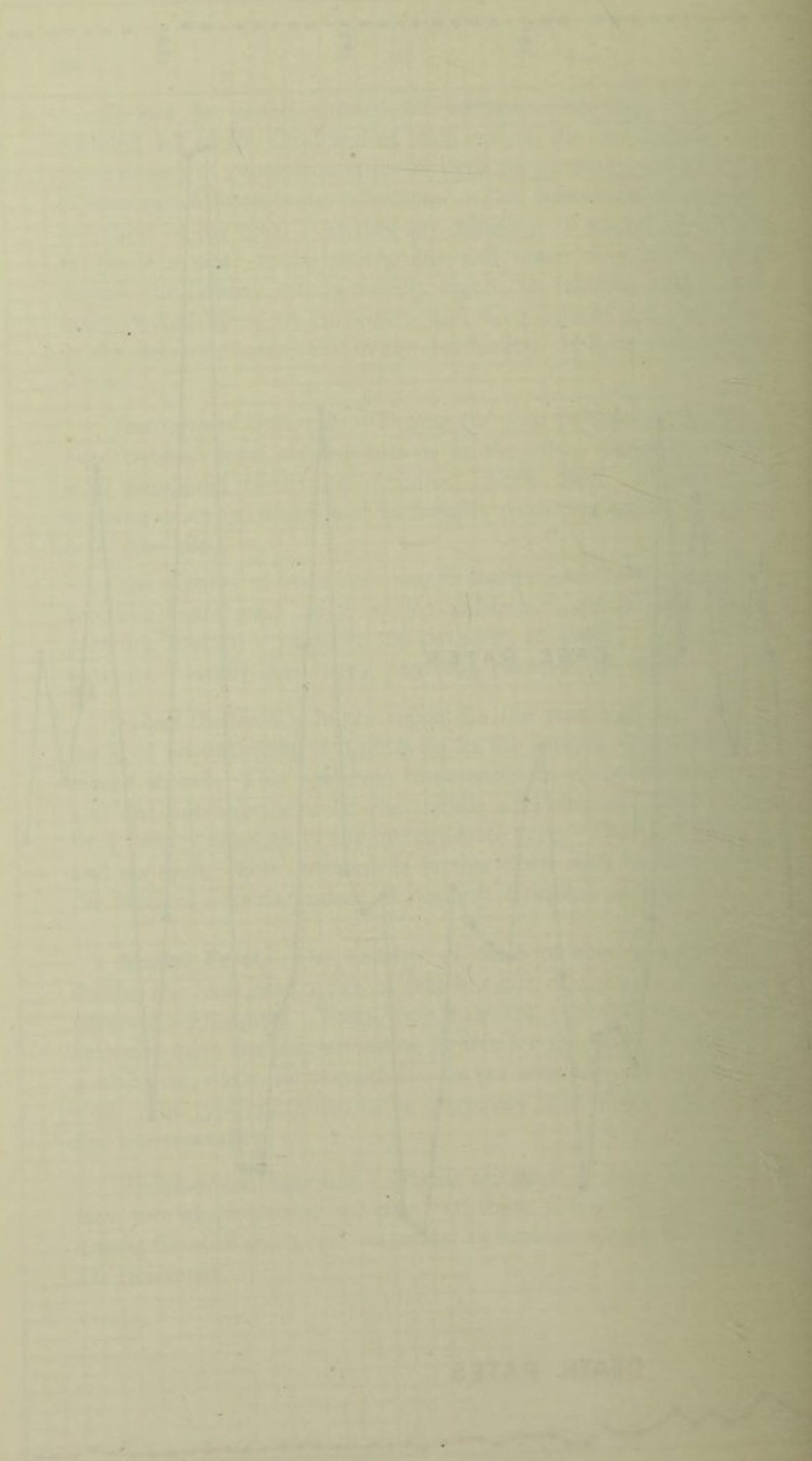
School Outbreak.—In the report for the year 1937 mention was made of an outbreak of diphtheria in the infants department of a mixed school. This epidemic commenced in early October, 1937, and did not subside until the middle of February, 1938. There were twenty cases all of the intermediate type. Fourteen recovered and six died. This outbreak is further dealt with in the report of the Medical Superintendent of Seacroft Hospital on page 59.

Scarlet Fever.—The number of cases of this disease notified during the year was 1,717 of which 1,598 or 93·1 per cent. were removed to hospital. There were 8 deaths, equivalent to a death-rate of 0·02. The corresponding figures for the previous year were 5 and 0·01, while the average for the previous five years was 9 and 0·02. The type continued to be extremely mild which accounts for the low mortality.

Institutional Outbreaks.—During the year 39 cases were notified from five institutions in the city. Of these, 6 (all females) occurred among the staff and 33 (18 males and 15 females) among the patients. All recovered.

SCARLET FEVER CASE AND DEATH RATES 1895 - 1938





STATE OF NEW YORK

STATE OF NEW YORK

SCARLET FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1928	3,515	7.40	18	0.04	0.01
1929	3,473	7.26	29	0.06	0.02
1930	2,383	4.98	23	0.05	0.02
1931	1,467	3.02	12	0.02	0.01
1932	931	1.92	8	0.02	0.01
1933	1,906	3.93	9	0.02	0.02
1934	2,711	5.58	16	0.03	0.02
1935	2,082	4.27	5	0.01	0.01
1936	1,868	3.81	12	0.02	0.01
1937	2,234	4.54	5	0.01	0.01
1938	1,717	3.48	8	0.02	0.01

The number of cases occurring in institutions during each of the last five years are:—1937, 71 (55 patients 16 staff); 1936, 45 (38 patients 7 staff); 1935, 40 (38 patients 2 staff); 1934, 57 (44 patients 13 staff) and 1933, 28 (18 patients 10 staff).

Return cases.—Cases occurring in the same house within a period of 28 days from the discharge of a case from hospital are regarded as "return cases." Of the 1,736 cases discharged from Seacroft Hospital during the year, 40 gave rise to return cases. This is equivalent to a rate of 2.5 per cent. and is about the same as in 1937 when the rate was 2.6 per cent.

ENTERIC FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1928	6	0·01	1	0·00	0·01
1929	14	0·03	3	0·01	0·01
1930	4	0·01	2	0·00	0·01
1931	10	0·02	2	0·00	0·01
1932	9	0·02	..	..	0·01
1933	10	0·02	1	0·00	0·01
1934	8	0·02	1	0·00	0·00
1935	5	0·01	..	..	0·00
1936	4	0·01	..	..	0·01
1937	16	0·03	3	0·01	0·00
1938	3	0·01	..	..	0·00

The Enteric Group.—Only three cases of the enteric group of infections were notified during the year, all of which were true cases of typhoid fever. There were no deaths. Two male patients aged 13 and 19 years were admitted to a general hospital in the city from areas outside Leeds. Their symptoms suggested to the medical staff the possibility of enteric fever and the patients were removed to the City Isolation Hospital where the diagnosis was confirmed both clinically and bacteriologically in each case. Detailed information was sent without delay to the Medical Officers of Health of the districts concerned. In one of the hospitals concerned a nurse contracted the disease as a result of being in contact with one of the cases.

Enteric Fever Carriers.—In the reports of the last three years reference has been made to a girl, now aged 22 and a woman of 53 who were chronic carriers. During 1938 examinations of the faeces of both women were carried out at three monthly intervals with positive results on each occasion which means that the carrier condition still persists and observation continues.

MEASLES (EXCLUDING GERMAN MEASLES).

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate LEEDS.	Death-rate England and Wales.
1922	9,932	21.28	152	0.33	0.15
1923	4,683	9.97	50	0.11	0.14
1924	6,654	14.11	46	0.10	0.12
1925	5,100	10.78	39	0.08	0.14
1926	7,076	14.95	19	0.04	0.09
1927	8,569	17.94	117	0.24	0.09
1928	3,638	7.66	21	0.04	0.11
1929	9,486	19.82	102	0.21	0.09
1930	913	1.91	2	0.00	0.11
1931	10,955	22.52	56	0.12	0.08
1932	3,540	7.30	52	0.11	0.08
1933	3,973	8.19	22	0.05	0.05
1934	10,576	21.75	90	0.19	0.09
1935	1,341	2.75	4	0.01	0.03
1936	8,744	17.85	49	0.10	0.07
1937	2,373	4.82	9	0.02	0.03
1938	6,797	13.76	18	0.04	0.04

GERMAN MEASLES.

Year.	Cases notified.	Case-rate.	Deaths LEEDS.	Deaths in England and Wales.
1922 ..	146	0.31	..	15
1923 ..	541	1.15	..	17
1924 ..	383	0.81	..	12
1925 ..	201	0.43	..	42
1926 ..	626	1.32	1	35
1927 ..	95	0.20	..	20
1928 ..	41	0.09	..	12
1929 ..	1,256	2.62	..	31
1930 ..	343	0.72	..	27
1931 ..	101	0.21	..	16
1932 ..	86	0.18	..	7
1933 ..	119	0.25	..	11
1934 ..	2,495	5.13	..	8
1935 ..	501	1.03	..	11
1936 ..	427	0.87	1	13
1937 ..	312	0.63	..	9
1938 ..	1,268	2.57	1	

Measles.—As expected, measles attained its maximum incidence in the twenty-second week of the year when 461 cases were notified. By the thirty-fourth week the epidemic had abated. In all the number of cases of this disease notified during the year was 6,797 as compared with 2,373 in 1937. There were 18 deaths, giving a death-rate of 0.04.

German Measles.—The number of cases of German measles notified was 1,268. On one death certificate the cause of death is given as German measles.

Whooping Cough.—This disease is not notifiable in Leeds so that the actual number of cases occurring in the city was not ascertained. It is gratifying to note that the number of deaths, 13, was 6 less than the figure for the preceding year when 19 deaths were recorded. The death-rate was 0.03 compared with 0.04 for the year 1937.

Encephalitis Lethargica.—No case of this disease was notified during 1938. There were 7 deaths, all of which were old cases which had been notified in previous years.

Malaria.—One case of this disease was reported during the year.

Dysentery.—There were 14 cases of this disease reported during the year, 7 of which received hospital treatment. There was one death.

Acute Anterior Poliomyelitis.—No case of this disease was reported during the year.

Cerebro Spinal Meningitis.—There was a slight decrease in the number of cases of this disease, 12 being notified as compared with 16 last year. Four cases were removed to hospital. During the year 18 deaths occurred equivalent to a death-rate of 0.04.

WHOOPING COUGH.

Year.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1928	36	0·08	0·08
1929	107	0·22	0·16
1930	32	0·07	0·05
1931	43	0·09	0·06
1932	41	0·08	0·07
1933	28	0·06	0·06
1934	25	0·05	0·05
1935	48	0·10	0·04
1936	28	0·06	0·05
1937	19	0·04	0·04
1938	13	0·03	0·03

AGES AT DEATH FROM WHOOPING COUGH.

1938	0-1	1-2	2-3	3-4	4-5	5-10	10-15	Total.
No. of deaths	6	4	1	..	2	..	..	13

Erysipelas.—There was an increase in the number of notifications of this disease during the year, 304 cases being notified as compared with 270 reported during the previous year. The deaths numbered 9 which gives a death-rate of 0.02. Of the 304 cases reported, 129 received hospital treatment.

ERYSIPELAS.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate Leeds.	Death-rate England and Wales.
1928	361	0.76	19	0.04	0.02
1929	349	0.73	19	0.04	0.03
1930	423	0.88	23	0.05	0.03
1931	317	0.65	22	0.05	0.03
1932	289	0.60	22	0.05	0.02
1933	353	0.73	15	0.03	0.03
1934	418	0.86	28	0.06	0.04
1935	301	0.62	23	0.05	0.03
1936	291	0.59	24	0.05	0.02
1937	270	0.55	7	0.01	0.01
1938	304	0.62	9	0.02	

Puerperal Pyrexia.—The figures for the year are given below, viz. :—

Disease.	Cases notified.		Case-rate per 1,000 population		Deaths.		Death-rate per 1,000. population	
	1937	1938	1937	1938	1937	1938	1937	1938
Puerperal Pyrexia ..	198	170	0.40	0.34	6	2	0.01	0.00

Of the 170 cases of puerperal pyrexia 148 (87.1 per cent.) occurred in institutions, 10 (5.9 per cent.) in doctors' practices, and 12 (7.0 per cent.) in the practice of midwives.

Nine (5.3 per cent.) were removed to Seacroft Hospital and the remainder were treated either at home or in the special wards at the Leeds Maternity Hospital, and St. James's Hospital.

This subject is further dealt with in the section on Maternity and Child Welfare on page 159.

Ophthalmia Neonatorum.—Thirty-three cases of this disease were reported during the year, a decrease of nine cases as compared with the previous year.

DAY OF ONSET FROM BIRTH.

1938.	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	10th-15th	15th-20th	20th-25th
No. of Cases	-	1	2	-	1	1	6	-	-	6	10	5	1

The results of treatment were as follows :—

Recovery apparently perfect	..	..	29
Sight of both eyes affected	..	..	-
Still under treatment	..	..	-
Died from other diseases	..	..	2
Result not known	..	..	2

This subject is further dealt with in the section on Maternity and Child Welfare on page 158.

Influenza.—There were only 28 deaths equivalent to a death-rate of 0·06 from this disease during the year. This is the lowest number of deaths from influenza since the year 1896 when 20 deaths were recorded.

INFLUENZA.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1928	100	0·21	0·20
1929	568	1·19	0·74
1930	59	0·12	0·13
1931	125	0·26	0·36
1932	116	0·24	0·33
1933	258	0·53	0·57
1934	33	0·07	0·14
1935	102	0·21	0·18
1936	64	0·13	0·15
1937	181	0·37	0·45
1938	28	0·06	0·11

AGES AT DEATH FROM INFLUENZA.

1938	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	..	..	1	2	..	5	9	11	28

Epidemic (Summer) Diarrhœa and Enteritis.—An increase in the number of deaths of children under 2 years of age from this disease is recorded, 94 as compared with 65 during 1937. This gives a death-rate of 12·3 per 1,000 births against 8·9 during the previous year.

**DIARRHŒA AND ENTERITIS DEATHS UNDER TWO YEARS
WITH RATES PER 1,000 BIRTHS.**

Year.	Deaths.	Rate per 1,000 Births.	
		Leeds.	England and Wales.
1928	105	13·7	7·2
1929	86	11·6	8·3
1930	34	4·5	6·2
1931	68	9·4	5·9
1932	106	15·1	6·6
1933	104	15·7	7·0
1934	76	10·6	5·4
1935	62	8·6	5·6
1936	71	9·7	5·7
1937	65	8·9	5·8
1938	94	12·3	5·5

DEATHS FROM DIARRHEA AND ENTERITIS UNDER TWO YEARS AND METEOROLOGICAL CONDITIONS
IN EACH MONTH OF THE YEAR.

1938.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Deaths	11	22	5	3	4	6	3	6	11	15	3	5	94
Barom. (inches) ..	29.64	30.05	30.04	30.21	29.86	29.81	29.79	29.91	29.85	29.69	29.40	29.73	29.83
Attached Ther. °F. ..	57.17	56.29	60.08	58.29	61.10	63.82	64.75	65.66	62.56	59.40	59.65	54.81	60.30
Dry Bulb	45.33	44.56	53.11	51.53	55.19	61.51	62.19	63.55	59.79	53.35	51.05	41.77	53.58
Wet Bulb	42.90	41.94	49.49	46.86	51.96	57.93	58.79	59.57	55.96	50.62	48.02	40.17	50.35
Humidity	81.10	79.10	76.43	67.20	79.65	80.20	81.44	78.78	77.94	81.96	82.77	83.21	79.15
Mn. of highest reading ..	49.43	48.68	58.23	56.64	61.46	66.49	67.54	70.09	64.64	57.50	54.31	45.14	58.35
.. lowest	38.89	36.75	43.49	40.39	45.46	51.40	53.39	54.51	51.11	45.32	42.69	35.89	44.94
.. daily range ..	10.54	11.93	14.74	16.25	16.00	15.09	14.15	15.58	13.53	12.18	11.62	9.25	13.41
Total rainfall (inches) ..	2.82	1.46	0.36	0.04	2.45	5.63	2.69	4.91	2.10	3.21	3.89	3.18	32.74
Sunshine (hours) ..	50.08	54.92	121.50	122.50	155.77	168.33	127.25	144.50	89.25	78.42	43.25	29.92	1,185.69

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

Pneumonia.—There was a welcome decrease in the number of deaths as well as in the number of notified cases during the year. Notifications numbered 726 of which 698 were primary and 37 influenzal. The attack rate for the two varieties of pneumonia based on the notifications received was 1·39 and 0·07 respectively, as compared with 1·53 and 0·46 for the previous year and an average of 1·46 and 0·27 for the previous five years.

Of the cases, 471 were notified during the first two quarters of the year. The number of deaths reported from all forms of pneumonia was 348 giving a death-rate of 0·70 as compared with 453 or 0·92 for 1937.

PNEUMONIA.

Year	CASES NOTIFIED.				DEATHS (ALL FORMS).*		
	Acute Primary		Acute Influenzal		Leeds.		England and Wales
	Cases	Case Rate	Cases	Case Rate	Deaths	Death Rate	Death Rate
1928	993	2·09	159	0·33	485	1·02	0·79
1929	1,351	2·82	437	0·91	825	1·72	1·11
1930	645	1·35	65	0·14	413	0·86	0·70
1931	832	1·71	145	0·30	500	1·03	0·84
1932	748	1·54	109	0·22	497	1·02	0·74
1933	824	1·70	187	0·39	485	1·00	0·74
1934	675	1·39	64	0·13	378	0·78	0·71
1935	672	1·38	99	0·20	374	0·77	0·66
1936	645	1·32	91	0·19	419	0·86	0·69
1937	751	1·53	225	0·46	453	0·92	0·72
1938	689	1·39	37	0·07	348	0·70	

* Deaths from Acute Influenzal Pneumonia are recorded as deaths from Influenza.

Bronchitis.—The number of deaths from bronchitis registered during the year was 167 equal to a death-rate of 0.34 as compared with 236 and a death-rate of 0.48 for 1937. As usual more than half the deaths occurred in the age group 65 and over.

BRONCHITIS.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1928	343	0.72	0.59
1929	559	1.17	0.84
1930	278	0.58	0.49
1931	355	0.73	0.63
1932	299	0.62	0.51
1933	342	0.71	0.52
1934	224	0.46	0.42
1935	230	0.47	0.39
1936	245	0.50	0.43
1937	236	0.48	0.44
1938	167	0.34	

AGES AT DEATH FROM BRONCHITIS.

1938	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
No. of Deaths	7	..	1	1	1	9	63	85	167

Cancer.—It is regrettable to have to report a large increase (50 males and 52 females) in the number of deaths from cancer during the year. The total number was 879 (431 males, 448 females) with a death-rate of 1.78 as compared with 777 (381 males, 396 females) and a death-rate of 1.58 a year ago.

Cancer of the digestive system accounted for 46 more deaths in males and 6 more deaths in females than last year. Deaths from cancer of the respiratory organs show an increase of 16 in the female group. Cancer of the breast accounted for 13, of the genital organs for 8, and of the buccal cavity and pharynx for 5 more deaths in women than in 1937.

CANCER.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1928	698	1.47	1.43
1929	684	1.43	1.44
1930	728	1.52	1.45
1931	740	1.52	1.48
1932	760	1.57	1.51
1933	706	1.46	1.53
1934	801	1.65	1.56
1935	803	1.65	1.59
1936	843	1.72	1.62
1937	777	1.58	1.63
1938	879	1.78	1.66

AGES AT DEATH FROM CANCER.

1938.	0-1	1-2	2-5	5-15	15-25	25-45	45-65	65+	Total.
Males	..	1	..	2	2	32	174	220	431
Females	..	..	..	1	..	36	225	186	448
Total	..	1	..	3	2	68	399	406	879

1938.—DEATHS FROM CANCER IN WARDS CLASSIFIED ACCORDING TO ANATOMICAL SITE OF THE DISEASE.

Ward.	Buccal cavity and pharynx.		Digestive organs and peritoneum.		Respiratory organs.		Uterus.	Female genital organs.		Breast.		Male genito-urinary organs.		Skin.		Other or unspecified organs.		Totals.	
	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Mill Hill and South..	1	..	5	4	5	1	2	1	..	..	3	..	..	..	..	2	..	13	11
Westfield ..	1	..	7	7	2	3	2	1	..	..	2	5	..	..	..	..	..	15	15
Blenheim ..	1	..	4	10	4	3	1	1	..	..	3	3	1	1	..	..	1	13	20
Central ..	..	..	14	4	3	1	2	1	..	..	3	2	..	..	..	..	..	20	11
Woodhouse ..	..	..	14	6	1	..	5	1	..	..	5	1	..	..	..	1	3	17	20
North ..	1	1	3	16	6	1	..	1	..	..	8	3	..	..	..	..	1	13	28
Far Headingley ..	2	1	13	7	2	2	2	1	..	..	3	3	..	..	..	2	2	22	18
Hyde Park ..	..	1	10	6	4	1	2	2	..	..	5	1	..	..	..	..	3	15	21
Kirkstall ..	..	..	18	11	2	1	1	2	..	..	1	..	..	..	..	1	1	21	17
Burmantofts ..	..	..	7	3	6	2	1	..	..	..	2	2	..	..	..	..	..	15	9
Harehills ..	1	2	8	10	4	..	5	2	..	..	11	..	..	..	..	..	1	13	31
Potternewton ..	..	1	17	9	2	4	2	1	..	..	1	..	..	..	..	..	2	19	20
Roundhay ..	..	1	11	15	3	2	3	..	..	..	4	3	..	..	..	3	1	20	26
Cross Gates & Templenewsam	1	..	9	5	3	2	..	2	..	..	5	1	..	..	..	..	..	14	15
Richmond Hill ..	..	..	4	1	4	..	3	..	..	..	..	1	..	..	..	..	1	9	5
Osmondthorpe ..	..	..	13	7	6	..	6	2	..	1	1	1	..	..	..	2	1	23	18
East Hunslet ..	1	1	8	8	3	..	5	..	..	..	2	1	..	..	..	1	1	14	17
Hunslet Carr and Middleton	1	..	16	14	4	2	1	..	..	..	5	1	..	..	..	..	3	22	25
West Hunslet ..	..	..	8	7	2	..	..	..	..	..	3	3	..	..	..	..	1	13	13
Beeston ..	..	..	7	2	2	2	2	2	..	..	2	1	..	..	..	1	..	10	12
Holbeck (South) ..	3	..	6	3	7	1	3	..	..	..	4	3	..	..	..	1	1	20	8
Holbeck (North) ..	..	..	5	2	2	..	2	1	..	..	2	1	..	..	..	..	..	8	7
Armley and New Wortley	..	..	11	7	6	..	3	3	..	..	4	4	..	1	..	..	1	23	19
Upper Armley ..	2	1	10	6	3	..	4	1	..	..	3	2	..	..	..	..	2	17	17
Bramley ..	..	..	11	12	3	..	1	..	..	..	2	4	..	..	..	..	1	18	16
Farnley and Wortley	2	1	17	14	..	2	3	1	..	..	4	2	..	2	..	1	2	24	27
1938—City ..	19	10	256	196	89	30	61	27	1	88	48	4	7	14	29	431	448	381	396
1937—City ..	19	5	210	190	90	14	66	19	..	75	47	1	..	14	27	381	396	381	396

DEATHS FROM CANCER SINCE 1932 CLASSIFIED ACCORDING TO YEARS, AND THE ANATOMICAL SITE
OF THE DISEASE.

Year.	Buccal cavity and pharynx.		Digestive organs and peritoneum.		Respiratory organs.		Uterus.	Female genital organs.	Breast.		Male genito-urinary organs.	Skin.		Other or unspecified organs.		Totals.	
	M.	F.	M.	F.	M.	F.			M.	F.		M.	F.	M.	F.	M.	F.
1932	44	5	208	181	58	16	64	20	1	82	31	5	1	20	24	367	393
1933	29	2	209	167	57	20	53	18	1	64	34	1	..	22	29	353	353
1934	36	9	243	155	64	27	62	14	1	94	37	1	4	25	29	407	394
1935	31	2	223	200	72	22	69	23	..	61	36	1	5	25	33	388	415
1936	33	6	248	193	65	16	71	27	1	80	40	2	2	32	27	421	422
1937	19	5	210	190	90	14	66	19	..	75	47	1	..	14	27	381	396
1938	19	10	256	196	89	30	61	27	1	88	48	4	7	14	29	431	448

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

	Year 1926.	Year 1927.	Year 1928.	Year 1929.	Year 1930.	Year 1931.	Year 1932.	Year 1933.	Year 1934.	Year 1935.	Year 1936.	Year 1937.
London ..	1.46	1.49	1.52	1.55	1.57	1.64	1.61	1.65	1.72	1.69	1.78	1.79
Birmingham ..	1.31	1.39	1.37	1.37	1.42	1.45	1.47	1.44	1.47	1.55	1.61	1.65
Liverpool ..	1.18	1.16	1.33	1.34	1.27	1.34	1.40	1.47	1.53	1.56	1.58	1.59
Manchester ..	1.49	1.45	1.49	1.56	1.52	1.63	1.69	1.57	1.69	1.79	1.69	1.74
Sheffield ..	1.19	1.39	1.37	1.42	1.45	1.44	1.33	1.51	1.53	1.54	1.64	1.54
Leeds ..	1.41	1.37	1.46	1.44	1.52	1.53	1.58	1.48	1.64	1.65	1.72	1.59
Bristol ..	1.26	1.43	1.45	1.39	1.50	1.49	1.54	1.45	1.58	1.66	1.65	1.62
Hull ..	1.46	1.45	1.47	1.40	1.36	1.28	1.45	1.33	1.50	1.54	1.43	1.46
Bradford ..	1.63	1.59	1.55	1.58	1.61	1.68	1.71	1.76	1.64	1.90	1.83	1.94
Newcastle ..	1.19	1.20	1.54	1.38	1.39	1.30	1.45	1.44	1.57	1.53	1.45	1.41
Nottingham ..	1.38	1.49	1.44	1.52	1.43	1.51	1.44	1.35	1.47	1.46	1.52	1.57
England and Wales ..	1.36	1.38	1.42	1.44	1.45	1.48	1.51	1.53	1.56	1.59	1.62	1.63

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

Psittacosis.—During the year the second case of psittacosis to be notified in the city came to our notice.

The previous case occurred in 1930 when a woman aged 46 years was reported to be suffering from the disease. A suspected parrot fed and petted by this patient was killed and the body sent to the Ministry of Health's laboratory in London. Bacteriological examination of the body failed to reveal any organism of psittacosis. The patient was very ill for a month but eventually recovered.

The present case recovered, the clinical diagnosis was confirmed serologically though not bacteriologically owing to the inoculated mice dying from intercurrent infection. The patient, a married woman aged 37 years, commenced to be ill on October 27th and appeared to be suffering from a common cold. Two days later she went to bed complaining of headache, pains in the limbs and in the lumbar region. A medical practitioner was called in on October

31st, and on November 11th she was removed to hospital where she was diagnosed as suffering from psittacosis. On enquiry at her home it was ascertained that a budgerigar was purchased on October 17th from a dealer in Leeds. This bird developed an illness on October 25th and died four days later. From the history of the case obtained from the woman's husband it appeared that the patient had been in the habit of allowing the bird to feed from her mouth and that she had also petted and fondled it.

The body of the dead bird was put in the ashbin and removed by the Cleansing Department of the Leeds City Council to a controlled tip. After an exhaustive search had been made in the tip the body of the bird was recovered and was sent to the laboratory of the Minister of Health for examination but it was too decomposed to make a bacteriological examination worth while. At the same time a specimen of the patient's blood was obtained and sent to Professor Bedson of the Hale Clinical Laboratory at the London Hospital for a report on the complement fixation test. Professor Bedson informed us that his findings were so strongly positive as to make it almost certain that the patient had suffered from a recent infection with the virus of psittacosis.

A visit was paid to the aviaries of the dealer from whom the budgerigar had been purchased. He informed us that his was mostly a cash trade, both when purchasing and selling. Consequently he did not know the names and addresses of his customers. His stock of budgerigars and canaries, about 100 in all, were examined without result. They appeared to be sound and perfectly healthy.

We were also assured by the dealer that there had been no sickness among his birds and no deaths. It was therefore concluded that the infection had been confined to one bird and had not become widespread. All the same the necessary precautions were taken to ensure that there was no further spread of the disease.

Food Poisoning.—Outbreaks of food poisoning continue to occupy the attention of officers of this Department. Under the terms of Section 45 of the Leeds Corporation Act, 1930, this type of illness is notifiable.

During the year twenty-two cases were reported of which twenty recovered and two died.

In September, a man aged 46 was admitted to a general hospital in the city with symptoms suggestive of food poisoning from which he succumbed during the early hours of the following morning. He was a travelling salesman in the provision trade whose territory comprised the whole of the West Riding area. Owing to the dehydrated condition of the body it was difficult to establish the various articles of food he had consumed during the previous five days. The only article of diet on which suspicion could be placed was a sixpenny meat pie prepared and sold retail by a multiple firm of general merchants.

The Medical Officers of Health of the areas where the pies were prepared and consumed were communicated with and it was ascertained that there was no suspicious illness among those who prepared the pies or among the customers who purchased them. The Coroner caused a post-mortem examination to be made and after hearing the Bacteriologist's report returned the cause of death as "Food Poisoning caused by *Bacillus Aertrycke*—Misadventure."

In November five children in one family, two boys aged 11 and 8 years, and three girls aged 9, 6 and 4 years respectively, began to be ill within a few hours of each other. Their main symptoms were abdominal pain, vomiting and diarrhoea. All five patients were removed to hospital where the condition of four yielded to treatment but the girl aged 9 died. Inquest—"Food Poisoning due to *Bacillus Aertrycke*—Misadventure." The evidence of the parents as to the food consumed and likely to be responsible for the attack was altogether inconclusive. Samples of home boiled bacon and tinned milk were submitted for bacteriological investigation with negative results. Specimens of tea and sugar were submitted to chemical analysis but no trace of any chemical irritant could be found. It was ascertained that the whole family, other than the father and the baby, had had fish and chips which were purchased immediately the fish shop opened on the Monday night. The children's illness commenced two to seven hours later and the mother complained of slight digestive pains but was quite well when interviewed forty hours later. The fish shop appeared to be well managed and though we were unable to establish that infected fish was the cause of the outbreak we did not rule this out as a possible source of the infection.

A special report was sent to the Ministry of Health on December 6th of a suspected case of food poisoning attributed to infected duck eggs. The patient, a man aged 66 years, recovered. *Bacillus Aertrycke* (Mutton type) was recovered from his stools on the sixteenth day of his illness.

A case of paratyphoid "b" infection in a woman of 36 years was reported from one of the hospitals in the city. Epidemiological enquiries tended to suggest that the infecting micro-organism might be a member of the food poisoning rather than the paratyphoid group. Eventually an organism was isolated which though agglutinating Para "B," *Aertrycke*, and Newport anti-sera failed to show absorption of agglutinins with any of these strains. It was considered to be one of the rarer food poisoning organisms. The patient recovered.

In addition 14 sporadic cases of suspected food poisoning were reported to the Department during the year, all of which after thorough investigation failed to reveal any suspected organisms or chemical poisons. All these patients recovered.

Anthrax.—Three cases of this disease were diagnosed in a general hospital in the city during the year. One of the cases resided in a neighbouring County Borough. All patients were removed to our Infectious Diseases Hospital and detailed information was sent to H.M. Inspector of Factories, London, and the Medical Officer of Health of the area concerned.

Handling of Food, etc. by Infected Persons.—It was not found necessary to exercise the powers conferred by Section 42 of the Leeds Corporation Act, 1930, during the year under review.

AMBULANCE WORK.

Municipal Ambulance Service.—Central Ambulance Station.—

A resolution of the Housing Committee was submitted in June approving the transfer to the Health Committee of an area of land in Saxton Lane for the erection of a central ambulance station. Preliminary plans of the new station have since been prepared and approved by the Committee and provisionally by the Ministry of Health. Final plans and estimates are now in course of preparation and it is hoped will be presented before the Summer recess so that building operations can commence in the Autumn. The advantages of such a station which will be commodious and up-to-date in every detail will be great in time of peace, but in the unfortunate event of war will be incalculable. It will not only house and service the Corporation's fleet of ambulances but it will be the main repair depôt for the auxiliary ambulances used during a national emergency.

The following tables show the work of the Municipal Ambulance Staff for the year.

PATIENTS REMOVED.

Type of Case.	Number removed.
Accident	1,512
Illness	491
Maternity	2,119
Tuberculosis	626
Hospital	6,564
Public Assistance	571
Mental	134
Lunacy	50
Special treatment	1,820
Others	605
Total	14,492

MONTHLY RECORD OF CASES.

Month.	No. of cases.	Average No. of cases per day.	Mileage. Miles.	Average Mileage per case. Miles.	Average time per case. Mins.	Maximum No. of cases per day.		Minimum No. of cases per day.		Fruitless journeys.	
						Cases.	No. of days.	Cases.	No. of days.	Number.	% of patients carried
Jan.	1,388	45·79	8,932	6·29	33·25	73	1	15	1	31	2·23
Feb.	1,308	46·71	7,961	5·95	30·64	69	1	18	2	28	2·14
Mar.	1,179	38·03	8,073	6·68	39·17	57	1	11	1	28	2·37
April	1,112	37·06	7,467	6·55	32·83	72	1	11	1	28	2·50
May	1,202	40·22	7,826	6·27	31·05	68	1	11	1	45	3·74
June	1,243	41·43	7,785	6·10	30·74	81	1	10	1	33	2·65
July	1,151	38·06	7,267	6·15	31·08	60	1	9	1	29	2·51
Aug.	1,107	36·25	7,144	6·29	32·24	61	1	11	1	17	1·53
Sept.	1,080	36·00	6,855	6·34	31·44	56	1	10	1	19	1·75
Oct.	1,289	41·58	7,947	6·01	30·71	67	1	14	1	33	2·56
Nov.	1,217	40·56	7,461	5·99	33·54	59	1	10	1	27	2·21
Dec.	1,216	39·22	8,186	6·58	34·89	60	1	13	2	27	2·22
Total	14,492	..	92·904	..	..	..	..	..	..	345	..
Average	..	39·70	..	6·26	32·61	..	..	..	..	..	2·38

Infectious Diseases Ambulance Work and Disinfection.—

Ambulance Work.—During the year under review, 3,219 cases were removed by the ambulances to Seacroft Hospital. Over and above these, 105 journeys were made for the transference of patients from one institution to another or for returning patients home on discharge from hospital.

The following are details of the cases removed to hospital by the ambulances, viz :—

Smallpox	..	..	..	..	—
Scarlet fever	..	..	..	..	1,721
Diphtheria	..	..	..	..	1,177
Typhoid	..	..	..	..	11
Measles	..	..	..	..	108
Other diseases	..	..	..	..	202
Total	..	..	..	..	<u>3,219</u>

(As compared with 4,758 in 1937).

The total mileage run by the ambulances was 29,461, compared with 36,758 during 1937.

There are now four ambulances for infectious diseases and four bedding vans.

Disinfection.—The following work was done by the disinfecting staff, viz. :—

Houses disinfected	..	..	..	3,691
Rooms	..	..	..	5,983
Beds and Mattresses	..	..	..	4,149
Articles of bed linen	..	..	..	32,155
Articles of clothing	..	..	..	36,007
Other articles	..	..	..	5,118

Disinfectant baths were provided and disinfection of clothing carried out in respect of 280 infectious disease contacts.

The total mileage run by the disinfection and bedding vans was 26,128.

Vermineous Persons.—The number of baths given to vermineous persons at the cleansing station was 1,465 (including 487 to children referred from the Education Department) while 559 rooms, 16 houses and 20,654 articles of clothing and bedding were disinfested.

Disinfestation.—The following table shows the work done during the year at the Disinfesting Station, Stanley Road.

1. Number of articles fumigated by H.C.N. . .	147,396
2. „ „ „ disinfected by steam . .	44,546
3. „ „ houses dealt with	2,700
4. Number of personal disinfestations :—	
(a) Adults	..
(b) Children	..
5. Furniture supplied on loan :—	
(a) No. of articles	4,057
(b) No. of houses	1,456
6. Refusal to allow fumigation :—	
(a) Objection to fumigation	1
(b) Other reasons	..
7. Number of articles destroyed	
(a) Certified for destruction	..
(b) At tenant's request	605
8. Claims for damage or loss :—	
(a) Claims not accepted	52
(b) Claims accepted	31
(c) Cost	£17 2s. od.
(d) Damage due to fire in container . .	..
9. Work in connection with house fumigation :—	
(a) No. of articles disinfected by steam . .	10,247
(b) No. of houses	601
10. Work undertaken for other authorities :—	
(a) No. of articles fumigated	77
(b) No. of articles steam disinfected . .	32
(c) No. of houses	2
11. Work undertaken by private contractors for the Corporation (included in figures under items 1, 2 and 3 :—	
(a) No. of articles fumigated	3,398
(b) No. of articles steam disinfected . .	1,026
(c) No. of houses	62

This subject is again referred to on pages 246 and 269.

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 pathological or bacteriological investigation.	Number of specimens.
Diphtheria—	
Swabs for Kleb Loeffler bacillus	5,933
Virulence Tests	9
Scarlet—	
Swabs for haemolytic streptococci	198
Tuberculosis—	
Sputum for tubercle bacillus	1,601
Sputum for tubercle bacillus (concentration tests) ..	48
Typhoid—	
Faeces and urine for typhoid group of organisms ..	128
Agglutination (Widal) Test for typhoid group ..	27
Other—	
Sputum for organisms	..
Chest fluid for organisms	25
Pus for organisms	7
Urine for organisms, cells, and T.B.	58
Blood for organisms	4
Guinea Pig Inoculations—	
Pathological Fluids	5
Milk for guinea pig inoculation	223
Food Investigations—	
Milk for bacterial count	..
Foodstuffs for bacteriological examination	52
Water Investigations—	
Water bacteriological examinations	94
Miscellaneous Examinations—	
Throat swabs for organisms	31
Faeces for organisms	2
Cerebro-spinal fluid	5
Other examinations	19
Cultures for whooping cough	2
Blood test for B. Abortus	10
Identification tests on salmonella strains	6
Total	8,487

SEACROFT HOSPITAL.

REPORT FOR THE YEAR ENDING

31st DECEMBER, 1938.

BY

E. C. BENN, M.B., Ch.B., D.P.H.,

Medical Superintendent.

Admissions.—The number of patients admitted during the year 1938 was 3,269, as compared with 3,712 in 1937. The decrease in the total number of admissions was due to the lower incidence of scarlet fever, particularly in the latter months of the year. The demand on the accommodation of the Hospital was well within its capacity at all times during the year although the need of cubicle wards for the isolation of individual patients was acute.

The daily average number of patients in Hospital during 1938 was 293·3 as compared with 321·4 in 1937. The greatest number of patients in Hospital at any one time was 442 and this figure was reached during the month of January, and the smallest number was 172 in the month of September. The average stay in Hospital of the 3,432 patients who completed treatment during the year was 33·6 days which is almost the same as the comparative figure of 33·7 days in the year 1937.

The number of deaths from all causes during 1938 was 62, which gives a hospital mortality of 1·8 per cent. This is the same as the previous year and compares with 2·4 per cent. in 1936 and 2·2 per cent. in 1935. As in 1937 more than half the deaths were due to diphtheria and a low mortality from streptococcal diseases was again recorded.

The number of direct admissions from outside the city boundaries was 13, and the various notifications and the districts from which they were admitted are shown below.

Puerperal Fever	..	..	..	Castleford	..	1
				West Riding	..	3
Diphtheria	..	..	..	Wetherby	..	1
Measles	..	..	..	West Riding	..	2
Scarlet Fever	..	..	..	Morley..	..	1
				Thorp Arch	..	3
Healthy baby admitted with mother				Castleford	..	1
				West Riding	..	1
						—
Total	..	..	..			13

In the course of the year 209 patients suffering with infectious diseases were admitted from other hospitals and medical institutions in the city.

Structural Alterations and Extensions.—A start was made on a scheme of modernisation of the existing wards of the Hospital, and extensive improvements and alterations were made to Wards X and Y as a first step in this policy. These wards were rewired throughout and the kitchens and sluice rooms were cleared and equipped with modern apparatus. There is no doubt these wards are now better fitted for the satisfactory nursing of patients suffering from infectious diseases and it is hoped that a similar renovation of Wards T and U will take place during 1939.

A scheme for the eventual replacement of the existing boilers of the steam raising plant was drawn up and is at the moment being considered by the Ministry of Health. The present boilers have been in use for 35 years and are still working at the pressure for which they were originally designed, but their replacement will have to be met in the course of a few years. The Seacroft plant provides power for both Seacroft Hospital and Killingbeck Sanatorium and is at present working at its maximum capacity. Further extensions are contemplated at both institutions and before these can be used some addition will have to be made to the output of power. The first part of the scheme includes an additional boiler of large output and the complete mechanisation of the stoking apparatus.

The plans of the proposed cubicle blocks have made slow progress but final plans have been approved and a start should be made on the construction of the wards before the year is out.

In the scheme of air raid precautions adopted by the City Council and the Ministry of Health the hospital will be used as a Class I or casualty clearing hospital in time of national emergency. It forms part of a group of hospitals specially set apart for dealing with casualties occurring in the area. This will involve a complete change of usage. It will no longer be the infectious diseases hospital for the city but will be devoted entirely to the treatment of casualties and civilian sick. Infectious cases will be dealt with at Killingbeck Sanatorium which for the time being and as long as the emergency lasts will become the infectious diseases hospital for Leeds.

Smallpox Hospital.—No cases of smallpox were treated during the year.

Meteorological Records.—Daily observations were made and are summarised on pages 73 and 74. As in previous years records of visibility were kept during the winter months.

Diphtheria.—The number of patients admitted during 1938 in whom the notified diagnosis of diphtheria was confirmed was 1,021. This approximates closely to the comparative figure for the previous year, which was 1,016. The number discharged on completion of treatment was 1,017 and the average stay in hospital of these patients was 42·5 days.

Death Rate.—Deaths attributed in part or in whole to diphtheria numbered 32. This gives a case mortality of 3·1 per cent. as compared with 3·8 per cent. in 1937, and 3·7 per cent. in 1936. The diagnosis of "carrier" was made in 88 cases and when these are subtracted the case mortality for 929 cases of clinical diphtheria is 3·3 per cent. The comparative figure for 1937 was 4·3 per cent.

Type of Disease.—The gravis type of diphtheria which was the predominant strain in the City has, during the last two years, given place to the mitis strain and this now accounts for more than 50 per cent. of all cases of diphtheria admitted to the hospital. Particular reference should be made to a small outbreak of severe diphtheria which occurred at the end of 1938 and the beginning of 1939. It was localised to one school and was due to the intermediate type of bacillus. Twenty patients were admitted as a result of this

outbreak and all suffered with unusually severely toxic attacks of the disease. Deaths numbered 6, a mortality rate of 30.0 per cent. for this small epidemic. Most of these patients were admitted to a particular ward, and at the height of the outbreak two of the Schick negative staff of this ward developed clinically evident diphtheria probably due to the exceptionally high concentration of infection on this ward.

Forms of the Disease.—Cases of diphtheria discharged from Hospital during the year were classified as follows:—

Form of Infection.	Number of Cases.	Percentage of Total Cases.	Deaths.
Faucial	787	75.0	20
Faucial and nasal	32	3.1	..
Faucial and laryngeal	32	3.1	7
Faucial, nasal and laryngeal	3	0.3	..
Nasal	101	9.6	3
Laryngeal	6	0.6	2
Carriers	88	8.4	..
Total	1,049	100.0	32

Complications.—Post-diphtheritic paralysis was seen in 108 patients or 10.6 per cent. of recoveries, as compared with 11.6 per cent. in the year 1937. This is in keeping with the mild type of diphtheria seen in the city during the year under consideration. Other complications were infrequent but acute myocarditis was noted in 43 patients and otitis media in 15.

COMPLICATIONS.

	Number of patients.	Percentage of total patients.
Paralysis :		
All types	108	10.3
Accommodation	31	3.0
Diaphragm	2	0.2
Face	18	1.7
Limbs	10	1.0
Palate	91	8.7
Pharynx	11	1.0
Strabismus	39	3.7

Laryngeal Diphtheria.—The incidence of laryngeal diphtheria remained low and of the 1,017 cases of diphtheria under treatment during the year only 41 (4.0 per cent.) showed evidence of laryngeal involvement. Ten patients required tracheotomy for the relief of laryngeal obstruction and of these 8 died, 4 of them within 24 hours of admission to Hospital, and 4 had reached the seventh day of disease or later before admission to Hospital.

Amended Diagnosis.—Revision of diagnosis was necessary in 167 cases which is equivalent to 13.7 per cent. of all cases admitted with a notified diagnosis of diphtheria. Details of the final diagnosis are given below.

DIPHTHERIA REVISIONS, 1938.

Abscess of neck	1
Acute lymphatic leucaemia	1
Asthma	1
Epilepsy	1
Laryngitis	4
Measles	3
Mumps	1
No evidence of disease	3
Pneumonia	4
Quinsy	6
Rubella	1
Scarlet Fever	14
Stomatitis	3
Tonsillitis	122
Urticaria	1
Vincent's Angina	1
TOTAL.. ..	167

Cross Infection.—The number of diphtheria patients who developed a second infection while in hospital was 38 or 3·6 per cent. Of these 9 were incubating the disease on admission to hospital and if these are excluded the number is 29 or 2·8 per cent. Chickenpox was widespread in the city during the early months of the year and accounted for the greater number of all cross infections.

The figures in brackets in the table below indicate the number of patients who were incubating the second infection when admitted to hospital.

Chickenpox	..	..	..	30	(5)
Measles	..	..	..	2	(2)
Scarlet fever	..	..	..	3	(1)
Whooping cough	..	..	..	3	(1)
TOTAL				38	(9)

Scarlet Fever.—The number of patients admitted during the year was 1,604 and the number treated to completion 1,739 as compared with 2,101 and 1,999 respectively in 1937. The greatest number of admissions occurred in the early months of the year but at no time was there any strain on hospital accommodation.

Return Cases.—These numbered 43 or 2·5 per cent. of the 1,736 patients discharged from hospital after scarlet fever. Of the 40 patients who were considered to have given rise to return cases, 34 showed no evidence of complications while in hospital and 6 showed complications as follows:—adenitis 2, rhinitis 2, otitis media 1 and herpes labialis 1. One infecting case gave rise to 2 return cases and another to 3.

Case Mortality.—Three deaths took place in patients suffering from scarlet fever, a mortality of 0·17 per cent. Two of these deaths were due to endocarditis and the third to meningitis following acute mastoiditis.

Type of Disease.—There is no sign of increasing virulence in the mild type of scarlet fever which has been prevalent for several

years. Excluding the fatal cases which have already been noted, 7 patients were considered to be suffering with a septic type of scarlet fever but no patient was classified as toxic.

Complications.—The complication rate was slightly lower than the previous year. Otitis media showed a slight increase and in 1938 was the commonest complication of scarlet fever in this hospital. Endocarditis, as noted last year, is fairly frequently met as a complication of scarlet fever and its incidence appears to be increasing. It has already been noted that two of the three deaths which occurred in scarlet fever during the year under review were due to this complication. The numbers of the major complications are shown below.

Complication.	Number.	Percentage incidence.
Adenitis (suppurative in 10 cases)	98	5.6
Albuminuria ..	31	1.8
Arthritis	7	0.4
Endocarditis ..	11	0.6
Nephritis	5	0.3
Otitis media ..	115	6.6
Relapse	10	0.6
Rhinitis	51	2.9
Total ..	328	18.8

Amended Diagnosis.—It was found necessary to revise the diagnosis in 131 cases which is equivalent to 7.1 per cent. of all cases admitted with a notified diagnosis of scarlet fever. Details of the final diagnosis are as follows ;—

SCARLET FEVER REVISIONS, 1938.

Acute coryza	..	..	..	..	5
Cerebro-spinal fever	..	..	..	..	1
Cervical adenitis, suppurative	..	..	..	..	1
Chickenpox	..	..	..	..	3
Desquamation, simple	..	..	..	..	2
Erythema, simple	..	..	..	..	12
Erythema, toxic	..	..	..	..	2
Influenza	..	..	..	..	1
Measles	..	..	..	..	14
Mumps	..	..	..	..	1
No evidence of disease	..	..	..	..	2
Pharyngitis	..	..	..	..	1
Pink disease	..	..	..	..	1
Pneumonia	..	..	..	..	4
Pyelitis	..	..	..	..	1
Rubella	..	..	..	..	34
Scabies	..	..	..	..	1
Stomatitis	..	..	..	..	1
Tonsillitis	..	..	..	..	36
Tuberculous meningitis	..	..	..	..	2
Tuberculous peritonitis	..	..	..	..	1
Urticaria	..	..	..	..	5
TOTAL					131

Cross Infection.—The cross-infection rate in scarlet fever was higher than the previous year and 62 patients or 3.6 per cent. developed a second infection against 1.7 per cent. in 1937.

It has already been noted that chickenpox occurred in epidemic form early in the year and this disease was introduced into the scarlet fever wards on no less than 10 occasions.

The figures in brackets show those patients who were incubating the second infection when admitted to the wards.

Chickenpox	..	..	..	31	(10)
Diphtheria	..	..	..	9	
Measles	..	..	..	14	(4)
Rubella	..	..	..	6	(4)
Whooping Cough	..	..	..	2	(2)
TOTAL				62	(20)

Measles.—The number of patients suffering from this disease treated during 1938 was 120 of which 3 were notified as cases of diphtheria, 1 as puerperal fever, 1 as rubella and 14 as scarlet fever.

Revision of diagnosis was required in 9 cases, of which 2 were found to be suffering with cerebro-spinal fever, 2 with erythema multiforme and one with each of the following, bronchitis, enteritis, peritonitis and rubella. One showed no evidence of disease.

The number of deaths was 4 which gives a case mortality of 3.3 per cent. The cause of death in all four patients was broncho-pneumonia.

The value of M. and B. 693 in the treatment of certain cases of secondary pneumonia became evident early in the year when a trial supply of the drug was made available. It is hoped that a reduction in the heavy mortality of this severe complication can be anticipated.

Complications as follows occurred in those patients who recovered.

Pneumonia	..	..	..	..	22
Otitis media	..	..	..	..	9
Bronchitis, severe	..	..	..	..	2
Corneal ulceration	..	..	..	..	2
TOTAL				..	35

Erysipelas.—The number of patients in whom the diagnosis was confirmed was 133 and of these 4 died, a mortality of 3.0 per cent. The value of sulphanilamide drugs in the treatment of this condition was obvious and this method of treatment is tending to exclude all

others. Three of the four deaths were due to severely toxic forms of the disease which did not respond to sulphanilamide treatment, and the fourth was a terminal condition in a man suffering with carcinoma of the stomach.

Situation.	Total number.	Deaths.
Face	119	4
Limbs	10	—
Body	2	—
Generalised ..	2	—
	133	4 (3.0)

Complications.—These were commoner than in the previous year and were seen in 12 patients who recovered; relapse 10, suppurative adenitis 2, jaundice 1, nephritis 1, pneumonia 1.

Revision of diagnosis was required in 13 cases as follows:—cellulitis or other suppurative condition 4, herpes frontalis 2, dermatitis medicamentosa 2, eczema 2, anthrax 1, corrosive burn of cheek 1, acute maxillary sinusitis 1.

Enteric Fever.—Three patients suffering from this disease came under treatment during the year. In two cases the causal organism was the bacillus typhosus and in the third, B. para-typhosus B. All recovered without complications.

The notified diagnosis of enteric fever required revision in 8 cases; the actual conditions from which the patients were suffering were chickenpox 1, constipation 1, dysentery 3, enteritis 1, pyelitis 1 and tuberculous peritonitis 1.

Puerperal Fever.—As a result of alternative accommodation for this condition being provided in the city, the number of cases of puerperal fever treated in the Hospital continues to fall. Nine patients, including one suffering with concurrent measles, were admitted during 1938. One death took place and was due to pelvic cellulitis.

Cerebro-Spinal Fever.—Five cases of cerebro-spinal fever admitted during the year including two notified as measles and one as scarlet fever, and of these two died. In six other cases the notified diagnosis of cerebro-spinal fever was amended; to pneumonia in 3 cases, tuberculous meningitis 2, and bronchitis 1.

Anthrax.—Three patients, all males, were admitted with cutaneous anthrax in 1938. Two were employed in the leather industry and the third had been in frequent contact with horses. The situations of the malignant pustules were forehead, neck and hand, and all made good recoveries after the intravenous injection of anti-anthrax serum.

Treatment of Ear, Nose and Throat Conditions.—Removal of tonsils and adenoids for relief of the carrier state in diphtheria was carried out on 20 patients and was successful in all. Two of these patients should be removed from the series as they were carrying diphtheria bacilli in situations other than the naso-pharynx. The remaining 18 became clear of infection within an average period of 15 days from the operation. Mastoid antrotomy was performed on 5 patients, removal of tonsils and adenoids for persistent otorrhoea on two, and removal of aural polyp on one suffering with scarlet fever. Patients suffering with measles required mastoid antrotomy in two cases, exploration of lateral sinus in one, and appendicectomy and drainage in one.

The services of Mr. Maxwell Munby continue to be available.

Laboratory.—The number of bacteriological examinations made in the hospital laboratory was 10,270 and of these 10,234 were cultures from throat, nose, ear and other situations for diphtheria organisms.

Immunisation of Staff.—All new members of the medical, nursing and domestic staff, a total of 119 persons, were Schick and Dick tested immediately on joining the staff, and those who showed susceptibility to diphtheria or scarlet fever were immunised against those diseases.

Diphtheria.—It was found that 49 (41·2 per cent.) of the new entrants were Schick positive. Ten of them, one nurse and nine domestic workers, mostly temporary cleaners, left the hospital before they received the full course of injections. Six persons, three nurses and three maids, developed diphtheria before immunity

was established. Of the remainder, nine were immunised by two small doses of A.P.T. and nineteen were given three injections of T.A.F. Two nurses, however, failed to become Schick negative within 8 to 12 weeks of receiving the injections and required a second course of T.A.F.

Thirteen members of the staff, an exceptionally large number, suffered with clinically recognisable attacks of diphtheria. In the middle of February a gravis type infection appeared in the maids' home and five cases occurred in a few days. One was a very mild attack in a known Schick negative, but the other four were moderately severe attacks. Three of these were recent recruits and were known susceptibles, and the other was a woman of thirty years service who was thought to be immune but who was proved to be Schick positive at the time of the attack. None of these maids were working on the wards of the hospital. Seven of the remaining eight cases of diphtheria were mild in type. Two were known Schick positive reactors who were receiving immunising injections, at the time of infection; one received no anti-toxin but the other received 16,000 units. Five Schick negative reactors, all of whom were working on diphtheria wards, developed mild clinically evident attacks, and it appears that although diphtheria may sometimes occur in Schick negative reactors when heavily infected, the attack is mild and the antibody response rapid. All these cases were free from toxæmia and three of them received no antitoxin. The last case was a laryngeal infection in a recently joined Schick positive reactor who responded rapidly to antitoxin.

Scarlet Fever.—Twenty-five (21.0 per cent.) of the 119 new entrants gave positive reactions to the Dick test. Three of these, all domestic workers, left the hospital before the immunising injections were completed, and the others received approximately 72,000 skin test doses in a course of four injections. Two persons developed reactions with the first injections and in these the maximum dose was reached after a slightly prolonged course of more closely spaced doses. Two maids failed to develop immunity with this series of injections and required a second course of prophylactic before they gave a negative Dick test. No member of the staff developed scarlet fever during the year.

Injections of T.A.F. vaccine were given to 28 nurses who were working on wards receiving enteric fever.

Sickness of Staff.—This is adversely weighted by the abnormally large number of cases of diphtheria. These have been discussed at length elsewhere. In all other respects the health of the staff was good, and the table given below shows those cases of staff sickness which were admitted to the wards during 1938.

Nature of Illness.	Staff.			Days in Hospital.		
	Nursing.	Domestic.	Male.	Nursing.	Domestic.	Male.
Diphtheria	7	6	..	218	253	..
Rubella	5	..	..	31	..	..
Mumps	1	..	..	17	..	..
Acute confusional insanity..	..	1	..	..	15	..
Acute rheumatism	3	..	..	135	..	..
Catarrhal jaundice	4	..	..	78	..	..
Otitis media	1	..	..	10	..	..
Pleural effusion	..	1	..	..	4	..
Pyelitis	1	..	..	52	..	..
Pyelo-nephritis	1	..	..	34	..	..
Tonsillitis	6	..	..	76	..	..
TOTAL	29	8	..	651	272	..

SUMMARY OF CASES.

DISEASE.	Total number of cases.	Deaths
INFECTIOUS DISEASES :—		
Anthrax	3	..
Cerebro-spinal fever	5	2
Chickenpox	13	..
Diphtheria	1,049	32
Dysentery	6	..
Enteric fever	3	..
Enteritis	4	..
Erysipelas	133	4
Influenza.. .. .	1	..
Measles	120	4
Mumps	6	..
Pneumonia	11	1
Puerperal fever	9	1
Rubella	48	..
Scarlet fever	1,739	3
Whooping cough	7	1
Carried forward	3,157	48

SUMMARY OF CASES.—(Continued).

DISEASE.	Total number of cases.	Deaths.
Brought forward	3,157	48
DISEASES OF THE EAR, NOSE AND THROAT :—		
Acute coryza	6	..
Laryngitis	4	..
Otitis media	2	..
Pharyngitis	1	..
Quinsy	7	..
Sinusitis, maxillary	1	..
Stomatitis	5	1
Tonsillitis	165	1
Vincent's angina	3	1
DISEASES OF THE SKIN :—		
Dermatitis medicamentosa	2	..
Desquamation, simple	2	..
Eczema	1	..
Erythema, multiforme	2	..
Erythema, toxic	3	..
Erythema, simple	11	..
Herpes frontalis	2	..
Scabies	1	..
Urticaria	6	..
OTHER DISEASES :—		
Abrasion of forehead	1	..
Abscess, cervical	2	1
Asthma	1	..
Bronchitis	2	..
Catarrhal jaundice	4	..
Cellulitis	4	1
Cerebellar ataxia, congenital	1	1
Constipation	3	..
Corrosive burn	1	..
Intestinal obstruction	1	1
Lymphatic leukæmia	1	1
Pink disease	1	..
Pleural effusion	1	..
Pyelitis	3	..
Pyelo-nephritis	2	..
Rheumatism, acute	4	..
Tuberculosis, pulmonary	1	..
Tuberculous meningitis	5	5
Tuberculous peritonitis	2	..
Ulcerative colitis	1	1
Healthy baby admitted with mother	1	..
No evidence of disease	9	..
TOTAL	3,432	62

LEEDS CITY HOSPITALS, SEACROFT, LEEDS.

YEAR 1938.

ABSTRACT FROM REGISTERS.

	Diphtheria.	Enteric Fever.	Erysipelas.	Measles.	Pertussis.	Scarlet Fever.	Small Pox.	Other Diseases.	Quarantine Cottages.	TOTAL.
Patients remaining in Hospitals and Isolation Cottages, December 31st, 1937	126	1	9	..	..	272	..	19	..	427
Admitted in 1938 ..	1,021	3	129	125	11	1,604	..	376	..	3,269
Total treated	1,147	4	138	125	11	1,876	..	395	..	3,696
Discharged	1,017	3	129	116	6	1,736	..	363	..	3,370
Died	32	..	4	4	1	3	..	18	..	62
Mortality per cent. ..	3.1	..	3.0	3.3	14.3	0.17	..	4.7	..	1.8
Patients remaining in Hospitals and Isolation Cottages, December 31st, 1938	98	1	5	5	4	137	..	14	..	264
Average days in Hospital for recovered patients ..	42.5	70.3	18.3	22.0	27.0	33.3	..	18.7	..	33.6

NUMBER OF ADMISSIONS DURING EACH OF THE
LAST TWENTY YEARS.

YEAR.	Seacroft Hospital.		Small Pox Hospital.	Admitted to all Hospitals.	Cottages for Contacts.	Total No. Admissions.
	Infectious Diseases.	Tuberculosis.				
1919-20	2,668	*378	..	3,046	33	3,079
1920-21	2,148	..	..	2,148	4	2,152
1921-22	2,430	..	..	2,430	6	2,436
1922-23	3,265	..	I	3,266	18	3,284
1923-24	2,185	..	..	2,185	16	2,201
1924-25	2,033	..	8	2,041	73	2,327
1925-26	1,944	..	4	1,948	8	1,956
1926-27	1,632	..	3	1,635	9	1,644
1927-28	1,793	..	81	1,874	186	2,060
**1928-29	4,059	*51	46	4,156	39	4,195
†1929	4,171	..	24	4,195	9	4,204
1930	3,554	..	42	3,596	29	3,625
1931	2,874	..	5	2,879	4	2,883
1932	2,347	..	..	2,347	..	2,347
1933	3,372	..	..	3,372	..	3,372
1934	5,387	..	..	5,387	..	5,387
1935	3,795	..	..	3,795	..	3,795
1936	3,181	..	..	3,181	..	3,181
1937	3,712	..	..	3,712	..	3,712
1938	3,269	..	..	3,269	..	3,269

*Beds set apart for cases of tuberculosis in Seacroft hospital.

**Ward taken over at Holbeck Infirmary for scarlet fever patients for three months.

†Year ending December 31st instead of March 31st.

METEOROLOGICAL RECORD.

1938.	SUN- SHINE. Total. hr. min.	SUNSHINE.			EARTH TEMPERATURE. (4' 0" below surface).		
		Max. in 24 hrs. hr. min.	Date.	No. of days no Sunshine.	Max.	Date.	Min.
January	53.40	6.10	30	10	41.0	28	38.0
February	74.40	7.40	16	6	41.0	8-13	39.5
March ..	80.40	9.30	14	0	44.0	31	40.0
April ..	188.00	12.20	16	0	46.5	30	44.0
May ..	176.50	13.20	5	0	49.5	25-31	46.0
June ..	172.10	13.50	7	0	54.0	24-30	49.5
July ..	136.40	12.20	19	2	55.5	26-31	54.0
August	161.50	11.20	20	3	58.0	13-18	56.0
September	121.40	11.30	8	3	56.5	1-3	55.5
October	105.35	7.30	6	1	55.5	1-4	50.5
November	61.10	6.20	1	3	50.5	1	46.0
December	31.10	5.30	3	18	45.5	1-3	41.0
Year ..	1,364.05	13.50	June 7	46	58.0	Aug. 13-18	38.0
							Jan. 12

METEOROLOGICAL RECORD.

(Observations made at 9.30 a.m.).

HEIGHT FROM GROUND:—Barometer, 2 ft.; Thermometers, 4 ft.; Rain Gauge, 1 ft. (235 ft. above sea-level).

1938.	•BARO- METER, 9-30 a.m.	TEMPERATURE.				RAINFALL.				WIND—No. of Observations.																	
		Shade—Minimum and Maximum.			Mean.	Date.	Max.	Total Inches.	Max. in 24 hrs.	Date.	No. of days on which "or" or more fell	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.	
January	29.732	41.3	29	10	53	22	2.66	0.44	8	18	—	4	—	—	—	—	—	2	2	—	4	11	2	2	1	1	
February	30.194	40.8	29	24	54	25	1.42	0.88	26	9	—	9	1	—	—	—	1	1	3	—	2	4	—	—	1	1	
March ..	30.143	48.5	31	25	62	20	0.22	0.1	24	4	—	—	—	—	—	—	3	1	—	—	5	10	1	10	1	—	
April ..	30.269	46.1	29	10	66	12	0.03	0.02	29	2	—	6	6	1	—	—	1	2	—	—	—	7	—	—	1	2	
May ..	29.939	50.7	29	7	69	11	3.44	1.23	29	16	—	1	6	5	—	—	—	2	2	—	5	5	1	3	—	—	
June ..	29.931	57.4	35	18	76	26	2.60	0.55	1	13	—	—	—	1	—	—	3	—	—	—	2	14	—	8	1	1	
July ..	29.870	58.8	45	1	78	31	3.60	0.66	1	16	—	2	—	1	—	—	3	—	—	—	2	10	2	8	—	—	
August ..	29.933	60.7	38	31	77	1	4.36	0.90	7	17	—	11	—	3	—	—	2	2	—	—	1	5	—	2	—	3	
September	29.968	56.0	38	14	74	5	2.63	0.64	30	16	—	3	5	1	—	—	1	1	3	—	3	5	—	2	1	2	
October	29.755	49.8	34	26	64	13	3.82	1.12	3	17	—	—	—	1	—	—	3	—	—	—	1	14	2	2	2	—	
November	29.694	46.8	31	21	64	5	3.68	0.91	25	19	—	—	—	—	—	—	3	3	—	6	7	7	2	2	—	—	
December	29.805	38.3	20	20	54	3	3.33	0.58	31	21	—	4	1	—	—	—	1	5	4	—	1	5	1	2	1	1	
Year ..	29.936	49.6	20	Dec. 20	78	July 31	31.79	1.23	May 29	168	—	47	20	15	—	6	27	24	22	31	97	11	43	10	12	—	

* Corrected to temperature and mean sea level at Liverpool.

E = 38.1%.

W = 61.9%.

VENEREAL DISEASES.

The number of deaths certified as due to syphilis during the year was 19, which is equal to a death-rate of 0.04 per thousand of the population. Of these, one was a female under one year of age ; one male and one female between 25 and 45 ; nine males and six females between 45 and 65 ; and one male over 65 years. The number of deaths in 1938 shows a decrease of one as compared with the previous year.

Work of the Treatment Centre.—The total number of new cases registered at the Centre at the Leeds General Infirmary from Leeds and the other contributory areas was 2,221 comprising 290 males and 182 females suffering from syphilis, 751 males and 197 females suffering from gonorrhoea, and 640 males and 161 females suffering from other diseases not venereal. As compared with the previous year these figures represent in the case of syphilis a decrease of 25 males and 23 females, in gonorrhoea an increase of 3 males and a decrease of 8 females, and in other diseases not venereal an increase of 65 males and a decrease of 5 females. There was, therefore, a nett total increase of 7 as compared with the figure for the previous year. (*Vide* table on page 78).

The number of cases ceasing to attend before completion of treatment or final tests of cure was 475 or 10.1 per cent. of the total attending the centre as compared with 518 or 11.0 per cent. for the previous year. The figure is still much too high and a further reduction is very desirable.

The number of in-patients treated at the Leeds General Infirmary was 7 as compared with 12 for the previous year and the corresponding number of in-patient days was 71 as against 137 for 1937.

Turning to Leeds cases the total number of new cases registered was 1,736, comprising 212 males and 134 females suffering from syphilis, 597 males and 151 females suffering from gonorrhoea, and 521 males and 121 females suffering from other diseases not venereal. As compared with the previous year these figures represent in the case of syphilis a decrease of 34 males and 15 females, in gonorrhoea a decrease of 4 males and 1 female, and in other diseases not venereal an increase of 56 males and a decrease of 12 females. Taking the cases of all types there was a decrease of

10 as compared with the figure for the previous year. (*Vide* table on page 78).

The total attendances of all Leeds cases was 63,523, a decrease of 5,025 on the figure for the previous year.

Institutions.—*Maternity Hospital.*—The number of new cases admitted as in-patients to the Leeds Maternity Hospital increased from 16 in 1937 to 19 in 1938 namely eleven syphilis, seven gonorrhoea, and one syphilis and gonorrhoea. The corresponding number of in-patient days increased from 197 to 289.

Hope Hospital.—The number of cases treated was 49 as against 44 for the previous year, whilst the number of new admissions was 35 as compared with 30 in 1937. It should be pointed out, however, that these figures do not include babies admitted with their mothers or born whilst their mothers were in residence.

That greater use is not made by neighbouring Local Authorities of this small but very efficient unit is to be regretted. It offers advantages which cannot be obtained in the average general hospital or at home inasmuch as it seeks not only to cure her disease but also to strengthen the moral fibre of the girl so that when she is discharged she is less likely to run the risk of reinfection.

During the year extensive improvements were made to the theatre, the isolation room and the nursery at a cost of over £330. The effect of these ought to be to make the work easier for the staff and more comfortable for the patients.

To the Committee of the Hospital, which is largely voluntary, thanks are due for the service they render in looking after the affairs of the Hospital and attending to the needs, both spiritual and physical, of the patients who are admitted for treatment.

Further particulars of the cases admitted to and treated in the Maternity and Hope Hospitals are given in the table on page 79.

For particulars of the work of the special clinic for mothers and babies suffering from venereal diseases held in connection with Maternity and Child Welfare see page 181.

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 49. The amount of salvarsan substitutes distributed to practitioners was 959 doses as compared with 1,173 in 1937.

LEEDS GENERAL INFIRMARY (LOCAL TREATMENT CENTRE).

Cases on the register on January 1st, 1938 ..	2,445
Old cases re-admitted	34
New cases admitted (including 58 known to have received treatment at other centres)	2,221
Cases ceased to attend	475
Transferred to other centres, etc.	236
Discharged on completion of treatment	1,545
Cases on the register on January 1st, 1939 ..	2,444

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	53
for practitioners	4
for institutions.. .. .	..
For detection of gonococci—	
for treatment centre	4,282
for practitioners	192
for institutions	278
For Wassermann reaction—	
for treatment centre	3,223
for practitioners	423
for institutions	4,109
Other examinations—	
for treatment centre	..
for practitioners	..
for institutions	3
TOTAL	12,567

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

				Year 1937.		Year 1938.		Increase or decrease.	
				M.	F.	M.	F.	M.	F.
Syphilis ..	first cases	..	..	315	205	290	182	- 25	- 23
Soft chancre	"	..	..	..	..	..	..	..	..
Gonorrhœa	"	..	..	748	205	751	197	+ 3	- 8
Other diseases									
not Venereal	"	..	..	575	166	640	161	+ 65	- 5
Total				1,638	576	1,681	540	+ 43	- 36
Total attendances of all cases				82,206		76,748		- 5,458	
Aggregate No. of In-patient days				137		71		- 66	
No. of doses of Salvarsan substitutes				16,716		16,198		- 518	
Pathological specimens examined :—									
Spirochetes				63		53		- 10	
Gonococci				4,782		4,282		- 500	
Other organisms				..		..		..	
Blood—Wassermann reaction				3,413		3,223		- 190	

LEEDS PATIENTS.

	Year 1937.		Year 1938.		Increase or decrease.	
	M.	F.	M.	F.	M.	F.
Syphilis first cases	246	149	212	134	- 34	- 15
Soft chancre	..	..	..	..	..	..
Gonorrhœa	601	152	597	151	- 4	- 1
Other diseases, not Venereal	465	133	521	121	+ 56	- 12
Total	1,312	434	1,330	406	+ 18	- 28
Total attendances of all cases	68,548		63,523		- 5,025	
Aggregate No. of In-patient days	86		67		- 19	
No. of doses of Salvarsan sub- stitutes	12,690		12,314		- 376	
Pathological specimens examine :-						
Spirochetes	48		42		- 6	
Gonococci	3,898		3,466		- 432	
Other organisms	..		..		..	
Blood—Wassermann re- action	2,685		2,467		- 218	

MATERNITY HOSPITAL, 42, HYDE TERRACE.

	Cases in residence on Jan. 1st, 1938.	Cases admitted.	Cases discharged.	Cases in residence on Dec. 31st, 1938.
Syphilis	1	11	12	..
Gonorrhœa	1	7	7	1
Syphilis and Gonorrhœa	..	1	1	..
Other disease	..	..	..	..
Total	2	19	20	1

Total days in residence 289

No. of doses of Salvarsan substitute . 27

Pathological specimens examined :—

Spirochetes	..
Gonococci	..
Other organisms	..
Blood—Wassermann reaction.. ..	22

HOPE HOSPITAL, 126, CHAPELTOWN ROAD.

	Cases in residence on Jan. 1st, 1938.	Cases admitted.	Cases discharged.	Cases in residence on Dec. 31st, 1938.
Syphilis	3	7	6	4
Gonorrhœa	9	22	22	9
Syphilis and Gonorrhœa	2	5	5	2
Other disease	..(+4)	1(+12)	1(+14)	..(+2)
Total	14(+4)	35(+12)	34(+14)	15(+2)

Total days in residence 4,827(+906)

No. of doses of Salvarsan substitute .. 107

Pathological specimens examined :—

Spirochetes	..
Gonococci.. ..	229
Other organisms	7
Blood—Wassermann reaction.. ..	30

Of the 35 women admitted, 12 had babies, shown in the above table in brackets.

Case in	Case in	Case in	Case in	Case in
1901	1902	1903	1904	1905
1906	1907	1908	1909	1910
1911	1912	1913	1914	1915
1916	1917	1918	1919	1920
1921	1922	1923	1924	1925
1926	1927	1928	1929	1930
1931	1932	1933	1934	1935
1936	1937	1938	1939	1940
1941	1942	1943	1944	1945
1946	1947	1948	1949	1950
1951	1952	1953	1954	1955
1956	1957	1958	1959	1960
1961	1962	1963	1964	1965
1966	1967	1968	1969	1970
1971	1972	1973	1974	1975
1976	1977	1978	1979	1980
1981	1982	1983	1984	1985
1986	1987	1988	1989	1990
1991	1992	1993	1994	1995
1996	1997	1998	1999	2000

The following table shows the number of cases of the disease in each year from 1901 to 1995. The number of cases is given in the first column, and the year is given in the second column. The total number of cases is given in the third column.

Case in	Case in	Case in	Case in	Case in
1901	1902	1903	1904	1905
1906	1907	1908	1909	1910
1911	1912	1913	1914	1915
1916	1917	1918	1919	1920
1921	1922	1923	1924	1925
1926	1927	1928	1929	1930
1931	1932	1933	1934	1935
1936	1937	1938	1939	1940
1941	1942	1943	1944	1945
1946	1947	1948	1949	1950
1951	1952	1953	1954	1955
1956	1957	1958	1959	1960
1961	1962	1963	1964	1965
1966	1967	1968	1969	1970
1971	1972	1973	1974	1975
1976	1977	1978	1979	1980
1981	1982	1983	1984	1985
1986	1987	1988	1989	1990
1991	1992	1993	1994	1995

The following table shows the number of cases of the disease in each year from 1901 to 1995. The number of cases is given in the first column, and the year is given in the second column. The total number of cases is given in the third column.

Municipal General Hospitals.

LEEDS CITY GENERAL HOSPITALS

BY

J. DICK, M.B., Ch.B., D.P.H.,

Medical Superintendent.

ST. JAMES'S HOSPITAL.

The number of patients admitted to hospital and the total treated are shown in the following table, together with the number of discharges and deaths and the number of patients remaining at the end of the year.

	Men.	Women.	Children.	Total.
Remaining in hospital on 31st December, 1937	403	484	262	1,149
Admitted during 1938	3,741	5,410	1,774	10,925
Children born during 1938	..	..	1,165	1,165
Total admissions and births ..	3,741	5,410	2,939	12,090
Total number treated during 1938	4,144	5,894	3,201	13,239
Discharges during 1938	3,012	4,748	2,691	10,451
Deaths	769	695	282	1,746
Total discharges and deaths ..	3,781	5,443	2,973	12,197
Remaining in hospital on 31st December, 1938	363	451	228	1,042

The admissions show a fall of 17, the figure in 1937 having been 12,107. Actually 15 more men and 51 more women were admitted, and 81 more children were born in the hospital, but the number of children admitted fell by 164. The average daily number in hospital was 1,102, the highest on any one day having been 1,179 on 7th January, and the lowest 951 on the 2nd October. Excluding babies in the maternity wards the average number was 1,061, the highest 1,141 and the lowest 912. The low number occurred at the time of the September crisis, and would rapidly have been much further reduced had the necessity arisen. The average stay for all cases was 32.97 days, which is one day less than during 1937. Excluding the patients in the mental detention wards, the average duration of stay was 27 days.

Owing to the fact that the extensions to the nurses' home and other new buildings were not completed, one ward was occupied as cubicles for the nurses and another had to be adapted to serve as the massage department. The average number of beds available, excluding cots in the maternity wards, was 1,248.

DISEASES FROM WHICH PATIENTS SUFFERED.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
INFECTIOUS DISEASES:—					MALIGNANT DISEASE—				
Cerebro-Spinal Fever	5	..	7	12	<i>Continued.</i>				
Chickenpox	..	..	5	5	Rodent Ulcer	2	1	..	3
Diphtheria	1	..	15	16	Cancer of Skin	7	3	..	10
Dysentery	..	..	5	5	Cerebral Tumour	1	12	1	14
Erysipelas	4	3	3	10	Tumour of Acoustic Nerve ..	1	1	..	2
Measles	..	..	4	4	Pleural Mesothelioma	1	..	..	1
Mumps	1	..	..	1	Sarcoma of Uterus	..	1	..	1
Polio-myelitis	..	2	2	4	" " Ovary	..	2	..	2
Scarlet Fever	..	..	2	2	" " Muscle	1	3	..	4
Typhoid " B " Fever	..	1	..	1	" " Bone	3	..	1	4
Whooping Cough	..	..	8	8	Retroperitoneal Sarcoma ..	1	..	..	1
	11	6	51	68	Lymphosarcoma of Tonsil ..	1	..	..	1
INFLUENZA:—						240	244	2	486
.. ..	8	6	..	14	RHEUMATISM:—				
TUBERCULOSIS:—					1. Acute Rheumatism	20	27	40	87
Pulmonary	151	93	9	253	" " with	..	12	13	25
					" Valvular Heart Disease ..	2	9	57	68
Non-Pulmonary:—					" " with Valvular	..	2	14	16
Bones and Joints	8	14	9	31	" Heart Disease	4	3	10	17
Lymphatic Glands	3	9	8	20	" Pericarditis	..	..	4	4
Meninges	..	3	10	13	" Endocarditis	3	2	3	8
Genito-Urinary	1	2	1	4		29	55	141	225
Testis	1	..	..	1	2. Fibrositis	12	19	..	31
Epididymis	1	1	..	2	Myalgia	3	4	..	7
Intestines	2	1	..	3	Sciatica	15	11	..	26
Sigmoid-Rectal	3	..	3	6	Chronic Rheumatism	6	4	..	10
Peritoneum	2	2	3	7		36	38	..	74
Skin	1	2	..	3	3. Osteo-arthritis	25	25	..	50
Hiliary	2	..	3	5	Rheumatoid Arthritis	15	54	..	69
Abscess of Chest Wall ..	1	..	..	1	Spondylitis Deformans	3	1	..	4
	25	34	34	93		43	80	..	123
MALIGNANT DISEASE:—					VENEREAL DISEASES:—				
Cancer of Larynx	1	..	..	1	Syphilis	16	15	..	31
" " Bronchus	49	15	..	64	Congenital Syphilis	4	1	5	10
" " Lung	4	1	..	5	Gonorrhoea	24	2	..	26
" " Mediastinum	1	..	..	1	Gonococcal Arthritis	2	2	..	4
" " Jaw	1	3	..	4	Syphilitic Ulcer	..	1	..	1
" " Antrum of						46	21	5	72
Highmore	1	1	..	2	PUERPERAL PYREXIA:—				
" " Parotid	1	1	..	2	Delivered in Hospital	..	34	..	34
" " Tongue	4	1	..	5	Cases delivered before	..	2	..	2
" " Palate	1	..	..	1	admission	..	..	..	..
" " Fauces	2	..	..	2		..	36	..	36
" " Pharynx	3	..	..	3	OTHER DISEASES AND				
" " Oesophagus	8	..	..	8	ACCIDENTS CONNECTED WITH				
" " Stomach	54	30	..	84	PREGNANCY AND CHILD-				
" " Pylorus	2	1	..	3	BIRTH:—				
" " Small Intestine	1	..	..	1	Abortion	..	299	..	299
" " Caecum	1	3	..	4	Threatened Abortion	..	25	..	25
" " Colon	27	21	..	48	Hydatidiform Mole	..	2	..	2
" " Rectum	23	18	..	41	Ectopic Gestation	..	12	..	12
" " Liver	5	4	..	9	Ante-natal cases:—				
" " Gall Bladder	1	1	..	2	Albuminuria	..	3	..	3
" " Hepatic Bile Ducts ..	..	1	..	1	Hyperpiesia	..	2	..	2
" " Pancreas	8	5	..	13	Pyelitis	..	18	..	18
Abdominal Carcinomatosis ..	1	2	..	3	Cystitis	..	1	..	1
Hypernephroma	2	3	..	5	Vomiting	..	14	..	14
Cancer of Bladder	8	5	..	13	Chorea	..	1	..	1
" " Prostate	11	..	..	11	Toxaemia	..	18	..	18
" " Testis	1	..	..	1					
" " Penis	1	..	..	1					
" " Breast	..	45	..	45					
" " Ovary	..	11	..	11					
" " Uterus	..	46	..	46					
" " Vulva	..	3	..	3					

DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
OTHER DISEASES AND ACCIDENTS CONNECTED WITH PREGNANCY AND CHILDBIRTH—Continued.					INJURIES—Continued.				
Ante-natal cases—Continued.					Fractures :—				
Ante-partum Haemorrhage ..		3		3	Femur	30	55	16	101
Hydramnios		1		1	Patella	6	2		8
Disproportion		2		2	Fibula	4	6	1	11
Correction of Presentation ..		12		12	Tibia	4	2	4	10
Vaginitis		1		1	Tibia and Fibula	22	22	4	48
Vaginal Discharge		2		2	Pott's	11	27		38
Varicose Veins		1		1	Os Calcis	1			1
Phlebitis		2		2	Phalanges (Toes)		1		1
Prolapsed Haemorrhoids		1		1	Skull	24	8	12	44
Valvular Heart Disease		3		3	Jaw	7	1		8
Bronchitis		1		1	Spine	7	4		11
Anaemia		2		2	Pelvis	3	1		4
Debility		1		1	Ribs	13	6		19
Intestinal Colic		1		1	Multiple	1			1
Puerperal Conditions :—					Dislocations :—				
Post-partum hæmorrhage		1		1	Shoulder	3	2		5
Retained Placenta		2		2	Wrist		1		1
Shock following obstructed labour		1		1	Traumatic Cerebral Lesions	1		4	5
Collapse of Lung		1		1	Concussion	105	41	30	176
Eclampsia		1		1	Wounds	12	17	12	41
Pulmonary Embolism		1		1	Lacerations	1	1		2
Endometritis		1		1	Abrasions	8	3	1	12
Pelvic Abscess		1		1	Contusions	16	12	2	30
Anaemia		1		1	Sprains	4	1	3	8
Subinvolution		1		1	Ruptured Muscle	1	2		3
Perineal Tear		1		1	Burns	5	8	7	20
Prolapse :—					Scalds	4	5	15	24
Cystocele		2		2	Haematoma	5	3	2	10
Rectocele		3		3	Shock		1		1
Mental States :—					Cut Tendon	1			1
Melancholia		2		2	Ruptured Urethra	1			1
Confusional States		7		7	Ruptured Hymen			1	1
Breast Abscess and Mastitis ..		40		40	Traumatic Orchitis	1			1
					Foreign Body in Thigh		1		1
		494		494	Attempted Suicide :—				
MENTAL DISEASES :—					Cut Throat	1	6		7
Neurosis	15	36		51	Poisoning—Suicidal :—				
Psychosis	9	19		28	Aspirin	1	1		2
Psychoneurosis	4	11		15	Camphor		1		1
Confusional States	10	17		27	Coal Gas	10	9		19
Delusional States	35	48		83	Izal	1			1
Mania	11	11	1	23	Luminal		2		2
Melancholia	20	46		66	Lysol	2	1		3
Dementia Praecox	19	2		21	Poisoning—Accidental :—				
Dementia	11	14		25	Ammonia		2		2
Senile Dementia	1	4		5	Lead	1			1
Dementia Paralytica	22	11		33	Liniment	2		1	3
Tabo-Paresis	1	1		2	Petrol	1			1
Mental Instability	3	7		10	Alcoholism	14	7		21
Loss of Memory	2			2		358	289	122	769
Mental Observation	17	12		29	DISEASES OF NERVOUS SYSTEM :				
Mental Deficiency	9	6	14	29	Cerebral Aneurysm	5			5
	189	245	15	449	" Hæmorrhage	17	18	1	36
INJURIES AND OTHER FORMS OF VIOLENCE :—					" Thrombosis	118	105		223
Fractures :—					" Cortical Atrophy	11	23		34
Clavicle	2	3		5	" Diplegia			2	2
Humerus	11	7	5	23	" Abscess	2	2		4
Radius	2	1		3	Arachnoid Cyst	1			1
Radius and Ulna	2	3		5	Hydrocephalus			1	1
Colles'	3	11		14	Paralysis Agitans	3	3		6
Metacarpals	1	1	1	3	Post-Encephalitic				
Phalanges (Fingers)	1	1	1	3	Parkinsonism	9	9		18
Olecranon	2			2	Huntington's Chorea		1		1
					Bulbar Palsy		1		1
					Epilepsy	35	51	4	90

DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
NERVOUS SYSTEM—continued.					DISEASES OF THE RESPIRATORY SYSTEM :—				
Convulsions	..	..	14	14	Upper Respiratory	..	..	75	75
Meningitis Pneumococcal	..	..	3	3	Infection	178	100	30	308
" Lymphocytic	..	1	..	1	Bronchitis	29	9	66	104
" Streptococcal	..	..	2	2	Broncho-pneumonia	174	57	135	366
Locomotor Ataxia	16	6	..	22	Lobar Pneumonia	8	7	20	35
Friedrich's Ataxia	..	1	..	1	Empyema-Pneumococcal	6	4	2	12
Transverse Myelitis	2	..	..	2	" Streptococcal	8	1	4	13
Ascending Myelitis	1	..	..	1	Abscess of Lung	7	2	..	9
Disseminated Sclerosis	13	11	..	24	Fibrosis of Lung	3	..	..	3
Amyotrophic Lateral Sclerosis	2	..	..	2	Bronchiectasis	25	12	8	45
Spastic Paraplegia	..	..	1	1	Haemoptysis	1	..	..	1
Cerebro-Spinal Syphilis	2	1	..	3	Pleurisy	17	7	3	27
Neuro-Syphilis	8	6	..	14	" with Effusion	13	6	3	22
Spina Bifida	..	..	2	2	Spontaneous Pneumothorax	2	..	1	3
Old Poliomyelitis	1	..	..	1	Pyopneumothorax	1	1	..	2
Bell's Palsy	..	2	..	2	Asthma	19	32	5	56
Neuritis	5	5	..	10	Atelectasis	..	..	6	6
Polyneuritis	2	..	..	2	Acute Respiratory Failure	..	..	1	1
Neurofibromatosis	..	1	..	1	Coryza	..	3	..	3
Neuralgia	2	9	..	11	Pulmonary Infarction	1	1	..	2
Progressive Muscular Atrophy	1	3	..	4		492	242	359	1093
Myasthenia Gravis	..	1	..	1	DISEASES OF THE CIRCULATORY SYSTEM :—				
Headache	..	3	1	4	Calcification of Pericardium	..	1	..	1
Migraine	1	2	..	3	Infective Endocarditis	6	3	1	10
Neurasthenia	17	14	1	32	Valvular Heart Disease	78	131	13	222
Hysteria	2	22	..	24	Congenital Heart Lesion	..	1	9	10
Functional Aphonia	1	..	..	1	Cardiac Myopathy	86	92	..	178
" Fits	1	2	..	3	Heart Block	1	2	..	3
Habit Spasm	1	1	2	4	Paroxysmal Tachycardia	..	1	..	1
Vertigo	6	4	..	10	Effort Syndrome	4	1	..	5
	285	308	34	627	Arterio-Sclerosis	208	164	..	372
DISEASES OF THE EYE :—					Hyperpiesia	34	53	..	87
Blepharitis	..	..	2	2	Ruptured Hepatic Artery	1	..	..	1
Conjunctivitis	..	..	9	9	Coronary Thrombosis	12	10	..	22
Corneal Ulcer	2	..	3	5	Aortitis (Syphilitic)	8	1	..	9
Keratitis	..	..	1	1	Femoral Thrombosis	1	1	..	2
Cataract	..	2	1	3	Aneurysm	..	2	..	2
Retinal Hæmorrhage	1	..	..	1	Raynaud's Disease	..	1	..	1
Panophthalmitis	1	..	..	1	Intermittent Claudication	1	..	..	1
Dacryocystitis	..	..	1	1	Thrombo-Phlebitis	6	12	..	18
	4	2	17	23	Varicose Veins	7	7	..	14
DISEASES OF NOSE AND EAR :—					Angioma	..	..	1	1
Otitis Media	13	7	53	73	Telangiectasis	..	4	..	4
Mastoiditis	4	3	30	37	Purpura	1	2	1	4
Aural Polypus	1	..	1	2	Haemophilia	1	..	1	2
Tinnitus	..	1	..	1	Anaemia	2	4	..	6
Naso-pharyngitis	..	..	2	2	Achlorhydric Anaemia	..	2	..	2
Rhinitis	1	1	1	3	Pernicious	15	21	..	36
Nasal Polypi	11	5	..	16	Splenic	..	6	..	6
Deflected Septum	5	3	..	8	Microcytic	5	12	..	17
Hypertrophied Turbinates	..	..	2	2	Hypochromic	1	3	1	5
Sinusitis	6	7	1	14	Secondary	2	7	..	9
Epistaxis	2	8	2	12	Lymphatic Leukaemia	4	..	..	4
	43	35	92	170	Acholic Jaundice	..	1	..	1
DISEASES OF THE THROAT :—					Banti's Disease	..	1	..	1
Tonsillitis	17	28	12	57	Hodgkin's Disease	3	3	..	6
Quinsy	8	7	..	15	DISEASES OF DIGESTIVE SYSTEM :—				
Enlarged Tonsils & Adenoids	5	4	68	77	Stomatitis	..	3	9	12
Retropharyngeal Abscess	..	..	2	2	Dental Caries and Pyorrhoea	10	6	2	18
Laryngitis	..	1	1	2	Parabuccal Tumour	1	..	..	1
Laryngeal Papilloma	..	..	1	1	Pharyngitis	3	2	..	5
	30	40	84	154	Dysphagia	2	..	..	2
					Achalasia Cardia	..	2	..	2
					Congenital Hypertrophic Pyloric Stenosis	..	..	4	4

DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
DISEASES OF DIGESTIVE SYSTEM—Continued.					DISEASES OF THE GENITO-URINARY SYSTEM:—Contd.				
Dyspepsia	22	22	4	48	Nephroptosis	..	1	..	1
Hyperchlorhydria	2	4	..	6	Papilloma of Bladder	3	..	..	3
Gastritis	27	7	..	34	Cystitis	19	43	1	63
Gastric Ulcer	44	21	..	65	Vesical Calculus	4	..	..	4
Perforated Gastric Ulcer	7	2	..	9	Enlarged Prostate	67	..	..	67
Haematemesis	10	13	..	23	Urethritis	5	..	..	5
Gastro-Colic Fistula	1	..	..	1	Urethral Stricture	18	..	..	18
Duodenal Ulcer	114	17	1	132	Periurethral Abscess	2	..	..	2
Perforated Duodenal Ulcer	22	2	..	24	Pinhole Meatus	..	..	1	1
Duodenitis	2	1	..	3	Phimosis	1	..	5	6
Jejunal Ulcer	3	..	..	3	Paraphimosis	..	..	3	3
Perforated Gastro-Jejunal Ulcer	1	..	..	1	Balanitis	1	..	..	1
Jejunitis	1	3	..	4	Undescended Testis	..	..	1	1
Regional Ileitis	1	2	..	3	Orchitis	6	..	..	6
Enteritis	9	8	..	17	Hydrocele	6	..	1	7
(Children)	..	..	137	137	Haematocele	1	..	..	1
Appendicitis	86	110	49	245	Varicocele	1	..	..	1
Appendix Abscess	5	12	1	18	Retention of Urine	3	..	..	3
Diarrhoea	5	1	8	14	Dysmenorrhoea	..	6	..	6
Constipation	27	38	2	67	Menorrhagia	..	14	..	14
Colitis	3	3	1	7	Metrorrhagia	..	2	..	2
Ulcerative Colitis	2	11	..	13	Metropathia Haemorrhagica	..	1	..	1
Diverticulosis	..	1	..	1	Metritis	..	3	..	3
Diverticulitis	4	8	..	12	Endometriosis	..	2	..	2
Prolapsed Colostomy	1	..	..	1	Cervicitis	..	3	..	3
Proctitis	..	1	..	1	Leucorrhoea	..	16	..	16
Prolapse of Rectum	..	..	1	1	Cervical Polypus	..	9	..	9
Haemorrhoids	37	22	..	59	Procidentia	..	6	..	6
Imperforate Anus	..	..	3	3	Fibromyomata	..	10	..	10
Fissure-in-Ano	4	1	..	5	Ovarian Cyst	..	10	..	10
Fistula-in-Ano	6	3	..	9	Fimtrial Cyst	..	1	..	1
Catarrhal Jaundice	11	15	8	34	Tubo-Ovarian Abscess	..	1	..	1
Obstructive Jaundice	2	2	..	4	Salpingitis	..	26	..	26
Necrosis of Liver	..	3	..	3	Pyosalpinx	..	14	..	14
Cirrhosis of Liver	11	6	..	17	Parametritis	..	3	..	3
Hepatitis	..	1	..	1	Pelvic Peritonitis	..	3	..	3
Cholecystitis	13	48	..	61	Dyspareunia	..	1	..	1
Cholelithiasis	7	27	..	34	Vulvo-Vaginitis	..	2	..	2
Empyema of Gall Bladder	..	1	..	1	Caruncle	..	1	..	1
Abdominal Pain and Colic	31	45	14	90		220	292	48	560
Peritoneal Adhesions	7	5	..	12	DISEASES OF THE SKIN:—				
Pneumococcal Peritonitis	..	..	1	1	Bromide Granuloma	..	..	1	1
Intussusception	1	..	2	3	Carbuncle	24	11	1	36
Volvulus	4	1	..	5	Dermatitis	6	7	1	14
Intestinal Obstruction	2	1	..	3	Arsenical	2	1	..	3
Hernia Inguinal	96	13	6	115	Exfoliative	1	1	..	2
Femoral	9	22	1	32	Exogenic	4	3	1	8
Epigastric	4	1	..	5	Herpetiformis	1	..	1	2
Umbilical	6	10	2	18	Seborrhoeic	1	..	2	3
Ventral	..	7	..	7	Sunburn	..	2	1	3
Incisional	2	3	..	5	Toxic	..	2	..	2
Diaphragmatic	..	2	..	2	Eczema	17	17	7	41
Obturator	..	2	..	2	Constitutional	5	3	..	8
Tapeworm	..	1	4	5	Gravitational	..	3	..	3
	668	542	260	1,470	Infantile	3	..	20	23
DISEASES OF THE GENITO-URINARY SYSTEM:—					Psychogenic	..	1	..	1
Oxaluria	1	..	..	1	Seborrhoeic	3	2	..	5
Nephritis	44	43	20	107	Varicose	2	..	..	2
Nephrosis	..	1	..	1	Erythema Multiforme	..	..	1	1
Pyelonephritis	..	1	..	1	Furunculosis	8	6	2	16
Pyelitis	2	35	13	50	Herpes Zoster	1	6	1	8
Haematuria	7	1	..	8	Hyperkeratosis of Scar	..	1	..	1
Renal Calculus	4	4	..	8	Impetigo	8	2	49	59
Renal Colic	17	9	..	26	Implantation Cyst	..	1	..	1
Ureteric Calculus	2	5	..	7	Keloid	1	..	..	1
Hydronephrosis	6	9	1	16	Painful Scar	..	1	1	2
Pyonephrosis	..	6	2	8	Papilloma of Shoulder	1	..	..	1
					Pediculosis and Vermin Rash	4	2	3	9
					Pemphigus	..	..	1	1
					Pompholyx	2	3	..	5

DISEASES FROM WHICH PATIENTS SUFFERED.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE	Men.	Women.	Children.	Total.
DISEASES OF THE SKIN— <i>continued.</i>					MISCELLANEOUS :—				
Pruritus	4	4	..	8	Adenomatous Goitre ..	..	1	..	1
Psoriasis	4	9	4	17	Colloid Goitre	..	1	..	1
Ringworm	..	..	5	5	Hyperthyroidism	..	1	..	1
Rosacea	1	..	..	1	Thyrototoxicosis	1	32	1	34
Scabies	15	19	54	88	Riedel's Thyroiditis ..	..	1	..	1
Sebaceous Cyst	2	..	2	4	Myxoedema	2	7	..	9
Septic Disease of New Born	..	..	1	1	Hypopituitarism	1	1	..	2
Strophulus	..	..	1	1	Diabetes Mellitus	37	56	2	95
Ulcer	20	13	2	35	Haemochromatosis	3	1	..	4
Urticaria	..	..	1	1	Addison's Disease	1	..	..	1
	140	120	163	423	Obesity	..	2	..	2
DISEASES OF BONES AND JOINTS :—					Pink Disease	..	..	3	3
Osteomyelitis	4	4	14	22	Gout	5	..	..	5
Chronic	7	3	8	18	Acidosis	..	..	1	1
Osteitis	1	1	..	2	Tetany	1	1	..	2
Osteogenesis Imperfecta ..	..	..	1	1	Nutritional Disorders ..	2	3	27	32
Paget's Disease	1	3	..	4	Rickets	..	..	1	1
Exostosis	2	1	..	3	Debility	8	24	9	41
Myxoma of Femur	1	..	..	1	" Collapse "	3	3	..	6
Multiple Myelomatosis ..	..	1	..	1	Menopausal Debility ..	..	5	..	5
Synovitis	5	5	..	10	Visceroptosis	1	12	..	13
Septic Arthritis	5	1	3	9	Erythema Nodosum	1	10	..	11
Perthé's Disease	..	..	1	1	Polyarthritis, Toxic ..	4	5	10	19
Charcot's Joint	1	1	..	2	Malaria	1	..	..	1
Torn Internal Semilunar	..	..	..	..	Fibroma	..	1	..	1
Cartilage	3	1	..	4	Lipoma	1	4	..	5
Myositis Ossificans	..	1	..	1	Hypertrophic Mastitis ..	..	1	..	1
Torticollis	..	..	1	1	Sacro-coccygeal Sinus ..	..	2	..	2
Peroneal Spasm	2	..	1	3	Coccygodynia	..	1	..	1
Genu Valgum	1	..	..	1	Breakdown of Operation				
Talipes	2	..	4	6	Wound	3	1	1	5
Pes Planus	1	..	1	2	Transposition of Viscera ..	..	1	..	1
Pes Cavus	2	..	..	2	Haemorrhage from Umbilical	..	..	1	1
Hallux Valgus	2	7	..	9	Cord	..	..	..	..
Hallux Rigidus	..	2	..	2	Post-Extraction	..	..	..	..
Hammer Toe	..	1	..	1	Haemorrhage	3	4	1	8
Ingrowing Toe Nail	3	..	..	3	Unexplained Fever (P.U.O.)	..	..	4	4
Contracture of Fingers ..	2	2	..	4	Prematurity	..	..	56	56
Bursitis	8	20	..	28	Debility from birth	..	..	6	6
Painful Stump	..	1	..	1	Icterus Gravis	..	..	2	2
	53	55	34	142	Admitted with mother ..	..	..	36	36
SEPTIC INFECTIONS :—					Malingering	2	..	..	2
Fingers	4	4	4	12	No Disease	6	6	37	49
Hands	7	1	2	10		86	187	198	471
Toes	2	1	..	3	PATIENTS DISCHARGED FROM MATERNITY WARD AND NOT INCLUDED ELSEWHERE :—				
Feet	6	1	..	7	Delivered in Hospital ..	..	1,232	..	1,232
Abscess :—	..	..	..	..	" before admission ..	..	25	..	25
Face, Head and Neck ..	10	11	63	84	Children born in Hospital ..	..	..	1,116	1,116
Upper Extremity	6	1	2	9	" before admission ..	..	..	24	24
Lower	18	8	17	43	Undelivered (apparently normal, but not in labour) ..	..	85	..	85
Chest Wall	3	..	2	5		..	1,342	1,140	2,482
Abdominal Wall	1	1	1	3		3,781	5,443	2,973	12,197
Perinephric	1	1	..	2					
Scrotum	..	..	1	1					
Bartholin's	..	9	..	9					
Ischio-Rectal	32	9	2	43					
Multiple	1	..	2	3					
Adenitis	9	7	31	47					
Cellulitis	36	32	10	78					
Streptococcal Septicæmia	..	2	1	3					
Gas Gangrene of Feet ..	1	..	..	1					
	137	88	138	363					

Deaths.—The number of deaths was 1,746, this being an increase of 53 over the previous year. The principal age group affected was that of children under one year, in which group 203 deaths occurred, being 44 more than in 1937. Rises also took place in the 25-35 (65 to 86) and in the over 75 group (245 to 260). A fall was recorded in the 65-75 group (421 to 378). The number of deaths occurring within 24 hours of admission was 226, and a further 105 took place within the second 24 hours.

DEATHS IN AGE GROUPS.

Under 1 year	..	..	203
1-2 years	..	..	33
2-5	..	..	22
5-15	..	..	24
15-25	..	..	51
25-35	..	..	86
35-45	..	..	121
45-55	..	..	218
55-65	..	..	350
65-75	..	..	378
75-85	..	..	228
85 and over	..	..	32
All ages			1,746

DEATHS IN QUARTERS.

	Men.	Women.	Children.	Total.
1st Quarter	188	192	95	475
2nd "	216	162	56	434
3rd "	182	156	61	399
4th "	183	185	70	438
Year	769	695	282	1,746

ST. JAMES'S HOSPITAL.

CAUSES OF DEATH.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
INFECTIOUS DISEASES :—					VENEREAL DISEASE :—				
Cerebro-spinal Fever ..	3	..	5	8	Congenital Syphilis ..	..	1	1	2
Diphtheria ..	..	..	1	1	Syphilitic Ulcer ..	..	1	..	1
Dysentery ..	..	..	1	1		..	2	1	3
Erysipelas ..	1	2	1	4	DISEASES AND ACCIDENTS				
Whooping Cough ..	..	..	3	3	CONNECTED WITH PREG-				
	4	2	11	17	NANCY AND CHILDBIRTH :—				
TUBERCULOSIS :—					Abortion ..	..	1	..	1
Pulmonary ..	33	10	2	45	Pyelonephritis of Pregnancy ..	..	1	..	1
Non-Pulmonary :—					Mitral Disease with				
Lymphatic Glands ..	2	..	1	3	Pregnancy ..	..	1	..	1
Meninges ..	..	3	10	13	Ante-partum haemorrhage ..	..	1	..	1
Genito-Urinary ..	..	1	..	1	Obstructed Labour ..	..	1	..	1
Peritoneum ..	..	..	1	1	Collapse of Lung after Labour ..	..	1	..	1
Miliary ..	2	..	1	3	Puerperal Eclampsia ..	..	1	..	1
	4	4	13	21	Puerperal Endometritis ..	..	1	..	1
MALIGNANT DISEASE :—					Confusional Psychosis ..	..	2	..	2
Cancer of Larynx ..	1	..	..	1		..	10	..	10
" " Bronchus ..	28	10	..	38	MENTAL DISEASES :—				
" " Lung ..	2	1	..	3	Amentia ..	2	..	1	3
" " Mediastinum ..	1	..	..	1	Confusional Insanity ..	2	7	..	9
" " Jaw ..	1	2	..	3	Toxic Psychosis ..	1	4	..	5
" " Antrum of					Dementia ..	1	..	..	1
Highmore ..	1	1	..	2	Dementia Paralytica ..	6	5	..	11
" " Parotid ..	1	1	..	2	Melancholia ..	..	2	..	2
" " Tongue ..	1	1	..	2		12	18	1	31
" " Pharynx ..	2	..	..	2	ACCIDENTAL INJURY AND				
" " Oesophagus ..	4	..	..	4	VIOLENCE :—				
" " Stomach ..	29	20	..	49	Fractures :—				
" " Small Intestine ..	1	..	..	1	Skull ..	11	4	..	15
" " Caecum ..	1	..	..	1	Humerus ..	..	4	..	4
" " Colon ..	16	10	..	26	Femur ..	4	17	..	21
" " Rectum ..	14	13	..	27	Fibula ..	..	1	..	1
" " Liver ..	1	2	..	3	Tibia and Fibula ..	1	1	..	2
" " Gall-bladder ..	1	1	..	2	Ribs ..	1	..	..	1
" " Hepatic Bile Ducts ..	..	1	..	1	Spine ..	1	..	..	1
" " Pancreas ..	3	1	..	4	Contusions ..	1	3	..	4
Abdominal Carcinomatosis ..	..	1	..	1	Concussion ..	..	2	..	2
Hypernephroma ..	2	1	..	3	Traumatic Cerebral Lesion ..	..	..	4	4
Cancer of Bladder ..	6	5	..	11	Wounds ..	1	2	..	3
" " Prostate ..	5	..	..	5	Burns ..	1	2	1	4
" " Penis ..	1	..	..	1	Scalds ..	..	..	2	2
" " Breast ..	..	23	..	23	Ammonia Poisoning ..	..	1	..	1
" " Ovary ..	..	5	..	5	Coal Gas Poisoning ..	..	1	..	1
" " Uterus ..	..	24	..	24	Cut Throat ..	..	1	..	1
" " Vulva ..	..	1	..	1	Lysol Poisoning ..	1	..	..	1
Rodent Ulcer ..	..	1	..	1		22	39	7	68
Cancer of Skin ..	5	1	..	6	NERVOUS SYSTEM :—				
Cerebral Tumour ..	..	8	..	8	Cerebral Aneurysm ..	5	..	..	5
Pleural Mesothelioma ..	1	..	..	1	" Haemorrhage ..	16	16	..	32
Sarcoma of Ovary ..	..	1	..	1	" Thrombosis ..	56	66	..	122
" " Muscle ..	..	2	..	2	" Cortical Atrophy ..	7	23	..	30
" " Bone ..	2	..	1	3	" Diplegia ..	..	..	1	1
Retroperitoneal Sarcoma ..	1	..	..	1	" Abscess ..	2	2	..	4
RHEUMATISM :—	131	137	1	269	Hydrocephalus ..	..	..	1	1
1. Acute types :—					Paralysis Agitans ..	1	2	..	3
Acute Rheumatism ..	2	1	..	3	Post-encephalitic				
Rheumatic Carditis ..	..	1	2	3	Parkinsonism ..	1	..	..	1
Pericarditis ..	..	..	2	2	Epilepsy ..	3	3	..	6
Endocarditis ..	2	2	..	4	Convulsions ..	..	..	2	2
	4	4	4	12	Pneumococcal Meningitis ..	..	..	3	3
2. Non-articular types :—					Streptococcal ..	..	..	2	2
3. Chronic Arthritis :—					Locomotor Ataxia ..	2	1	..	3
Osteo-arthritis ..	1	1	..	2	Transverse Myelitis ..	1	..	..	1
Rheumatoid Arthritis ..	1	2	..	3	Ascending ..	1	..	..	1
	2	3	..	5					

CAUSES OF DEATH.—(Continued).

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
NERVOUS SYSTEM—continued.					DIGESTIVE SYSTEM—continued				
Disseminated Sclerosis ..	2	1	..	3	Necrosis of Liver ..	..	3	..	3
Cerebro-spinal syphilis ..	1	..	..	1	Cirrhosis of Liver ..	9	3	..	12
Neuro-Syphilis ..	..	1	..	1	Cholecystitis ..	1	1	..	2
Spina Bifida ..	..	..	2	2	Cholelithiasis ..	1	3	..	4
	98	115	11	224	Peritoneal Adhesions ..	3	..	..	3
DISEASES OF NOSE AND EAR:—					Pneumococcal Peritonitis ..	..	..	1	1
Otitis Media ..	3	..	2	5	Volvulus ..	3	1	..	4
Mastoiditis ..	2	..	..	2	Hernia Inguinal ..	4	..	..	4
Naso-Pharyngitis ..	..	..	1	1	Femoral ..	..	2	..	2
Sinusitis ..	1	..	..	1	Umbilical ..	1	2	..	3
	6	..	3	9	Ventral ..	..	2	..	2
DISEASES OF THROAT:—					Obturator ..	..	1	..	1
Tonsillitis ..	1	..	..	1		58	34	76	168
					DISEASES OF THE GENITO- URINARY SYSTEM:—				
RESPIRATORY SYSTEM:—					Nephritis ..	21	22	..	43
Upper Respiratory Infection ..	..	..	3	3	Pyelitis ..	..	1	1	2
Bronchitis ..	43	30	3	76	Renal Calculus ..	..	1	..	1
Broncho-pneumonia ..	15	6	34	55	Pyonephrosis ..	..	..	2	2
Lobar Pneumonia ..	48	14	3	65	Cystitis ..	3	2	..	5
Pneumococcal Empyema ..	1	2	12	15	Vesical Calculus ..	1	..	..	1
Streptococcal Empyema ..	3	2	1	6	Ureteric ..	1	..	..	1
Abscess of Lung ..	2	1	..	3	Enlarged Prostate ..	35	..	..	35
Bronchiectasis ..	6	2	1	9	Urethral Stricture ..	6	..	..	6
Asthma ..	1	..	..	1	Ovarian Cyst ..	..	1	..	1
Atelectasis ..	..	..	6	6	Fibromyomata of Uterus ..	..	1	..	1
Acute Respiratory Failure ..	..	..	1	1	Salpingitis ..	..	1	..	1
	119	57	64	240	Pyosalpinx ..	..	1	..	1
DISEASES OF THE CIRCULATORY SYSTEM:—						67	30	3	100
Infective Endocarditis ..	6	3	1	10	DISEASES OF THE SKIN:—				
Valvular Heart Disease ..	16	30	1	47	Carbuncle ..	3	..	..	3
Congenital Heart Lesion ..	..	..	5	5	Infantile Eczema ..	..	..	1	1
Cardiac Myopathy ..	39	49	..	88	Septic Disease of New Born ..	..	..	1	1
Arterio-Sclerosis ..	110	114	..	224	Ulcer ..	..	1	..	1
Ruptured Hepatic Artery ..	1	..	..	1		3	1	2	6
Coronary Thrombosis ..	8	4	..	12	DISEASES OF BONES AND JOINTS:—				
Aortitis (Syphilitic) ..	4	..	..	4	Osteomyelitis ..	..	1	4	5
Aneurysm ..	..	1	..	1	Osteogenesis Imperfecta ..	..	..	1	1
Pernicious Anaemia ..	3	4	..	7	Septic Arthritis ..	3	..	..	3
Splenic Anaemia ..	..	1	..	1		3	1	5	9
Microcytic Anaemia ..	1	..	..	1	SEPTIC INFECTIONS:—				
Lymphatic Leukaemia ..	4	..	..	4	Septic Fingers ..	..	..	1	1
Acholic Jaundice ..	..	1	..	1	Abscess:—				
Hodgkin's Disease ..	2	2	..	4	Upper Extremity ..	1	..	1	2
	194	209	7	410	Lower ..	..	..	1	1
DISEASES OF THE DIGESTIVE SYSTEM:—					Multiple ..	..	..	1	1
Ulcerative Stomatitis ..	..	2	..	2	Cellulitis ..	1	2	..	3
Congenital Hypertrophic Pyloric Stenosis ..	..	..	2	2	Streptococcal Septicæmia ..	..	1	1	2
Phlegmonous Gastritis ..	1	..	..	1		2	3	5	10
Gastric Ulcer ..	3	1	..	4	MISCELLANEOUS:—				
Perforated Gastric Ulcer ..	3	1	..	4	Thyrototoxicosis ..	..	2	..	2
Gastro-Colic Fistula ..	1	..	..	1	Diabetes Mellitus ..	4	13	..	17
Duodenal Ulcer ..	4	..	..	4	Hæmochromatosis ..	1	1	..	2
Perforated Duodenal Ulcer ..	11	..	..	11	Addison's Disease ..	1	..	..	1
Jejunal Ulcer ..	1	..	..	1	Marasmus ..	..	..	2	2
Perforated Gastro-jejunal Ulcer ..	1	..	..	1	Prematurity ..	..	..	56	56
Enteritis (Infantile Diarrhoeal Diseases) ..	..	..	68	68	Debility from birth ..	..	..	6	6
Food Poisoning ..	1	..	1	2	Icterus Gravis ..	..	..	2	2
Appendicitis ..	6	3	3	12		6	16	66	88
Appendix Abscess ..	2	3	..	5					
Ulcerative Colitis ..	..	5	..	5					
Diverticulitis ..	2	1	..	3					
Imperforate Anus ..	..	..	1	1					
					TOTALS ..	769	695	282	1,746

DEATHS OF CHILDREN UNDER 1 YEAR—1938.

Cause of Death.	No. of Deaths.
Prematurity	56
Debility from birth	6
Intracranial Hæmorrhage	4
Atelectasis	6
Spina Bifida	2
Imperforate Anus	1
Hydrocephalus	1
Congenital Pyloric Stenosis	2
" Syphilis	1
" Heart Lesion	5
Icterus Gravis	2
Otitis Media	2
Naso-pharyngitis	1
Upper Respiratory Infection	3
Acute Respiratory Failure	1
Bronchitis	5
Broncho-pneumonia	20
Empyema	1
Enteritis (Diarrhœal Diseases)	60
Pyonephrosis	2
Infantile Eczema	1
Septic Disease of new born	1
Septic Finger	1
Abscess of Ankle	1
Multiple Abscesses	1
Osteomyelitis	1
Osteogenesis Imperfecta	1
Scalds	1
Amentia	1
Marasmus	2
Pneumococcal Peritonitis	1
" Meningitis	1
Suppurative Meningitis	1
Tuberculous	1
Cerebro-spinal Fever	3
Dysentery	1
Erysipelas	1
Whooping Cough	2
Total	203

ST. JAMES'S HOSPITAL.

OPERATIONS PERFORMED DURING 1938.

OPERATIONS PERFORMED.		OPERATIONS PERFORMED.	
ABDOMINAL OPERATIONS :—		For Urethral Calculus	1
Appendicectomy	277	For Varicocele	1
For Appendix Abscess	6	Nephrectomy	10
Caecostomy	5	Nephrolithotomy	3
" Closure of	1	Nephropexy	1
Caesarean Section	30	Orchidectomy	5
Cholecystectomy	58	Perinephric Abscess, drainage	6
Cholecyst-gastrostomy	3	Periurethral "	1
Colectomy	2	Prostatectomy	11
Colostomy	17	Pyelolithotomy	1
" Closure of	1	Reduction of Paraphimosis ..	1
Enterostomy	1	Suprapubic Cystotomy	26
Excision of Rectum (abdomino-		" Cystolithotomy	3
perineal)	1	Urethral Stricture, Dilatation ..	1
Gastrectomy	10	Vaginal Hysterectomy	2
Gastrostomy	1		417
Gastro-enterostomy	22		
Gilliam's Operation	1	OPERATIONS ON EYE, EAR, NOSE AND	
Hysterectomy	18	THROAT :—	
Ileostomy	1	Adenotonsillectomy	125
Laparotomy (Exploratory) ..	14	Cauterisation of Turbinates ..	3
Laparotomy for :—		Drainage of Cerebral Abscess ..	1
Intestinal Obstruction	3	" Maxillary Antrum	4
Intussusception	3	Evisceration of Eye	1
Perforation of Colon	1	Excision of Aural Polypus	4
" Diverticulitis	1	" Meibomian Cyst	1
" Duodenal Ulcer	24	" Nasal Polypus	15
" Gastric Ulcer	9	For Frontal Sinusitis	2
Peritoneal Adhesions	6	For Lateral Sinus Thrombosis ..	1
Peritonitis	19	Incision of Peritonsillar Abscess ..	1
Resection of Intestine	4	" Septal Abscess	1
Ruptured Liver	1	" Septal Haematoma	1
Tuberculous Mesenteric Glands	2	Intranasal Antrostomy	1
" Peritonitis	1	Mastoidectomy	11
Volvulus	2	Mastoidotomy	28
Nephrectomy	2	Myringotomy	8
Ovariectomy	10	Submucous resection of Nasal	
Pyloroplasty	1	Septum	11
Rammstedt's Operation	4	Tracheotomy	2
Resuture of Abdominal Wound ..	4	Turbineotomy	4
Salpingectomy	11		225
Salpingostomy	1		
Salpingo-oophorectomy	20	CHEST OPERATIONS :—	
Splenectomy	3	Cardio-Omentopexy	1
Transplantation of Ureters	1	Extra-pleural pneumothorax	2
	602	For Diaphragmatic Hernia	1
OPERATIONS FOR HERNIA :—		Phrenic Crush	4
Epigastric Hernia	5	" Evulsion	50
Femoral Hernia	14	Rib resection for Empyema	46
Strangulated Femoral Hernia ..	13	Thoracoplasty	5
Incisional Hernia	8	Thoracoscopy	25
Inguinal Hernia	90		134
Strangulated Inguinal Hernia ..	11		
Obturator Hernia	1	DRAINAGE OF ABSCESSES :—	
Umbilical Hernia	12	Abdominal Wall	6
Strangulated Umbilical Hernia ..	2	Axilla	20
	156	Breast	40
GENITO-URINARY OPERATIONS :—		Chest	11
Bartholin's Abscess (incision) ..	5	Face and Head	41
Circumcision	14	Ischio-rectal	40
Colpo-perineorrhaphy	12	Lower Extremity	100
Colpotomy	1	Lumbar	2
Cystoscopy (under general		Multiple	1
anaesthesia)	1	Neck	56
Dilatation and Curettage	59	Sacro-coccygeal	1
Evacuation of Uterus	242	Scrotum	2
Excision of Cervical Polypus ..	4	Upper Extremity	46
For Extravasation of Urine	2		366
For Hydrocele	4		

OPERATIONS PERFORMED DURING 1938.—(Continued).

OPERATIONS PERFORMED.		OPERATIONS PERFORMED.	
RECTAL OPERATIONS :—		Osteotomy	1
Excision of Fistula-in-Ano	12	Reduction of Dislocation	1
" " Haemorrhoids	49	Sequestrectomy	4
" " Rectum	1	Steindler's Operation	1
For Fissure-in-Ano	4	Tenotomy	2
For Imperforate Anus	1		283
	67	OPERATIONS ON THE SKULL, BRAIN	
AMPUTATIONS :—		AND NERVES :—	
Of Finger	6	Cerebral Decompression	1
" Leg	12	For Compound Fracture of Skull ..	2
" Stump	1	Injection of Trigeminal Nerve ..	2
" Toe	1		5
	20	MISCELLANEOUS OPERATIONS :—	
ORTHOPÆDIC OPERATIONS :—		Avulsion of Nail	8
Application of Plaster	5	Biopsy of Gland	1
Arthrodesis of Hip	2	" " Foot	1
Arthrotomy of Ankle Joint	1	" " Rectum	1
" " Elbow	1	" " Testis	2
" " Hip	1	Curettage of Venereal Warts	4
" " Knee	9	Examination under Anaesthetic ..	20
Bone Graft	2	Excision of Adenoma	1
Capsulotomy	2	" " Breast	13
Excision of Coccyx	1	" " Bursa	3
" " Exostosis	2	" " Cyst	4
" " Head of Radius	1	" " Fibroma	1
For Osteomyelitis of Femur	7	" " Glands	4
" " " Fibula	3	" " Keloid	1
" " " Humerus	2	" " Lipoma	5
" " " Metatarsal	1	" " Papilloma	2
" " " Tibia	6	" " Scar Tissue	2
" " " Toe	1	" " Sinus	10
" " " Ulna	1	" " Thyroid	21
For Fractured Femur	30	" " Tumour of Breast	1
" " Humerus	4	" " " " Elbow	1
" " Metacarpal	1	" " " " Neck	1
" " Olecranon	1	" " " " Thigh	1
" " Os Calcis	1	" " " " Varicose Veins ..	14
" " Patella	2	Extraction of Teeth	1
" " Radius and Ulna	3	Femoral Embolectomy	1
" " Thumb	1	For Hare Lip	1
" " Tibia and Fibula	33	Incision of Carbuncle	11
For Hallux Valgus	7	" " Prepatellar Bursitis	25
" Rigidus	1	Ligation of External Jugular Veins	1
" Hammer Toe	1	" " Thyroid Arteries	1
" Tenosynovitis	1	Periarterial Sympathectomy	1
" Torn Semilunar Cartilage	3	Popliteal Embolectomy	1
Hibb's Spinal Fusion	3	Skin Graft	5
Insertion of Kirschner Wire	44	Suture of Cut Tendon	2
" " Smith Petersen's Pin	1	" " Wounds	30
Laminectomy	3	Toilet of Burns	27
Manipulation of Foot	5		229
" " Hand	1		
" " Knee	2		
" " Legs	2		
" " Shoulder	1		
" " Spine	1		
" " Thumb	1		
Manipulation and application of			
Plaster	72		
Neurectomy (Musculo-Cutaneous			
Nerve)	1	TOTAL	2,504

Medical Work.—Cases of a medical type showed only a slight variation in the number admitted, but every year shows an increase in the work, caused by the development of new investigations and tests designed to achieve greater accuracy of diagnosis. There were no epidemics during the year, and influenza was practically non-existent as a cause of admission. In diseases of the respiratory system, the numbers treated for pneumonia and allied conditions remained about the same, the total being 517 as compared with 524 and 521 in 1936 and 1937 respectively. An interesting feature is that during the years 1937 and 1938, 181 and 197 cases of gastric and duodenal ulcer were treated, the corresponding figures being 111 and 110 in 1935 and 1936. This does not necessarily mean an increase in the incidence of this form of illness, but is probably due to a growing appreciation of the value of hospital treatment. Rest and a strict dietary are of great importance in the early stages of treatment, and are so much more easily attained than at home. The patients learn the regime and are in a better position to understand and carry out the later stages of treatment after they have left hospital.

Surgical Work.—There was a decrease in the number of operations from 2,611 to 2,504, but to this must be added 826 cases of a minor type dealt with in the theatre. This latter figure was 110 more than the corresponding figure for 1937. It included cases requiring local anæsthesia only, treatment of minor wounds and burns, special dressings, cystoscopies, sigmoidoscopies, gastroscopies and so on. Blood transfusion was carried out on 90 occasions, an increase of 12. The number of abdominal operations rose by 36 to a total of 602. The number of patients discharged during the year with a diagnosis of malignant disease was 227, an increase of 11 over 1937 but 2 less than in 1936. The deaths from malignant disease during the past five years have shown a rise each year, the figures being, 1934, 182 ; 1935, 217 ; 1936, 233 ; 1937, 241 ; 1938, 269. Treatment of cases by radium and deep X-rays has been carried out at the General Infirmary at Leeds in 21 cases, exclusive of such patients as had already begun such treatment before admission. The number of fractures treated fell from 435 to 363, presumably because more were dealt with elsewhere but cases of injury of other types showed a slight increase. The work in the fracture clinic

continued to be of great value; 341 patients were seen and the number of attendances was 1,121. The corresponding figures in 1937 were 320 and 1,190.

Once again one has to lament the inadequate theatre provision. Progress on the buildings has been held up for a variety of reasons, and the work has been carried on under the same difficulties as in previous years.

During the year the appointment of a neuro-surgeon to the General Infirmary and this hospital was made. The surgeon's services are proving increasingly valuable as the work develops. It has been arranged, to avoid unnecessary duplication of staff and equipment that all operative work should be carried out at one hospital, namely the General Infirmary. Provision for this type of case could not be made yet at this hospital because of the pressure on the operating accommodation.

Cerebral operations are lengthy and with the limited theatre accommodation available to undertake them at St. James's Hospital would make an already difficult situation, impossible.

Children's Wards.—During the year, 1,774 children were admitted, a decrease of 164 from 1937. The number of live births was 1,165, so that altogether 2,939 children passed through the hospital, this figure being down by 83 from the preceding year. The number of cases of infectious disease has fallen continuously during the past few years, and in a proportion of those shown as suffering from such illnesses the occurrence was incidental during treatment for other conditions. There was relatively little incidental infection, but it requires only a little to cause dislocation of work, owing to the necessity of imposing quarantine in the affected wards. The number of deaths in children under one year was 203, an increase of 44 over 1937. The principal factor in this was a rise in deaths due to prematurity, congenital abnormalities and other conditions affecting newly born children, the figures being 84 and 49 respectively for 1938 and 1937. Deaths from gastro-enteritis numbered 60, an increase of 7. The group of diseases, for convenience labelled as gastro-enteritis, remains a baffling problem. An unusual feature was an outbreak in the winter months of

1937-38 ; in 75 per cent. of the cases a definite history of preceding upper respiratory infection was established. There is little doubt but that in many cases the diarrhoeal symptoms in young children are symptomatic of a general infection rather than of a primary intestinal lesion. Some hospitals use the term symptomatic diarrhoea but for want of a more definite explanation, it has been thought better to retain the more usual name. The diagnosis is based on the principal feature of the clinical picture, although autopsy seldom shows any definite intestinal lesion.

The proposals to build a new Children's Hospital arising out of the deliberations of the Joint Hospitals Advisory Committee made progress, and plans have been prepared to meet the requirements of the various types of case it is desired to treat in it. Reconstruction of the Children's Wards at St. James's Hospital is an essential part of the development of the provision of hospital beds for children, and should be put in hand as soon as circumstances permit.

Maternity Department.—Labours conducted during 1938 numbered 1,225, or 88 more than in 1937. There were 75 stillbirths, 15 cases of twins, and a total number of live births of 1,165. In addition to those confined in hospital 27 women were admitted immediately following delivery. Of the women admitted for confinement, five died.

The major causes of abnormality were :—

Ante-partum haemorrhage	..	..	34
Post-mortem haemorrhage	..	..	23
Eclampsia	..	..	7

Abnormalities of presentation and position included :—

Breech	..	..	63
Persistent occipito-posterior	..	..	18
Transverse	..	..	4
Face	..	..	2

Caesarean section was performed in 32 cases; forceps were applied in 87 instances and induction was carried out in 39 cases, 25 by medical and 14 by surgical means. The number of premature births was 175, an increase of 99, which was reflected in the large number of deaths from this cause. Puerperal Pyrexia was notified in 35 cases.

Particulars of maternal deaths were as follows:—

1. Disproportion. Lie had been transverse during pregnancy and had recurred although corrected. When labour began, Caesarean Section was offered because of anticipated difficulty with head. This was refused. The child was turned, but the aftercoming head had to be perforated. The patient died from shock 6 hours after delivery.

2. In this case delivery of the child was spontaneous. Free intra-partum loss with retention of placenta occurred and the latter had to be removed manually. Blood transfusion was carried out. Subsequently there developed an extensive venous thrombosis, and the patient died from pulmonary embolism 22 days after delivery. Autopsy showed a moderate degree of endometritis, and suppuration in left broad ligament.

3. Puerperal eclampsia. Normal delivery, but albuminuria and oedema of legs and feet were present. Sudden onset of fits occurred 5 hours later, and death took place 25 hours after delivery.

4. Concealed accidental haemorrhage. Blood transfusion was carried out and Caesarean section performed. The patient collapsed and died whilst operation was being completed.

5. A case of massive post-anaesthetic collapse of lungs following delivery under anaesthesia.

In addition to the cases above noted, four deaths from causes unrelated to pregnancy occurred. One case was of severe mitral stenosis complicated by pregnancy. The child was delivered at 5½ months, and the death of the woman occurred eight days afterwards, but was probably entirely due to the heart condition. In another case a young woman was admitted, 5 months pregnant, suffering from pyelonephritis, toxæmia and uraemia. She died within a day of admission. Two other cases died from puerperal toxic psychosis. Both had been delivered some time before admission. There was only one death from abortion, of 300 cases treated.

There were 75 stillbirths, an increase of 3 over the previous year, but showing a decrease of 6.3 per cent. to 6.05 per cent. The causes of death were as follows:—

Prematurity	..	..	..	..	16
Maceration	..	..	..	..	5
Hydrocephalus	..	..	..	..	2
Anencephaly	..	..	..	..	3
Toxaemia in mother	..	..	..	..	3
Prolapsed cord	..	..	..	..	2
Ante-partum haemorrhage	..	..	..	..	14
Protracted labour	..	..	..	..	9
Difficult labour	..	..	..	..	11
Complicated breech	..	..	..	..	2
Craniotomy	..	..	..	..	4
Uncertain	..	..	..	..	4
					—
					75
					==

Forty-five children died within 10 days of birth, 9 more than in 1937. The causes of death were:—

Prematurity	..	..	..	..	32
Debility from birth	..	..	..	..	1
Atelectasis	..	..	..	..	3
Intracranial haemorrhage	..	..	..	..	4
Congenital heart lesion	..	..	..	..	1
Myelocoele	..	..	..	..	1
Icterus Gravis	..	..	..	..	1
Osteogenesis Imperfecta	..	..	..	..	1
Enteritis	..	..	..	..	1
					—
					45
					==

There were 3 cases of ophthalmia neonatorum, of which two were non-gonococcal and were cured. One case of gonococcal ophthalmia died from an intercurrent condition.

At the ante-natal clinic 1,172 women were registered and made 6,988 attendances. The figures for 1937 were 1,052 and 7,330. The post-natal clinic was attended by 260 women, the number of attendances being 267. Six women were re-admitted to hospital for treatment as a result of examination at this clinic.

Mental Wards.—

The following table shows statistics of admissions to and discharges from the Mental Wards for the year 1938.

	Men.	Women.	Total.
Remaining in hospital on 31st December, 1937	97	117	214
Admitted from outside	161	164	325
Transferred from hospital general wards ..	53	52	105
Transferred from Institutions	13	27	40
Total admissions and transfers	227	243	470
Total treated during 1938	324	360	684
Discharged to Mental Hospital as certified cases	66	74	140
Discharged to Mental Hospital as temporary patients	7	15	22
Discharged to Mental Hospital as voluntary patients	15	7	22
Discharged to Mental Deficiency Authorities ..	..	2	2
Transferred to hospital general wards ..	42	74	116
Discharged to Institutions	15	8	23
Discharged	44	40	84
Died	44	25	69
Total	233	245	478
Remaining in hospital on 31st December, 1938	91	115	206

There were 41 fewer persons admitted than during 1937. The number of patients proceeding to mental hospitals as certified cases was 37 less, as temporary cases 7 more, and as voluntary patients 5 less. The total number transferred to mental hospitals was 184, the figure for 1937 having been 219. During the year 3 men and 6 women were certified for detention in the mental wards of this hospital.

Pathological Department.—During the past year, 13,216 reports were issued from the laboratory, an excess of 3,088 over the record total for 1937. It was frequently difficult to avoid delay, but the service has been maintained. The increase of work has been met, to no small extent, by the fact that the three junior technicians have now gained experience. There has been no room for any appreciable extension of the laboratory activities, and, except for one or two minor advances, the position is static.

During the year, 400 autopsies were made, an increase of 66 on last year's total, and in excess of the record attained in 1935.

There is, of necessity, little to report concerning other aspects of the pathological service. Certain arrears in the preparation of laboratory records were reduced, and rather more than half of the museum preparations are satisfactorily described. It has not been possible to prepare any reports, as yet, on the histological preparations connected with the autopsies made during 1938, but the arrears for 1937 were cleared.

Only two papers were prepared, namely on "Uterine cancer in the rabbit," prepared in conjunction with Dr. John W. Orr, and on "Bronchial cancer at the apex of a lung."

The lack of an assistant pathologist has been acutely felt, and it is idle to pretend that the pathologist adequately performed all his duties. At least one-half of the pathologist's time is absorbed by the autopsy practice, and about a third of the remainder is required for hæmatological examinations. Little time is thus left for any sustained work in connection with problems of importance, for the supervision and training of the technical staff, to say nothing of the maintenance of records, the preparation of considered reports, or consultation with clinical colleagues.

It is hoped that the recommendation contained in the report for 1937, that the appointment of an assistant pathologist "should be made soon," will be implemented at a very early date. As stated in that report, this assistance is necessary, not only to cope with the existing service but also to make the requisite preparations for the transference of the laboratory service to the new unit and for the arrangement of the work in that unit.

X-ray Department.—The number of patients X-rayed was 4,016, of whom 493 were screened by the radiologist. These figures represent an increase of 53 and 51 respectively on those of 1937. The numbers dealt with may not appear to be large, but the proportion of heavy and prolonged cases is very high.

In the latter half of the year a new six-valve unit of the latest type was installed, and it can be said with certainty that the work turned out by this machine has justified all expectations and is of the highest quality. The completion of the new X-ray department is anxiously awaited. It is essential to reorganise the service, so that the time existing between request and performance can be reduced to a minimum. It has been considered that this can best be done when the transfer to the new department takes place. The wait for this has proved longer than anticipated and serious consideration has been given as to whether a partial reorganisation might not be advisable in advance. This may even yet be necessary, as increasing inconvenience is being caused by delay in carrying out examinations.

Massage Department.—The number of patients dealt with was 920, made up of 704 in-patients and 216 out-patients. There were 7 more persons under treatment than in 1937, but there was a decrease in the number of treatments given of 3,365, the greater part of the diminution being in treatment by ultra-violet light, quarantine preventing the attendance of children on a number of occasions. There have been many cases of a heavy nature to balance the decrease in the number of treatments given. Details of the treatments were :—

Massage and exercises	18,837
Exercise classes	104
Radiant heat	975
Electrical and diathermy ..	1,633
Wax baths	456
Ultra-violet light	2,473
	24,478

Almoner's Department.—*Social After Care.*—This side of the work, undoubtedly the most important, has increased steadily year by year. Calls for help of all kinds have come from doctors, sisters, patients and from outside the Hospital, and the Samaritan Fund has been of great assistance.

SAMARITAN FUND.

	£	s.	d.
Fares	12	2	4
Clothing	3	1	6
Comforts	4	6	4
Extra nourishment	2	4	7
Syringes	1	7	2½
Rent	1	7	0
Grant for Pram.	1	0	0
Postal Orders	0	1	2
Taxis	0	12	6
Handicrafts	0	14	3½
Xmas Hampers	4	0	0
Balance in hand	4	15	0
	<u>£35 11 11</u>		

There has been a determined effort during the past year to obtain more prompt payment of accounts and several cases have been referred by the City Treasurer to the Town Clerk for action. This has necessitated a member of the Almoner's staff attending Court as a witness. The result of this effort has been a decided improvement in the payment of outstanding accounts, though many appeals for revised assessments have been considered by the Committee in view of altered circumstances. This revision of former cases has entailed much extra work, but it is hoped that this will decrease as the improvement continues.

Appliances.—252 appliances were supplied during the year at a cost of £306 19s. Payment was received as follows:—

	£	s.	d.
Insurance Societies	47	1	2
Education Authorities	8	0	0
British Legion	5	13	0
Mental Health Committee	4	13	0
Miners' Welfare	2	15	6
L.M.S. Fund	1	1	0
P.A.C.	2	6	0
T. B. Authorities	9	12	0
Panel Doctor	1	8	6
Patients	141	1	1
Health Department	83	7	9
	<u>£306 19 0</u>		

Convalescence.—210 patients were sent away for convalescence, this being 57 more than last year. Arrangements have been made with the help of the following agencies :—

Leeds Convalescent Society	..	..	127
Workpeople's Hospital Fund	..	..	73
L.M.S. Convalescent Fund	..	..	1
Malton Convalescent Home			
(private)	..	..	9
			210

Once again we are indebted to Mrs. Clive Behrens for so kindly taking nine patients at her lovely home at Swinton Grange entirely free of charge.

Reports.—256 reports have been received from the Medical and Surgical Tutors at the Leeds General Infirmary and other hospitals, and have been passed on to the doctors in charge of the wards.

Review.—For the first time for many years the admission rate has not shown a rise, which in the present state of affairs was probably to the advantage of the hospital. The actual capacity of the hospital is such that a much greater number of cases can be dealt with so long as there is no delay in investigation and treatment. Two factors are involved in this, namely, equipment and medical staff. The first is being dealt with by the provision of a new laboratory, X-ray department, etc. The second will have to be tackled at an early date, and it is inevitable that considerable increases will have to be made, affecting both the extended special departments and the resident staff.

Bed accommodation has averaged 1,248, and it is unlikely that this will be exceeded in the future, as the loss of beds through the use of one ward for nurses' cubicles and another as the massage department has been to a large extent countered by the erection of extra beds elsewhere. When the oldest hospital block has undergone alteration, the benefits to be derived from its modernisation will be at the expense of a proportion of beds, enough to balance the gain when the wards referred to above come into service again. It has not been possible, unfortunately, to proceed as yet with this

alteration, nor can anything be done until occupation is obtained of part of the extensions of the nurses' home and of the new massage department.

The progress made with the extensions has been disappointingly slow, in large part due to the interval that elapsed between the approval of the architectural and engineering proposals. Latterly the question of A.R.P. has come along to complicate matters, causing additional delay, but the initial delay has proved beneficial in this respect, that it will enable strengthening of the ground floor to be undertaken before essential services are fixed. The extensive range of basements under the new theatre and electrical blocks has provided a solution for a problem not contemplated when it was designed, and will provide adequate accommodation for protected theatres and casualty clearing units of a kind as satisfactory as can be expected, short of the construction of the very deep type of shelter.

Of the extensions, the dining-room accommodation for sisters, nurses and maids is now in use, together with a much improved servery. The next building likely to be completed is the small admission unit. The commissioning of this will have two results additional to its intended purposes—provision can be made for the new telephone exchange and it will be possible to proceed with the establishment of a dental department.

Concerning further extensions, it is noted with regret that provision of a new maternity department has been removed from the proposals put forward under the "five years plan" of capital expenditure. Comment has been made for several successive years on the nature of the present provision, and it can only be repeated that new accommodation on modern lines is highly desirable. It would doubtless be possible to obtain some extra beds by adaptation of existing wards, but this would be but patch-work, and adaptation to provide maternity services is even worse than adaptation generally.

Mention has been made in previous reports of the need for a casualty department and of a residence for medical staff. The latter should be a matter for early decision. Schemes for such a building have been under consideration, but, as can be readily understood, progress has been hampered by the complications introduced by

external affairs, which have occupied much of the time that would otherwise have been devoted to domestic matters.

An offer to provide a library service for the patients was put forward by the British Red Cross and Order of St. John Hospital Library towards the end of the year and was accepted. Although it hardly comes within the sphere of activity covered by 1938, at the time of writing this report the service has begun to function and promises to be entirely successful. Thanks are due to the voluntary workers, who are carrying out the work with enthusiasm.

In common with many other hospitals the question of obtaining adequate nursing staff is ever present, but candidates have come forward, on the whole, in satisfactory numbers relative to the residential accommodation available. The complement of nurses has risen steadily during the past few years with the increasing work, but it has had to be restricted latterly because of lack of room. This defect having been remedied, it is hoped to increase the staff to overcome many of the difficulties that now exist in providing the best nursing attendance for the patients and the best conditions for those engaged in that essential duty.

The extension of the Nurses' Home, now well on its way towards completion has resulted in a further temporary difficulty, and a large ward has had to be divided into cubicles for a portion of the nursing staff displayed during the building operations, while the old Bramley Union offices near St. Mary's Infirmary have been adapted to house the greater part of those doing night duty.

During the year teaching provision for the nurses in training has been augmented by the appointment of an additional sister tutor, and of a sister tutor to the maternity department.

Co-operation on a friendly basis amongst the hospitals in the city has now long been an established fact, indeed it is difficult to envisage an efficient hospital service in the city without the present interchange of the facilities provided at the various institutions. While this everyday practical association goes on, the Joint Hospitals Advisory Committee is occupied with hospital policy generally and has brought to light and discussed many interesting problems. Its establishment must be considered to be wholly justified and it is likely to prove of vital importance in dealing with the institutional aspect of the development of special branches of medicine and surgery, and their proper allocation amongst the various hospitals.

ST. MARY'S INFIRMARY.

DISEASES FROM WHICH PATIENTS SUFFERED.

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
INFECTIOUS DISEASES :—					NERVOUS SYSTEM :—Continued				
Measles	..	..	1	1	Parkinsonism	1	4	..	5
TUBERCULOSIS :—					Epilepsy	..	1	..	1
Pulmonary	72	47	1	120	Tabo-paresis	..	1	..	1
Ischio-rectal Abscess	1	..	..	1	Neuritis	1	..	..	1
	73	47	1	121	Neurosis	..	1	..	1
MALIGNANT DISEASE :—					RESPIRATORY SYSTEM :—				
Cancer of Larynx	1	..	..	1	Bronchitis	24	16	..	40
" Bronchus	1	..	..	1	Broncho-pneumonia	4	3	..	7
" Lung	1	1	..	2	Lobar Pneumonia	3	..	..	3
" Tongue	1	..	..	1	Asthma	3	3	..	6
" Palate	1	1	..	2	Fibrosis of Lung	3	..	..	3
" Stomach	3	8	..	11		37	22	..	59
" Colon	1	2	..	3	CIRCULATORY SYSTEM :—				
" Rectum	1	4	..	5	Valvular Heart Disease	1	5	..	6
" Liver	1	..	..	1	Cardiac Myopathy	65	91	..	156
" Gall Bladder	1	..	..	1	Arterio-Sclerosis	31	54	..	85
" Kidney	..	1	..	1	Coronary Thrombosis	1	..	..	1
" Bladder	..	1	..	1	Hypopiesia	..	1	..	1
" Uterus	..	6	..	6	Congenital Heart Lesion	..	..	1	1
" Ovary	..	1	..	1	Thrombo-phlebitis	..	1	..	1
Malignant Ascites (? cause)	..	4	..	4	Anæmia	1	..	..	1
Cancer of Skin	..	2	..	2		99	152	1	252
" " Femoral Glands	..	1	..	1	DIGESTIVE SYSTEM :—				
	12	32	..	44	Dyspepsia	..	1	..	1
RHEUMATISM :—					Duodenal Ulcer	..	1	..	1
Acute Rheumatism	..	1	..	1	Constipation	2	1	..	3
Fibrositis	1	1	..	2	Catarrhal Jaundice	..	1	..	1
Osteo-arthritis	2	2	..	4	Cirrhosis of Liver	1	..	..	1
Rheumatoid Arthritis	..	4	..	4	Cholecystitis	..	4	..	4
	3	8	..	11	Peritonitis	..	1	..	1
VENEREAL DISEASE :—					Umbilical Hernia	..	..	1	1
Syphilis	1	1	..	2	Tapeworm	..	1	..	1
DISEASES CONNECTED WITH PREGNANCY AND CHILD-BIRTH :—						3	10	1	14
Abortion	..	1	..	1	GENITO-URINARY SYSTEM :—				
Threatened Abortion	..	3	..	3	Nephritis	2	1	..	3
Puerperal Pyrexia	..	17	..	17	Pyelonephritis	..	..	1	1
Anæmia of Pregnancy	..	1	..	1	Tumour of Kidney	..	1	..	1
Post-partum hæmorrhage	..	1	..	1	Enlarged Prostate	1	..	..	1
Toxæmia	..	1	..	1	Ovarian Cyst	..	1	..	1
Albuminuria	..	30	..	30		3	3	1	7
Breast Abscess	..	1	..	1	OTHER DISEASES :—				
Pyelitis	..	5	..	5	Eczema	..	1	..	1
Debility	..	4	..	4	Herpes Zoster	..	1	..	1
	..	64	..	64	Ulcer	..	2	..	2
ACCIDENTAL INJURY AND VIOLENCE :—					Paget's Disease	..	1	..	1
Colles' Fracture	..	1	..	1	Hallux Valgus	..	1	..	1
Fracture of Femur	..	6	..	6	Diabetes Mellitus	..	1	..	1
" " Tibia and Fibula	5	3	..	8	Hyperthyroidism	..	1	..	1
" " Fibula	..	1	..	1	Debility	1	1	..	2
" " Os Calcis	..	1	..	1	Prematurity	..	..	7	7
" " Metatarsal	1	..	..	1	Debility from birth	..	..	2	2
" " Ribs	1	1	..	2		1	9	9	19
Concussion	3	..	..	3	PATIENTS DISCHARGED FROM MATERNITY WARD AND NOT INCLUDED ELSEWHERE :				
Contusions	..	1	..	1	Delivered in Hospital	..	488	..	488
Burns	..	1	..	1	" " before Admission	..	2	..	2
Ruptured Quadriceps	1	..	..	1	Born in Hospital	..	..	482	482
Cut Throat (Suicidal)	1	..	..	1	" " before admission	..	..	2	2
	12	15	..	27	Undelivered (apparently normal, but not in labour)	..	30	..	30
NERVOUS SYSTEM :—						..	520	484	1,004
Cerebral Haemorrhage	6	11	..	17	TOTAL	276	929	498	1,703
" Thrombosis	20	27	..	47					
" Embolism	2	..	..	2					
" Diplegia	2	1	..	3					

ST. MARY'S INFIRMARY.

The following table gives statistics of admissions to and discharges from St. Mary's Infirmary during 1938 :—

	Men	Women	Children	Total
Remaining in hospital on 31st December, 1937	70	151	21	242
Admitted during the year ..	275	910	5	1,190
Births	..	..	484	484
Total admissions and births ..	275	910	489	1,674
Total treated during 1938 ..	345	1,061	510	1,916
Discharged during 1938 ..	146	773	487	1,406
Died during 1938	130	156	11	297
Total discharges and deaths ..	276	929	498	1,703
Remaining in hospital on 31st December, 1938	69	132	12	213

The average number of patients was 203. The highest number of beds occupied was 232 on 11th January, and the lowest 166 on 27th August. Owing to painting and other work several wards were closed for long periods. This accounts for the low average number of occupied beds.

Maternity Wards.—The number of women confined in the hospital was 494, an increase of 42. There were 19 stillbirths, 9 cases of twins, and the number of live births was 484. There were 17 cases of puerperal pyrexia. There were no maternal deaths.

Abnormalities included 18 cases of hæmorrhage, in two of which blood transfusion was required, and 12 breech deliveries. There were no cases of ophthalmia neonatorum.

The causes of stillbirth were :—

Prematurity	8
Hydrocephalus	2
Anencephaly	1
Maceration	2
Toxæmia in mother	5
Extended breech with prolapse of cord	1

The number of children born in hospital who died within 10 days of birth was 9; the cause in 7 cases was prematurity, and in the other 2 debility from birth.

Ante-Natal Clinic.—The ante-natal clinic was attended by 294 women, 19 less than in 1937, and the total number of attendances recorded was 1,297, a decrease of 95. A considerable proportion of the expectant mothers attend clinics other than that held at the hospital, and the percentage of women delivered who have attended a clinic is practically 100.

The post-natal clinic was attended by 190 mothers, the number of attendances being 318.

CAUSES OF DEATH

DISEASE.	Men.	Women.	Children.	Total.	DISEASE.	Men.	Women.	Children.	Total.
TUBERCULOSIS :—					RESPIRATORY SYSTEM :—				
Pulmonary	22	15	..	37	Bronchitis	2	1	..	3
					Broncho-Pneumonia	2	3	..	5
					Lobar Pneumonia	1	..	..	1
					Asthma	1	..	..	1
MALIGNANT DISEASE :—						6	4	..	10
Cancer of Bronchus	1	..	..	1	CIRCULATORY SYSTEM :—				
" Lung	1	1	..	2	Valvular Heart Disease	1	1	..	2
" Tongue	1	..	..	1	Cardiac Myopathy	54	74	..	128
" Palate	1	1	..	2	Arterio-Sclerosis	11	10	..	21
" Stomach	2	6	..	8	Coronary Thrombosis	1	..	..	1
" Colon	1	2	..	3	Congenital Heart Lesion	..	..	1	1
" Rectum	1	2	..	3		67	85	1	153
" Liver	1	..	..	1	MISCELLANEOUS :—				
" Gall Bladder	1	..	..	1	Rheumatoid Arthritis	..	1	..	1
" Kidney	..	1	..	1	Fracture of Tibia and Fibula	1	..	..	1
" Uterus	..	3	..	3	" " Os Calcis	..	1	..	1
" Skin	..	2	..	2	Cirrhosis of Liver	1	..	..	1
" Femoral Glands	..	1	..	1	Peritonitis	..	1	..	1
	10	19	..	29	Nephritis	1	..	..	1
NERVOUS SYSTEM :—					Pyelonephritis	..	..	1	1
Cerebral Hæmorrhage	6	11	..	17	Enlarged Prostate	1	..	..	1
" Thrombosis	13	17	..	30	Prematurity	..	..	7	7
" Embolism	2	..	..	2	Debility from Birth	..	..	2	2
Parkinsonism	..	1	..	1		4	3	10	17
Tabo-paresis	..	1	..	1		130	156	11	297
	21	30	..	51	TOTAL				

ST. GEORGE'S INFIRMARY.

The number of admissions during the year was 142, the discharges amounting to 121, and deaths to 64. The average number of beds occupied was 268, the highest being 302 and the lowest 234.

The following table shows the classification of diseases and deaths :—

	Children		Adults	
	Dis-charged.	Died.	Dis-charged.	Died.
Infectious diseases	7	..	..	1
Non-pulmonary tuberculosis ..	..	..	2	..
Malignant disease	..	..	3	3
Acute rheumatic conditions ..	26	..	..	..
Non-articular rheumatism ..	..	..	1	..
Chronic arthritis	..	..	1	..
Mental diseases	..	..	3	..
Senile decay	..	..	3	..
Injuries	1	..	5	..
Diseases of nervous system ..	3	..	18	26
Diseases of respiratory system	11	..	8	11
Diseases of circulatory system	1	..	12	19
Diseases of digestive system ..	1	..	3	..
Diseases of genito-urinary system	1	..	..	1
Diseases of skin	1	..	..	2
Other diseases	7	..	3	1
TOTAL	59	..	62	64

JOINT HOSPITALS ADVISORY COMMITTEE.

The Committee held four meetings during the year and the average attendance at each meeting was 12.

Among other things, the Committee discussed the need for new and better accommodation of a modern type for the treatment of orthopædics, the erection of a hospital for sick children (long term cases), and the provision of a Radium Institute in Leeds. With regard to the last mentioned several meetings of the Special Committee appointed to deal with the subject were held and a stage in the deliberations had been reached when plans of the buildings were about to be prepared and an appeal made to the public for funds for the erection when the Government announced its intention of introducing a Bill into Parliament to deal with the whole subject of Cancer, including its treatment by Radium. It was decided therefore to suspend further consideration of the matter until the nature and extent of the Government's proposals were known and the new Bill had become law.

Full particulars of the work of the Committee may be found in the Annual Report.

DISTRICT MEDICAL SERVICE.

The District Medical Service has continued to operate during the year on the same basis as previously. It is recognised that the question of re-organisation presents many major difficulties, but nevertheless the present position is so unsatisfactory that it is essential that some measure of reform should be introduced at an early date.

In this connection a decision of no small significance was arrived at by the Council during the year. That decision is incorporated in a resolution passed by the Sub-Public Assistance (Finance

and General Purposes) Committee on June 8th, 1938, which reads as follows :—

“ RESOLVED—That when the District Medical Officer for the district now named shall retire, the ‘ Open Choice ’ system of medical services be adopted for such District for such period and upon such conditions as shall be decided by the General Committee, and that the Chairman, Alderman Sir George Martin and Councillors Steel, Clark and Naylor be appointed to make arrangements in connection therewith and report thereon.”

Though only of the nature of an experiment, the introduction of the “ open choice ” system into one of the largest districts in the city involves a departure in principle which may have far reaching effects and in the long run may result in the complete replacement of the present system of salaried medical officers by one constructed on the National Health Insurance model. It is a bold experiment and one which will be watched with interest.

There has been one change in the personnel during the year, Dr. W. Adams having been appointed District Medical Officer for No. 22 Medical Relief District for a period of twelve months in place of Dr. J. Phillips. Three members of the District Medical staff now hold temporary appointments. A fourth is due to retire next year on account of age. The time would, therefore, appear to be opportune to consider an alternative scheme for the provision of medical relief, particularly as it is anticipated that the Ministry of Health will be unlikely to continue the approval of the present temporary appointments indefinitely.

CHILDREN'S HOSPITAL.

In July, the Health Committee considered a report on the subject of a new hospital for sick children and it was resolved that this Committee approve the proposal for the erection of such a hospital. It was further decided to erect the new hospital on a site on the Moortown Estate and a resolution was adopted requesting the Housing Committee to transfer the whole of that Estate to the Health Committee.

In December the Medical Officer of Health reported as to the terms of transfer suggested by the Housing Committee which were approved and accordingly the Estate passed into the hands of the Health Committee as from October 5th last. Further resolutions were adopted appointing as architects Messrs. G. W. Atkinson, Leeds, and as consulting architects Messrs. Stanley Hall, Easton and Robertson, London. Plans are now in process of preparation and should be completed early in the Summer. With the exception of the Infants' Hospital, Wyther, a small 50 bed hospital in a converted mansion, Leeds has always relied for its accommodation for sick children on the two General Hospitals, The Leeds General Infirmary and St. James's Hospital. Though adequate, in certain respects this has not been entirely satisfactory as it has failed to make provision for cases requiring long spells of treatment in open air or some open air conditions. The new hospital will be designed especially to meet the needs of such cases and should thereby close an important gap in our hospital system.

CENTRAL LAUNDRY.

In May, the Architect and Consulting Engineer attended the Health Committee and submitted plans and estimate of cost for the building and equipment of a Central Laundry. These were approved subject to certain amendments and reservations as to cost and the approval of the Public Assistance Committee which was also involved in the project. Unfortunately before these formalities could be completed the Council decided to strike this item out of their five years' programme of capital expenditure. I am fully convinced however that some such proposal will have to be adopted sooner or later if the Council is to avoid the multiplication of laundries in connection with their various hospitals and institutions already at a figure totally without justification and most uneconomical.

Tuberculosis.

TUBERCULOSIS.

The total number of names on the register on December 31st, 1938, was 3,112 as compared with 3,056 at the corresponding period of last year, an increase of 56.

There were added to the register during the year on account of fresh notifications and inward transfers 687 names and removed from the register on account of cancellations owing to death, removal from the city, and cure or change in diagnosis, 631 names.

The following table shows the number of cases on the register at the end of each year since 1925.

Year.			Number of Cases.	Increase or decrease compared with the previous year.
1925	..	..	7,599	—
1926	..	..	8,288	+ 689
1927	..	..	8,337	+ 49
1928	..	..	7,867	- 470
1929	..	..	6,076	- 1,791
1930	..	..	5,248	- 828
1931	..	..	4,109	- 1,139
1932	..	..	3,495	- 614
1933	..	..	3,294	- 201
1934	..	..	3,112	- 182
1935	..	..	3,025	- 87
1936	..	..	2,994	- 31
1937	..	..	3,056	+ 62
1938	..	..	3,112	+ 56

Statistics.—*Notifications.*—During the year 511 cases of pulmonary and 176 of non-pulmonary tuberculosis were notified, making a total of 687 cases of which 385 were males and 302 females. Compared with the previous year this is a decrease of 37 in the pulmonary and 38 in the non-pulmonary notifications, and compared with the average of the previous five years, a decrease of 68 pulmonary and an increase of 8 non-pulmonary.

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 ..	1	5	17	52	45	63	46	51	15	295
Females ..		5	27	76	51	33	14	9	1	216
Totals ..	1	10	44	128	96	96	60	60	16	511

NON-PULMONARY.

Ages.	-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males ..	1	22	28	9	13	10	2	3	2	90
Females ..		16	29	13	17	8	1		2	86
Totals ..	1	38	57	22	30	18	3	3	4	176

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.
1928	453	0.95	89	0.19	542	1.14	766	1.61	158	0.33	924	1.95
1929	508	1.06	113	0.24	621	1.30	743	1.55	156	0.33	899	1.88
1930	432	0.90	101	0.21	533	1.11	642	1.34	251	0.52	893	1.87
1931	439	0.90	88	0.18	527	1.08	666	1.37	176	0.36	842	1.73
1932	386	0.80	107	0.22	493	1.02	574	1.18	162	0.33	736	1.52
1933	412	0.85	87	0.18	499	1.03	632	1.30	151	0.31	783	1.61
1934	392	0.81	70	0.14	462	0.95	617	1.27	172	0.35	789	1.62
1935	358	0.73	77	0.16	435	0.89	569	1.17	141	0.29	710	1.46
1936	346	0.71	62	0.13	408	0.83	531	1.08	163	0.33	694	1.42
1937	354	0.72	52	0.11	406	0.83	548	1.11	214	0.44	762	1.55
1938	336	0.68	61	0.12	397	0.80	511	1.03	176	0.36	687	1.39

PULMONARY TUBERCULOSIS.

AGES AT DEATH.

1938.	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	4	..	1	9	20	68	89	13	204
Females	..	..	1	22	16	61	26	6	132
TOTALS	4	..	2	31	36	129	115	19	336
Average 10 years 1928-1937	5	1	4	34	52	162	132	18	408

NON-PULMONARY TUBERCULOSIS. DEATHS.

1938.	Tubercular meningitis.	Abdomin- al.	Bones and Joints.	Other tuber- culosis.	Total.
Males ..	20	3	3	6	32
Females	14	4	2	9	29
Totals	34	7	5	15	61

AGES AT DEATH.

1938	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males ..	12	2	5	1	2	7	2	1	32
Females	10	3	3	2	1	7	2	1	29
Totals ..	22	5	8	3	3	14	4	2	61
Average 10 years 1928-1937	31	10	5	8	5	13	10	3	85

Of the total cases of pulmonary tuberculosis notified 10.8 per cent. were children under 15 years, and 89.2 per cent. persons over 15 years. The corresponding figures for the previous year were 8.6 per cent. and 91.4 per cent. respectively. As usual, the age group responsible for the largest number of notifications (128) was 15-25 years.

As regards the non-pulmonary type of disease 54.5 per cent. were children under 15 years, and 45.5 per cent. persons over 15 years. The corresponding figures for the previous year were 45.3 per cent. and 54.7 per cent. respectively. The age group showing the largest number of notifications (57) was 5-15 years.

Of the total cases notified 505 were by medical practitioners and 182 came from institutions.

The number of cases of pulmonary tuberculosis not heard of until the time of death was 27 and the number of non-pulmonary 16, making a total of 43, or 5.9 per cent. of the total notifications for the year. This is an increase of 5 on the figure for the previous year.

The table on page 122 gives the deaths from all forms of the disease with the year of notification. Out of a total of 397 deaths from tuberculosis of all forms, 142 or 35.8 per cent., were notified in the same year as death occurred, 24 or 6.0 per cent., in the same month, and 48 or 12.1 per cent., in the same week. In the previous year there were 146, or 36.0 per cent., notified in the same year as death occurred, 29 or 7.1 per cent., in the same month, and 40 or 9.9 per cent., in the same week.

An analysis of the notifications in age groups will be found in the table on page 115.

Deaths.—The total deaths from tuberculosis of all forms during the year numbered 397 of which 236 were males and 161 females. In the previous year the total was 406, of which 227 were males and 179 females. Of the total, pulmonary tuberculosis accounted for 336, or 84.6 per cent., and non-pulmonary 61, or 15.4 per cent. The death-rate from pulmonary tuberculosis was 0.68, from non-pulmonary 0.12, and from all forms of the disease 0.80, as compared with 0.72, 0.11 and 0.83 respectively for the previous year. Set against the average rates for the previous five years, these figures represent a decrease of 0.08 in the pulmonary, and 0.02 in the non-pulmonary rate, making a total decrease for all forms of the disease of 0.10. The death-rates from pulmonary tuberculosis (0.68) and tuberculosis of all forms (0.80) are the lowest on record.

Comparative rates, England and Wales, and Other Towns.—The provisional death-rates for England and Wales for the year were from pulmonary tuberculosis 0·53, from non-pulmonary tuberculosis 0·10, making a total death-rate of 0·63. Comparing these rates with Leeds it will be observed that the Leeds rates were higher by 28·3 per cent. in the case of pulmonary tuberculosis, by 20·0 per cent. in non-pulmonary, and 27·0 per cent. in all forms of the disease.

As far as pulmonary tuberculosis is concerned it will be noted on referring to the table on page 12 that among the large towns of England and Wales, Leeds equal with West Ham occupied sixth place, the towns with lower rates being in order Sheffield, Bradford, Bristol, London and Stoke-on-Trent, and with higher, Nottingham, Birmingham, Liverpool, Hull, Manchester and Newcastle.

Death-rates in Wards.—The wards with the highest death-rates from pulmonary tuberculosis were Cross Gates and Templenewsam (1·21), Osmondthorpe (1·06), Harehills (1·00) and Roundhay (0·95), whilst those with the lowest were Burmantofts (0·33), Holbeck (North) (0·37), Beeston (0·40) and Holbeck (South) (0·45). These rates are obviously fallacious and are accounted for by the movement of population from the congested to the opener and healthier districts. By agreement with the Housing Committee tuberculous families receive a measure of preference in the allotment of houses on the new estates and even those who are in a position to provide houses for themselves generally select one of the suburbs if a member of the family is delicate and in need of fresh air and sunlight.

The tables on pages 120 and 116 give the analysis of the deaths in the various wards and age groups.

Institutional Accommodation for Tuberculosis.—Cases of pulmonary tuberculosis requiring institutional treatment are sent to one or other of the two sanatoria provided by the city, Killingbeck or Gateforth. The former has 242 beds of which an average of 228 were occupied by pulmonary and 20 by non-pulmonary cases during the year.

The latter has 55 beds (50 in winter and 55 in summer) devoted to the treatment of adult male pulmonary and non-pulmonary cases as they arise, of which an average of 50 were occupied during the year.

There are in addition 24 beds (18 for males and 6 for females) at St. Mary's Infirmary which are used for the reception of cases of chronic tuberculosis. These have been in full occupation during the whole of the period under review.

Early or suspected tuberculosis in children is treated in the children's sanatorium at "The Hollies" which possesses 40 beds of which an average of 38 were occupied during the year.

Cases of surgical tuberculosis are also treated at various institutions outside the city. Adults are treated at Oswestry where 8 males and 6 females were sent during the year. Children are accommodated at the Marguerite Home, Thorp Arch, and the Lord Mayor Treloar's Hospital, Alton, Hampshire. The number of beds reserved in the former is 25 all of which were occupied, plus a few additional ones for varying periods, and in the latter a varying number which averaged 14 during the year.

New Nurses' Home.—After many delays a tender for the erection of the new nurses' home at Killingbeck Sanatorium was finally accepted by the Health Committee in October, and has since been approved by the Ministry of Health. Sanction to borrow the necessary money (£37,837) has been received and building operations have started.

Rehabilitation Cottages.—Last year, the Health Committee resolved to approve the recommendations contained in a report submitted by the Medical Superintendent with respect to the provision of four houses at Killingbeck Sanatorium for the rehabilitation of women patients. The Housing Director, Mr. R. A. H. Livett, was asked to submit plans for the erection of these houses on the site of the one of the temporary wards at Old Killingbeck. This he very kindly did and in September plans and estimates were accepted. In due course the approval of the Ministry of Health to the proposal was obtained together with sanction to borrow the necessary money. The houses are now nearing completion and should be ready for occupation within a few months. A detailed description of these houses will appear in my next report.

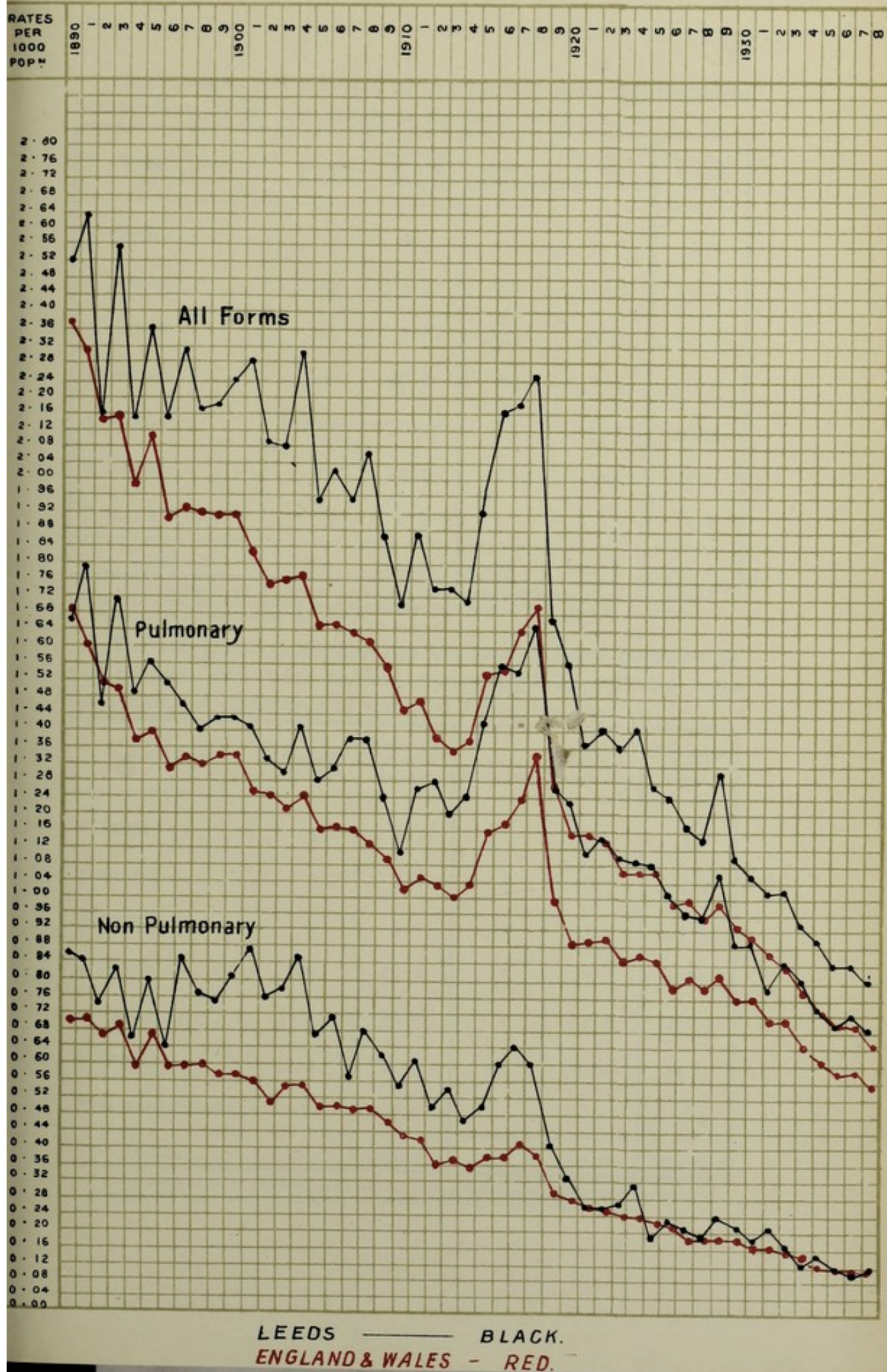
For further details with respect to institutional treatment see pages 135 and 140.

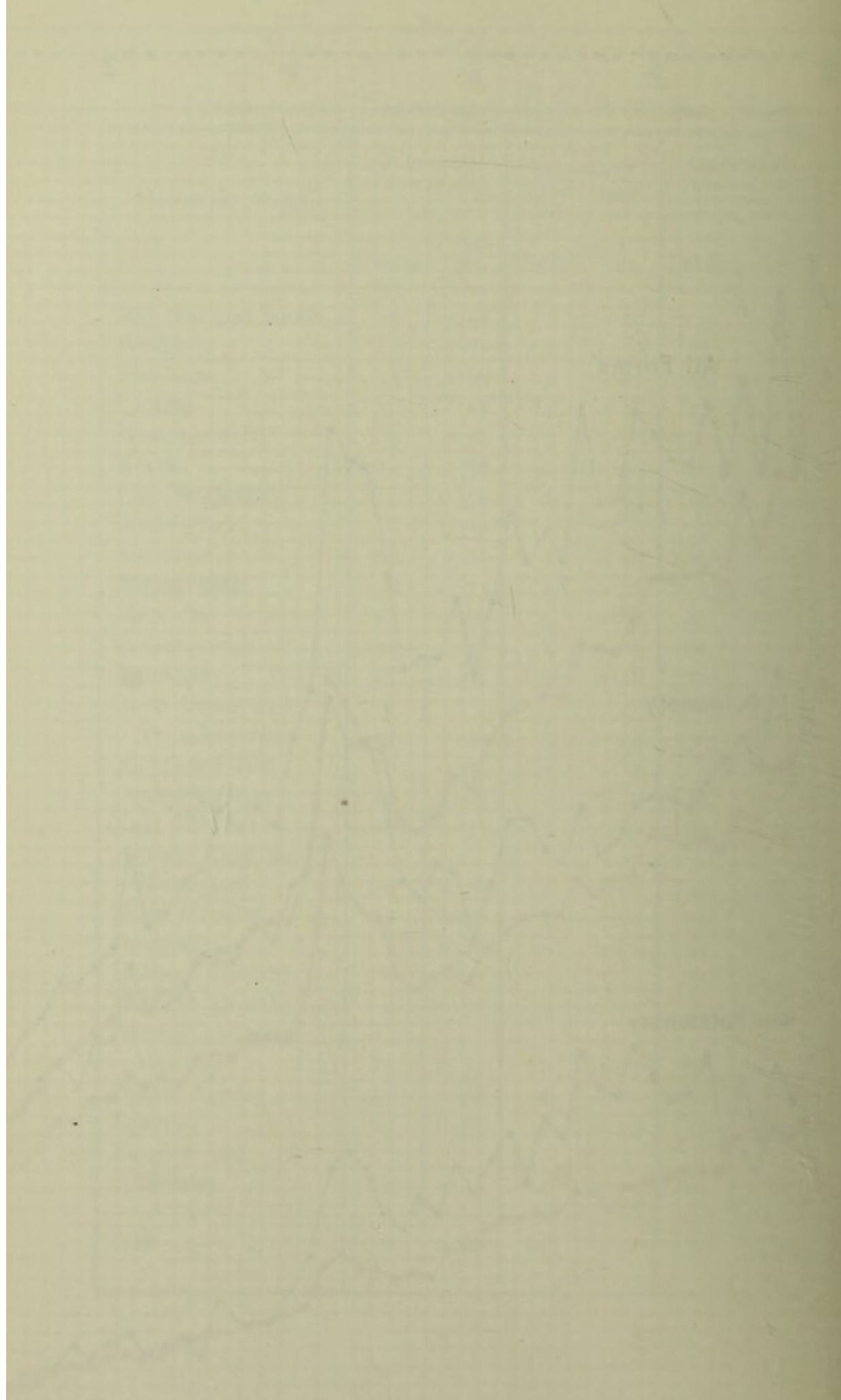
Public Health Act, 1936, Section 172.—No action was necessary under this section during the year.

TUBERCULOSIS—DEATHS AND RATES IN WARDS.

MUNICIPAL WARD.	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		All Forms Tuberculosis.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
Mill Hill and South..	8	0.58	1	0.07	9	0.66
Westfield	13	0.92	5	0.35	18	1.27
Blenheim	13	0.63	2	0.10	15	0.73
Central	10	0.57	1	0.06	11	0.63
Woodhouse	9	0.58	3	0.19	12	0.77
North	11	0.52	2	0.09	13	0.62
Far Headingley ..	11	0.50	2	0.09	13	0.59
Hyde Park	8	0.52	..	..	8	0.52
Kirkstall	15	0.64	1	0.04	16	0.68
Burmantofts ..	6	0.33	2	0.11	8	0.44
Harehills	23	1.00	5	0.22	28	1.22
Potternewton ..	10	0.53	1	0.05	11	0.58
Roundhay	28	0.95	3	0.10	31	1.06
Cross Gates and Templenewsam ..	27	1.21	3	0.13	30	1.34
Richmond Hill ..	10	0.69	2	0.14	12	0.83
Osmondthorpe ..	22	1.06	2	0.10	24	1.15
East Hunslet ..	16	0.93	5	0.29	21	1.22
Hunslet Carr and Middleton	20	0.78	4	0.16	24	0.94
West Hunslet ..	11	0.67	4	0.24	15	0.91
Beeston	7	0.40	3	0.17	10	0.57
Holbeck (South) ..	6	0.45	..	..	6	0.45
Holbeck (North) ..	4	0.37	2	0.19	6	0.56
Armley and New Wortley	10	0.52	1	0.05	11	0.57
Upper Armley ..	12	0.68	2	0.11	14	0.79
Bramley	14	0.58	3	0.13	17	0.71
Farnley and Wortley	12	0.55	2	0.09	14	0.65
City	336	0.68	61	0.12	397	0.80

TUBERCULOSIS DEATH RATE. - 1890 - 1938





The housing conditions of 667 of the 687 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	9	2·4	2	0·7	1·6
2 rooms	9	2·4	28	9·9	5·6
3 rooms	30	7·8	133	47·0	24·5
4 rooms	106	27·6	89	31·4	29·2
5 rooms	118	30·7	15	5·3	19·9
6 rooms	77	20·0	16	5·7	14·0
7 or more rooms	35	9·1	..	..	5·2
Total	384	100·0	283	100·0	100·0

In addition to the 384 through houses and 283 back-to-back houses, there were 20 cases notified from common lodging houses, etc., making a total of 687 cases of all forms of tuberculosis notified during the year.

The sub-joined table indicates the type of house occupied by 142 persons who were notified during 1938 as suffering from tuberculosis of all forms and who died 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	4	5·3	..	..	3·0
2 rooms	2	2·6	4	6·7	4·4
3 rooms	3	4·0	32	53·3	25·7
4 rooms	20	26·3	17	28·3	27·2
5 rooms	28	36·8	1	1·7	21·3
6 rooms	13	17·1	6	10·0	14·0
7 or more rooms	6	7·9	..	..	4·4
Total	76	100·0	60	100·0	100·0

In addition to 76 through houses and 60 back-to-back houses, there were 6 deaths in which the home address was given as common lodging houses, etc.

DEATHS FROM ALL FORMS OF TUBERCULOSIS IN 1938 WITH YEAR
OF NOTIFICATION.

Year of Notification.			No. dying in 1938.	Percentage of total deaths.
1916	..	..	3	0.8
1917	..	..	2	0.5
1918	..	..	—	—
1919	..	..	5	1.3
1920	..	..	2	0.5
1921	..	..	—	—
1922	..	..	1	0.2
1923	..	..	1	0.2
1924	..	..	—	—
1925	..	..	2	0.5
1926	..	..	—	—
1927	..	..	3	0.8
1928	..	..	2	0.5
1929	..	..	4	1.0
1930	..	..	2	0.5
1931	..	..	11	2.8
1932	..	..	10	2.5
1933	..	..	16	4.0
1934	..	..	13	3.3
1935	..	..	25	6.3
1936	..	..	33	8.3
1937	..	..	65	16.4
1938	..	..	142	35.8
Not notified	..		37	9.3
Died outside City			18	4.5
Total	..		397	100.0

REPORT OF THE WORK OF THE HEALTH CLINIC AND SANATORIA

BY

NORMAN TATTERSALL, M.D. (Lond.), *Chief Clinical Tuberculosis
Officer.*

General.—The mortality from tuberculosis again shows a small reduction from the previous year, the total deaths from all forms of the disease fell below 400, and the death-rate of 0·8 was a new low record.

The deaths from non-pulmonary tuberculosis showed a slight increase but this was more than offset by the reduction of deaths from pulmonary tuberculosis.

For practical purposes the cases of non-pulmonary disease are mostly non-infectious, and therefore the fall in the number of pulmonary deaths is a more important factor than the slight increase of non-pulmonary.

It is disappointing to note the increase in deaths from acute tuberculosis in young children. Most of these deaths were due to meningitis, and in the majority the disease was contracted from an adult in the home suffering from pulmonary tuberculosis. It is true that a number of these cases arise before the adult in the home is aware that he is suffering from tuberculosis, but many others are directly traceable to infection from cases already known to be suffering from the disease. Every effort is made to isolate the known infectious cases from young children, and if isolation is refused all possible steps are taken to warn those concerned of the risk incurred. The fact, however, that these deaths continue to occur in fairly considerable numbers proves that improved housing and ordinary care will not obviate the risk entirely, and that nothing short of complete removal of young children from infective surroundings is likely to be effective in preventing infection.

The mortality in the 15/20 age group shows an increase on that recorded in recent years, especially amongst young females. This is a feature which has been noted throughout the country generally for a number of years. The disease at this age period tends to be of an acute type and far too often the patient when first seen has widespread disease of both lungs, although probably working up to within a week or two of the first examination.

Analysis of a large number of these cases shows that slight symptoms have been present for some time but the patient usually states they were "not sufficient to go to the doctor about" or have been attributed to other causes. These young people are also very loath to give up work until they feel seriously ill, by which time the disease is almost certainly beyond cure.

Probably the underlying factor of greatest importance in maintaining the high death rate in this age group is the lack of sufficient rest. Overtime at work is followed by overtime at play, with insufficient hours of rest in bed. It is unfortunate that the National Fitness Campaign lays so much stress on exercise as a road to health and fails to lay sufficient emphasis on the paramount importance of adequate rest. Exercise and rest are complementary to each other and should never be divorced.

The re-housing of tuberculous families has proceeded to a fairly satisfactory extent during the past year, but there are still a large number whose needs have not been met. The majority of these are families requiring the smaller type of house with two and three bedrooms. The provision made by the Housing Committee for those with larger families is adequate, and it is to be hoped that the future programme will include a larger proportion of the smaller type of house.

The details of re-housing in recent years are set out in the following table :—

CITY OF LEEDS HEALTH CLINIC.
RE-HOUSING OF TUBERCULOUS FAMILIES.

Number of families recommended from September, 1929 to closing of lists in 1934	..	512	
Further families recommended in subsequent years	{ 1936 .. 183 1937 .. 195 1938 .. 215	—	1,105
Number of families rehoused to end of	{ 1934 .. 171 1935 .. 70		
Number of families rehoused during	{ 1936 .. 115 1937 .. 150 1938 .. 153	—	659
Cancelled from waiting list by death, removal, etc.	..	314	973
Number of families remaining on waiting list December 31st, 1938	..	132	

Attention was called last year to the need for extra hospital accommodation for men at Killingbeck Sanatorium. It frequently happens that patients have to wait two months or longer after being diagnosed, before they can be admitted for treatment. This delay may make all the difference between success and failure in treatment. Nothing has been done to meet this urgent need which should be dealt with by the provision of a number of one and two bed wards.

There has again been an increase in the number of cases undergoing special forms of treatment. At the Dispensary and Sanatorium the number of artificial pneumothorax inductions and refills have now grown to over 3,000 a year. The effectiveness of pneumothorax collapse has been improved in many cases by the cauterisation of adhesions or phrenic evulsion. The number of these operations has increased considerably during the last 12 months.

A final reference may be made to the continued increase in the number of calls made upon the Clinic for X-Ray examination. Not only doctors but also the laity are becoming increasingly aware that radiography will, as a rule, show evidence of disease in the chest before it can be found with certainty by clinical examination. This is especially the case in early disease. The taking of films is a comparative simple matter, but their interpretation needs wide experience. Practically half the time of one medical officer is spent in the taking of X-Rays. The greater part of this work could be done by a woman without special medical or nursing qualifications, and after a comparatively short training. If the post of Dispenser could be combined with the taking of X-Rays the following savings would be entailed :—

- (1) The medical officer would be available for four sessions a week for home visits, examinations of cases at the Dispensary, or reading of X-Ray films.
- (2) The Health Visitor who at present does the dispensing would have more time to spend on her district.
- (3) Most patients could be X-Rayed at their first attendance and at the same time as their clinical examination. Many of them find it most difficult to attend on separate days for these two examinations, which may entail breaking time at work with consequent loss of income, and in many cases the extra tram or bus fares of the double journey is a serious item.

For these reasons it is proposed to make application for the appointment of a dispenser-radiographer as an essential member of the staff of the Health Clinic for next year.

It was mentioned last year that the present X-Ray plant is becoming obsolete although still giving excellent service, and the replacement of the existing plant will have to be considered in the near future.

The City of Leeds Health Clinic.—Statistical details of the work of the Clinic appear on pages 127 and 128.

The number of new cases referred for an opinion was 1,451, of whom 533 (36·7 per cent.) were found to be suffering from tuberculosis—405 pulmonary, 128 non-pulmonary.

The number of cases remaining on the Health Clinic register at the end of the year showed a slight increase, being 2,873, of whom 982 were sputum positive cases.

Contacts.—The results of contact examination are set out in the following table :—

**" CONTACTS " FIRST EXAMINED AT THE HEALTH CLINIC
FROM JANUARY 1ST, 1938, TO DECEMBER 31ST, 1938.**

	New Contacts Examined.	Found Sputum T.B +	Clinically definite, but sputum negative.	Diagnosed Non- Pulmonary Tubercle.	Found to be Non- Tubercular, lost sight of, etc.	Remaining under observa- tion.	Number admitted to Sanatoria for observation or treatment.
Males	107	4	2	1	93	7	6
Females	225	3	3	—	209	10	5
Boys ..	165	—	7	4	122	32	26
Girls ..	147	—	13	2	118	14	24
Total	644	7	25	7	542	63	61

66 cases remaining under observation on December 31st, 1937, were re-examined, with the following results :—

Definitely diagnosed as tubercular	12
Marked off as non-tubercular, died, lost sight of, etc.	45
Remaining under observation	9

Total examinations made = 963 (687 cases).

EXTRACTS FROM THE MINISTRY OF HEALTH ANNUAL RETURN. FORM T/145. (Table A.) FOR THE YEAR ENDED 31st DECEMBER, 1938. SHOWING, UNDER HEADINGS A. AND B., THE STATE OF DIAGNOSIS AT THE END OF THE YEAR.*

A. New Cases examined during the year (excluding contacts).	PULMONARY.				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	239	153	7	6	26	36	265	189	35	31	42	37
Definitely Tuberculous	..	..	..	..	..	..	..	..	..	..	..	..
Doubtfully Tuberculous	..	..	..	..	..	..	..	..	..	..	..	..
Non-Tuberculous	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS	239	153	7	6	26	36	653	564	35	31	127	107
B. New Contacts examined during the year:—												
Definitely Tuberculous	6	6	7	13	1	..	7	6	4	2	11	15
Doubtfully Tuberculous	..	..	..	..	..	..	..	..	..	..	32	14
Non-Tuberculous	..	..	..	..	..	..	..	..	..	..	122	118
TOTALS	6	6	7	13	1	..	107	225	4	2	165	147
C. Cases written off Health Clinic Register:— Recovered												
..	42	35	24	22	7	12	49	47	15	16	39	38
Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)												
..	..	..	..	..	..	..	490	590	..	..	220	201
TOTALS	..	..	..	..	..	..	539	637	..	..	259	239
Number of Persons on Health Clinic Register:—												
Diagnosis completed	..	..	..	..	..	..	..	..	..	..	2,682	..
Diagnosis not completed	..	..	..	..	..	..	..	..	..	..	191	..
TOTAL	..	..	..	..	..	..	..	..	..	..	2,873	..

* Returns prior to 1931 have shown the diagnosis as at one month from date of first attendance.

**PATIENTS (EXCLUDING CONTACTS) FIRST EXAMINED AT CITY OF LEEDS HEALTH CLINIC
FROM JANUARY 1st, 1938 TO DECEMBER 31st, 1938.**

PULMONARY TUBERCULOSIS.

	New patients.			Number bacteriologically positive.			Number clinically positive, but not T.B. +.			Number found to be Non-tubercular, lost sight of, etc.			Still under observation.			Number admitted to Sanatoria for treatment or observation.			
	M.	F.	B.	M.	F.	B.	M.	F.	B.	M.	F.	B.	M.	F.	B.	M.	F.	B.	G.
Insured	517	367	1	3	121	63	..	..	..	298	222	1	3	21	36	..	149	88	..
Non-Insured	110	161	91	73	41	36	..	..	..	49	107	71	55	20	10	13	19	30	9

OTHER FORMS OF TUBERCULOSIS.

	New patients			Bones and Joints.			Abdominal			Other Organs.			Glands.			Number admitted to Sanatoria.				
	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.	M.	F.	B.	G.
Insured	21	25	..	..	7	5	..	..	5	5	..	..	6	5	..	..	6	6	..	..
Non-Insured	5	11	35	31	4	4	13	9	1	3	6	4	..	..	4	2	..	3	10	10

Total attendances at Health Clinic for—

(a) Light treatment	..	..	4,463
(b) Other special treatments	..	..	3,022
(c) Ordinary clinics	..	..	7,457
(d) X-ray ..	..	..	1,835
			<u>16,777</u>

Total Number of Clinical Examinations

(included in attendances)	..	..	7,185
Number of cases making the clinical attendances	..	..	..
(excluding Light and Special treatments)	..	..	3,417

The percentage of those found to be suffering from tuberculosis remains fairly constant around 6.0 per cent. This percentage would certainly be increased if it were possible to persuade more of the young adult contacts to attend for examination. This is the age of greatest risk but is also the age of greatest irresponsibility, and the bulk of them refuse to attend either because it would mean losing time at work, or more often, because they "feel alright" and so assume that nothing can be wrong.

Deaths from Acute Tuberculosis in Young Children.—As in previous years every effort has been made to trace the source of infection in cases of acute tuberculosis in young children as most of these cases are only brought to our knowledge at death.

Of the 26 cases of this type which were investigated no source of infection was found in 16, but in several of these the parents refused to attend for examination. In 5 cases the death occurred in a family of a sputum positive case already known to us. In 2 others the probable source of infection was a near relative, and in the remaining 3 the examination of contacts proved that a parent in each case was suffering from tuberculosis, although this was not known prior to the death of the child. It seems quite clear that if only more parents could be persuaded to attend for complete examination when their child has died from tuberculosis, still more of these previously unsuspected cases would be brought to light.

Home Visiting by Medical Staff.—Included in the 830 visits made by the medical staff to patients in their homes were 90 consultations with the patient's own doctor, 32 for artificial pneumothorax treatment, and 97 for other special treatments.

Treatment.—The X-Ray screening unit installed on the ground floor in November, 1937, has been of great help in diagnosis and in control of treatment. Over 1,500 screen examinations were made.

Artificial pneumothorax clinics are held on two afternoons each week, and pneumothorax patients who are working obtain their refills at an evening clinic. The total number of refills was 1,283.

More patients received "Gold" treatment during the year, the number of injections being 624, as compared with 474 in the previous year.

Dr. A. G. Evans who has carried out the routine treatment of surgical cases for the past three years resigned at the end of October on obtaining an appointment elsewhere, and Dr. W. Guthrie has been appointed in his place. This side of the work has continued to be busy, and there were 1,115 attendances for the application or renewal of plaster, and other surgical measures.

Artificial Sunlight.—This department is also under the care of Dr. Guthrie. In addition to the 47 cases remaining under treatment at the end of 1937, 93 cases commenced treatment and the total attendances in the department were 4,463. At the end of the year there were still 32 cases remaining under treatment.

Dental Treatment.—Two sessions per week are held by Mr. W. L. Fleming, L.D.S., who also visits the Sanatoria. Details of treatment are shown in the following table:—

	Health Clinic	Killing- beck.	Gateforth.	The Hollies.
Cases { Examined ..	176	162	14	78
{ Treated ..	153	143	14	48
Attendances	487	396	14	48
Extractions :—				
Local anæsthetic ..	406	327	43	20
N ₂ O	53	3	13	44
Fillings and Scalings ..	38	82	3	8
Dentures :—				
Number	80	8	9	..
Patients supplied ..	48	6	5	..
Repairs, etc.	24	4	1	..

X-Ray Department.—Reference has already been made to the fact that the apparatus in use has done over 12 years' hard service and is becoming obsolete. The number of films taken has again increased, the total of 2,206 being a higher figure than in any previous year. Considering the age of the plant the quality of the work which Dr. S. Thompson produces remains of a very high standard.

Health Visitors.—Owing to an unusual degree of sickness amongst the staff the visits made to patients' homes has decreased,

though it may be that some share of the decrease is due to the greater distances which now have to be covered owing to the wider spacing of the houses on the new estates. A total of 13,420 visits were made, comprising 11,813 to patients on the Clinic register, 682 for environmental reports, and 925 to other notified cases and contacts.

The services of the District Nursing Organisations are freely used in cases where home nursing is indicated; 60 such cases required 3,039 visits.

Clerical.—When patients are receiving domiciliary treatment periodical reports are obtained from their panel doctors on the National Health Insurance Form G.P. 36. The 615 reports received have been extremely helpful in maintaining close co-operation between the Health Clinic and the patients' own medical attendants.

Other reports on cases requiring special investigation are sent as required to the Ministry of Health Divisional Medical Officers, and to the Ministry of Pensions. Close co-operation has been maintained with the Education Department concerning children of school age seen at the Clinic.

Care Work.—Copies of the Case Committee's Annual Report, which gives full details of their most valuable work, are available on application to the Almoner at the Health Clinic. The report states that 1,642 appeals for help have been dealt with, comprising :—

	CASES.
Extra nourishment	749
Convalescence arranged	84
Beds, bedding, sick-room requisites, etc. supplied	139
Clothing supplied	323
Financial and food grants.. .. .	113
Other assistance and advice	102
Assessments made for surgical appliances and dentures	132
	1,642

At Christmas 400 parcels of food and 200 bags of coal were given to necessitous families, the cost being met by a special collection, gifts of money, and the profit on a "Chocolate Club" run by a member of the clerical staff.

It has long been felt that a scheme to teach patients boot repairing would be very useful, and this has now been arranged at Killingbeck Sanatorium, under the charge of a patient. Men who are unable to pay, may, with the Committee's sanction, have their boots repaired free. This service has been much appreciated by our patients, both resident and non-resident.

The Annual Garden Party was held in July by kind permission of Mrs. Braime of Donisthorpe Hall, Moortown. It was a great success both financially and otherwise.

The Factory-in-the-Field.—Employees are selected from patients who are considered sufficiently recovered on completing Sanatorium treatment, and by giving them light work under ideal conditions it is hoped to make them fit for work in the open labour market. A small number of key-men are permanently retained on the staff, mostly non-tuberculous.

The employees in each department at the end of the year were as follows :—

Department.	Tuberculous.	Non-tuberculous.
Firewood	16	2
Brushmaking	2	2
Printing	7	1
Miscellaneous	1	5
	—	—
	26	10
	==	==

Tuberculous Employees.—Each member of the indoor staff is provided with a good dinner at the cost of 10d. per head. The Manager is informed of each patient's working capacity and progress after periodical re-examination at the Clinic. During the year five patients commenced work, five ceased owing to sickness (2 died), one resigned, two were unsuitable, and one was considered fit for the open labour market.

Loss of Time due to Ill-health.—Of the 26 employees remaining in December, 11 had lost time during the year owing to sickness. The average time lost per head was 4.3 days for the whole number of patients employed, the respective figures for each department being :—Firewood 4.7, Brushmaking nil, Printing 4.4.

"The Hollies" Sanatorium School.

PERIOD ENDED 31ST DECEMBER, 1938.

(Ministry of Health Form T.145 (D)—modified).

				Remaining Jan. 1st, 1938.	Admitted. †	Discharged. †	Remaining Dec. 31st, 1938.	
Pulmonary	Boys	..	Under 5	..	1	3	2	2
			Over 5	..	5	5	8	2
	Girls	..	Under 5	..	1	4	3	2
			Over 5	..	10	11	17	4
Non-Pulmonary	Boys	..	Under 5	..	..	1	1	..
			Over 5	..	5	3	6	2
	Girls	..	Under 5	..	..	..	..	..
			Over 5	..	..	2	1	1
Observation Cases	Boys	..	Under 5	..	1	4	4	1
			Over 5	..	3	17	10	10
	Girls	..	Under 5	..	2	5	4	3
			Over 5	..	9	22	20	11
Totals				37	77	76	38	

† Includes transfers from (2) and to (1) other institutions.

ANALYSIS OF DEFINITE CASES DISCHARGED.

DURATION OF RESIDENTIAL TREATMENT.

(Ministry of Health Form T.145 (G)—modified).

			Pulmonary.			Non-Pulmonary.			Total.
			Disease Quies- cent.	Disease Im- proved.	Disease not Im- proved.	Disease Quies- cent.	Disease Im- proved.	Disease not Im- proved.	
1-3 months.	Boys	{ Under 5 ..	..	..	..	..	..	..	..
		{ Over 5 ..	2	..	..	..	..	..	2
	Girls	{ Under 5 ..	..	..	..	..	..	..	..
		{ Over 5 ..	2	2	..	..	1	..	5
3-6 months.	Boys	{ Under 5 ..	1	1	..	..	..	..	2
		{ Over 5 ..	1	..	..	3	1	..	5
	Girls	{ Under 5 ..	1	..	..	..	..	..	1
		{ Over 5 ..	1	3	..	..	..	..	4
6-12 months.	Boys	{ Under 5 ..	..	..	..	..	..	..	..
		{ Over 5 ..	2	..	..	1	1	..	4
	Girls	{ Under 5 ..	..	1	..	..	..	..	1
		{ Over 5 ..	4	2	..	..	..	..	6
Over 12 months.	Boys	{ Under 5 ..	1	2	..	..	..	..	3
		{ Over 5 ..	..	..	..	..	..	..	..
	Girls	{ Under 5 ..	2	..	..	..	..	..	2
		{ Over 5 ..	..	..	..	..	..	..	..
	Totals		17	11	..	4	3	..	35

St. Mary's Infirmary.

PERIOD ENDED 31ST DECEMBER, 1938.
(Ministry of Health Form T.145 (D) modified).

		Remaining Jan. 1st, 1938.	Admitted. *	†Dis- charged.	Died.	Remaining Dec. 31st, 1938.
Pulmonary	Males	16	67	46	21	16
	Females	6	40	31	15	..
Non-Pulmonary	Males	1	..	..	1	..
	Females	..	..	..	..	..
Observation Cases	Males	..	2	2	..	..
	Females	..	1	1	..	..
	Totals	23	110	80	37	16

† Includes transfers to Killingbeck (12 Males, 10 Females), and Gateforth (1 Male).

* Includes transfers from Killingbeck (2 Males).

ANALYSIS OF DEFINITE CASES DISCHARGED.

DURATION OF RESIDENTIAL TREATMENT.

(Ministry of Health Form T.145 (G)—modified).

		Pulmonary Tb. Disease.							Non-Pulmonary Tb. Diseases.			Total.
		T.B. Minus.			T.B. Plus.			Quies- cent.	Im- proved.	Not Im- proved.		
		Quies- cent.	Im- proved.	Not Im- proved.	Quies- cent.	Im- proved.	Not Im- proved.					
1-3 months.	Males	..	..	1	..	9	11	..	..	..	21	
	Females	..	1	2	..	9	3	..	..	..	15	
3-6 months.	Males	..	2	..	..	6	..	..	..	..	8	
	Females	..	..	..	..	..	..	..	..	..	..	
6-12 months.	Males	..	1	..	..	..	..	..	..	..	1	
	Females	..	..	..	..	..	..	..	..	..	..	
Over 12 months.	Males	..	..	..	..	1	..	..	..	..	1	
	Females	..	..	..	..	..	..	..	..	..	..	
	Totals	..	4	3	..	25	14	..	..	..	46	

NOTE.—Nearly all the cases transferred to Sanatorium were in hospital for less than 28 days.

"The Hollies" Children's Sanatorium.—Children requiring isolation from gross home contact, or treatment for slight or early forms of tuberculosis, are accommodated in the 40 beds at this Institution. Details as to numbers and treatment are shown in the tables on page 133.

There have been five cases of mild Diphtheria all of which were transferred to the City Isolation Hospital.

Treatment has continued on the established lines, generous diet, rest, and the maximum time spent out of doors for lessons and recreation.

The Head Teacher has supplied the following details :—

Number of children on school register	..	102
(Boys 46, Girls 56).		
Number of school sessions		510
Average number on school register		37.36

St. Mary's Infirmary.—Chronic infectious cases requiring isolation, or hospital treatment pending admission to Sanatorium, are accommodated in two wards—Males 18 beds—Females 6 beds. The beds available have been kept fully occupied, and the table on page 134 shows the number treated, etc.

SANATORIA.

Killingbeck Sanatorium (Report of Dr. W. Santon Gilmour).—The total number of cases treated during the year was 677 as compared with 676 for 1937, and this total was made up as follows :—

Pulmonary—

Males 272, Females 273, Children 80. Total 625.

Non-pulmonary—

Males 14, Females 12, Children 26. Total 52.

The average percentage of bed cases was 74.61 and the average length of stay of patients was, non-pulmonary 34 weeks, and pulmonary 28 weeks. The average for 1937 was 51 weeks and 30 weeks respectively.

The Dental Surgeon made 396 examinations of 162 patients during the year and 143 received treatment.

The average length of stay remains around 30 weeks for pulmonary cases, while the number of cases seeking admission appears to be slightly increasing ; the waiting list, therefore, from time to time, becomes alarmingly high. On the female side it has kept

within fairly reasonable limits since a few extra beds were provided in Block 8, and now that the four small cottages are being built to house twelve women, where they will stay during the latter part of treatment and re-accustom themselves to domestic life after long hospitalisation, the female waiting list should cease to be a worry. The case of the male patients does not offer such easy solution and will remain difficult unless extra accommodation is provided or the type of case admitted is selected. Men between 55 and 70 years with chronic disease may need to stay in the Sanatorium for long periods for hygienic and economic reasons rather than because of the severity of the disease. This type does not usually require the special treatment and nursing of less advanced cases and might be more conveniently accommodated in "bachelor" quarters on the Sanatorium site, at a lower cost than in the wards.

Routine Sanatorium principles remain the basis of all treatment, but collapse therapy rendered more effective by surgical intervention, notably cauterisation of adhesions, is helping more and more to produce permanent results.

Any form of treatment that will free the patient of infectious sputum, with a reasonable chance of its remaining non-infectious is a great advantage to the patient and an even greater to the general public. An efficient X-Ray plant to control this type of treatment is still an urgent need which has not been met.

Bone and joint disease has to be dealt with in spite of arrangements for this type of case to be sent to the Orthopædic Hospitals. Patients suffering from both pulmonary and surgical disease are bound to arise, who must be treated in a sanatorium. A small section, set apart for these cases, would be more satisfactory and would release beds for pulmonary cases.

Special Treatment.

Pneumothorax and Air Replacement, 104 cases. Number of refills, 1,764.

Gold cases, 105. Number of injections, 1,825.

Phrenic evulsions 47. Thoracoplasty and Thoracoscopy 26.

Other operations 25.

Examination of sputum, pus, etc. at Leeds Medical School and St. James's Hospital 84.

Sputum examinations at Killingbeck 478.

X-Ray examinations; films 1,064, screenings 1,920.

Ultra-Violet Light Treatment was given to 8 patients.

School.—There has again been a high average attendance throughout the year and because of a fair proportion of surgical cases a considerable amount of teaching has been done on the ward. A school building with easier levels and greater accommodation for two classes would make it possible for the surgical bed cases to be wheeled into school.

Acknowledgments.—There have again been frequent concerts throughout the year and thanks are due to the artistes concerned for their continued interest in the social life of the patients.

Thanks are also due to those friends and firms who remember the patients' comfort at Christmas.

Rev. Edmund Beabey, A.K.C., the Honorary Chaplain, is retiring this year and going to a new living in the country. He has given unstinted service to the Sanatorium for over six years and his departure will be a great loss to all of us.

I wish to thank the staff at Killingbeck, the Public Health Department, the Leeds Health Clinic, and St. James's Hospital, for their willing co-operation throughout the year.

Killingbeck Sanatorium.

GRADE OF EXERCISE ATTAINED BY ADULT CASES, ON DISCHARGE OR TRANSFER.

	Males.	Females.	Total.
No exercise	36	31	67
Walking	51	44	95
Work { Grade A.*	16	24	40
Grade B.†	7	..	7
Grade C.‡	2	..	2
Treatment not completed	26	39	65
Total	138	138	276

* Light work in wards and garden, or vocational.

† Slightly heavier than "A."

‡ Moderately heavy work in wards and garden.

Killingbeck Sanatorium.

PERIOD ENDED 31st DECEMBER, 1938.

(Ministry of Health Form T.145 (D)—modified).

		Remain- ing Jan. 1st, 1938.	Admitted. *	Discharged †	Died.	Remain- ing Dec. 31st, 1938.
Pulmonary.	Males	89	177	132	47	87
	Females	96	165	132	39	90
	Boys { Under 5	2	3	2	..	3
	{ Over 5	12	11	10	1	12
	Girls { Under 5	2	1	1	..	2
	{ Over 5	3	14	9	1	7
Non-Pulmonary	Males	6	8	6	..	8
	Females	4	8	6	2	4
	Boys { Under 5	2	2	2	..	2
	{ Over 5	4	6	6	1	3
	Girls { Under 5	1	..	..	..	1
	{ Over 5	7	4	3	..	8
Observation Cases.	Males	1	5	5	..	1
	Females	2	10	11	..	1
	Boys { Under 5	1	..	1	..	..
	{ Over 5	5	13	11	..	7
	Girls { Under 5	..	..	..	..	..
	{ Over 5	7	6	11	..	2
Totals		244	433	348	91	238

*Includes transfers from Gateforth (8), St. Mary's (22), The Hollies (3).

†Includes transfers to Gateforth (20) and other institutions (3).

ANALYSIS OF DEFINITE CASES DISCHARGED.

DURATION OF RESIDENTIAL TREATMENT.

(Ministry of Health Form T.145 (G)—modified).

		Pulmonary Tb. Disease.						Non-Pulmonary Tb. Diseases.			Total.
		T.B. Minus.			T.B. Plus.			Quies-cent.	Im-proved.	Not Im-proved.	
		Quies-cent.	Im-proved.	Not Im-proved.	Quies-cent.	Im-proved.	Not Im-proved.				
1-3 months.	Males	2	8	..	..	5	14	..	2	..	31
	Females	1	3	..	..	6	12	..	1	..	23
	Children { Under 5	..	1	..	..	..	..	..	1	..	2
		Over 5	1	1	..	..	..	..	..	2	..
3-6 months.	Males	1	13	1	..	21	7	..	1	..	44
	Females	1	9	..	..	16	10	..	2	..	38
	Children { Under 5	..	..	..	..	..	..	..	..	..	..
		Over 5	5	2	..	..	..	..	..	1	..
6-12 months.	Males	2	6	..	..	30	6	..	..	1	45
	Females	3	5	1	2	28	7	1	..	..	47
	Children { Under 5	..	..	..	..	..	..	..	..	..	..
		Over 5	5	..	1	..	..	..	1	2	..
Over 12 months.	Males	..	..	..	1	4	1	1	1	..	8
	Females	1	7	..	2	11	3	..	..	..	24
	Children { Under 5	..	2	..	..	..	..	..	..	1	3
		Over 5	2	2	..	..	..	..	1	1	..
Totals		24	59	3	5	121	60	4	14	2	292

The above figures include 19 (Male) transfers to Gateforth Sanatorium and 3 (various) to other Institutions. The further period of treatment is shown in the respective tables for those Institution

Gateforth Sanatorium (Males only).

PERIOD ENDED 31ST DECEMBER, 1938.

(Ministry of Health Form T.145 (D) modified).

	Remaining Jan. 1st, 1938.	Admitted.*	Dis- charged.†	Died.	Remaining Dec. 31st, 1938.
Pulmonary ..	44	60	66	..	38
Non-Pulmonary ..	1	4	3	..	2
Observation Cases..	3	20	20	..	3
Totals	48	84	89	..	43

* Includes transfers from Killingbeck Sanatorium (20) and St. Mary's Hospital (1).

† Includes transfers to Killingbeck Sanatorium (8).

ANALYSIS OF DEFINITE CASES DISCHARGED.**DURATION OF RESIDENTIAL TREATMENT.**

(Ministry of Health Form T.145 (G)—modified).

PULMONARY T.B. DISEASE.							NON-PULMONARY T.B. DISEASES.			Total.
	T.B. Minus.			T.B. Plus.			Quies- cent.	Im- proved.	Not Im- proved.	
	Quies- cent.	Im- proved.	Not Im- proved.	Quies- cent.	Im- proved.	Not Im- proved.				
-3 months ..	6	3	..	2	5	4	..	3	..	23
-6 months ..	4	6	..	..	6	..	..	..	..	16
-12 months..	1	2	1	..	6	2	..	..	..	12
Over 12 mths.	..	1	1	..	6	6	..	..	..	14
Total ..	11	12	2	2	23	12	..	3	..	65

includes 7 transfers to Killingbeck Sanatorium and the further period of treatment is shewn in the corresponding table for that institution.

Gateforth Sanatorium (Report by Dr. A. C. Meek).—The accommodation for adult male patients remains the same as in former years, viz., 55 beds, though this number is slightly reduced during the winter months, when the unheated single-bed huts are not occupied.

Routine Sanatorium treatment is carried out in the majority of cases, commencing with a period of rest in bed, and followed by walking exercise and graduated labour. As in previous years, a certain number of patients received supplementary treatment such as the induction of artificial pneumothorax. In the great majority of cases a stay of satisfactory length is made, it rarely happening that a patient asks for discharge from the institution against medical advice.

Many improvements have been effected during the year, including redecoration of the patients' huts, the nurses' and maids' bedrooms, and the kitchen with its ancillary premises. Large scale alterations were made in the central heating arrangements, which it is hoped will lead to economy of both fuel and labour. An addition of great value was the installation of an electric lift, which conveys food from the basement to the first-floor landing. This has had the effect of lightening the labour both of staff and patients, more especially the latter.

Fortnightly cinema exhibitions have again been given during the winter months, and have been greatly appreciated by the patients.

The Church of St. Mary, Gateforth, was re-opened on 1st March, 1938, when a re-dedication service was conducted by His Grace the Archbishop of York. Thanks are again due to the Rev. W. Ernest Smith, Vicar of Hambleton, for the great interest he has taken in the spiritual welfare of the patients.

Numerous concert parties have again visited the Sanatorium, and our grateful thanks are due to them for their enthusiastic efforts to entertain the patients and staff.

Farm and garden produce to the value of £215 was used in the Sanatorium, and a sum of £145 was realised by the sale of eggs, pigs, poultry, etc.

Egg production reached the satisfactory figure of 28,294, as compared with 17,713 in 1937.

GRADE OF EXERCISE ATTAINED BY PATIENTS ON DISCHARGE OR
TRANSFER.

Cases who completed treatment. Grade.						Treatment not completed.	Total.
1	2	3	4	5	6		
6	4	1	3	6	9	40	69

NOTE.—Patients take walking exercise until 2 hours per day are done without symptoms. Six grades of manual work are then carried out, the last grade involving 6 hours normal work without any rest period.

Maternity and Child Welfare.

MATERNITY AND CHILD WELFARE.

The most notable achievement in the section of Maternity and Child Welfare was a further reduction in the Maternal Mortality Rate. The rate for the year, which is the lowest ever recorded in the city, was 1.76 per thousand total (live and still) births as compared with 2.24 for the previous year and an average of 3.25 for the previous five years. It is less than the rate for England and Wales and the lowest of all the large towns in the country.

Another achievement was the reduction of the infant mortality rate to 64, the lowest recorded since 1935 when the rate was the same and at that time itself the lowest on record.

Statistics.—The number of children under one year of age who died in 1938 was 490 (males 280 and females 210) as compared with 491 (males 275 and females 216) for 1937. The infant mortality rate was 64 as compared with 67 for the previous year and an average of 70 for the previous five years. As mentioned previously the rate for the year equalled the rate for 1935 which at that time was the lowest on record.

Compared with the other large towns in England and Wales, Leeds occupied eighth place, the towns with lower rates being Bristol, Sheffield, Stoke-on-Trent, London, West Ham, Bradford, and Birmingham, and with higher Newcastle, Manchester, Hull, Nottingham and Liverpool.

The rate for England and Wales was 53 or 17.2 per cent. less than the rate for Leeds.

INFANT MORTALITY.

Year.	Deaths under one year.	RATE PER 1,000 BIRTHS.	
		LEEDS.	England and Wales.
1890	2,128	173	151
1891	2,216	177	149
1892	2,114	168	148
1893	2,542	206	159
1894	1,945	156	137
1895	2,384	191	161
1896	2,120	169	148
1897	2,454	190	156
1898	2,372	183	160
1899	2,222	172	163
1900	2,397	183	154
1901	2,429	188	151
1902	2,113	160	133
1903	1,992	153	132
1904	2,207	176	145
1905	1,875	152	128
1906	1,837	152	132
1907	1,533	131	118
1908	1,654	138	120
1909	1,350	123	109
1910	1,446	133	105
1911	1,679	159	130
1912	1,051	102	95
1913	1,469	135	108
1914	1,324	124	105
1915	1,253	127	110
1916	1,216	129	91
1917	1,023	135	96
1918	984	133	97
1919	899	119	89
1920	1,232	110	80
1921	997	98	83
1922	935	101	77
1923	773	89	69
1924	921	108	75
1925	748	91	75
1926	748	93	70
1927	629	81	70
1928	606	79	65
1929	722	97	74
1930	512	68	60
1931	552	76	66
1932	617	88	65
1933	537	81	64
1934	513	71	59
1935	463	64	57
1936	476	65	59
1937	491	67	58
1938	490	64	53

INFANTILE MORTALITY DURING THE ELEVEN YEARS 1927-1938 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.
1927	..	170	21.8	274	35.2	103	13.2	87	11.2	84	10.8	81	10.4	629	81
1928	..	201	26.2	286	37.3	102	13.3	94	12.3	72	9.4	52	6.8	606	79
1929	..	210	28.3	314	42.3	111	14.9	107	14.4	108	14.5	82	11.0	722	97
1930	..	208	27.5	291	38.5	74	9.8	57	7.5	49	6.5	41	5.4	512	68
1931	..	172	23.8	233	32.3	92	12.7	86	11.9	80	11.1	61	8.4	552	76
1932	..	189	27.0	255	36.4	110	15.7	100	14.3	85	12.1	67	9.6	617	88
1933	..	175	26.3	243	36.6	99	14.9	80	12.0	57	8.6	58	8.7	537	81
1934	..	185	25.7	252	35.0	85	11.8	55	7.6	69	9.6	52	7.2	513	71
1935	..	182	25.2	239	33.1	88	12.2	62	8.6	41	5.7	33	4.6	463	64
1936	..	166	22.6	220	30.0	70	9.5	87	11.9	54	7.4	45	6.1	476	65
1937	..	186	25.6	242	33.2	84	11.5	80	11.0	48	6.6	37	5.1	491	67
1938	..	170	22.3	252	33.1	75	9.9	69	9.1	55	7.2	39	5.1	490	64

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

	I.	II.	III.	IV.	Year.
1928	84	60	77	99	79
1929	142	84	79	84	97
1930	80	62	54	76	68
1931	105	62	57	83	76
1932	103	77	74	100	88
1933	107	62	67	90	81
1934	91	53	70	72	71
1935	75	63	70	49	64
1936	94	69	40	57	65
1937	97	55	56	65	67
1938	79	55	56	70	64

Causes of Death.—The principal causes contributing to the infant death-rate in order of numerical importance were premature birth, diarrhoea and enteritis and pneumonia. An examination of the list of causes of death given on page 154 shows that 74, or 15·1 per cent. of the total deaths under one year of age were due to the respiratory group of diseases—pneumonia, bronchitis, whooping cough and influenza. Last year the number was 124, or 25·3 per cent., and the average of the previous five years was 100 or 20·2 per cent. As compared with the previous year the principal decreases were in pneumonia and influenza.

Prematurity still remains the most important single cause of death, the deaths attributable to it being 136 or 27·8 per cent. of the total as compared with 120, or 24·4 per cent. for the previous year.

The following table shows the number of deaths from prematurity and the death-rate per thousand births for the years 1928-1938.

Year.	Births.	Deaths from prematurity.	Death-rate per 1,000 births.
1928	7,665	169	22·0
1929	7,426	173	23·3
1930	7,568	152	20·1
1931	7,219	114	15·8
1932	7,004	128	18·3
1933	6,643	134	20·2
1934	7,190	121	16·8
1935	7,211	124	17·2
1936	7,340	114	15·5
1937	7,279	120	16·5
1938	7,614	136	17·9

The average death-rate from prematurity per thousand births for the ten years 1928-1937 was 18·6.

Diarrhœa and enteritis was the second most important single cause of death, 87 or 17·8 per cent. of the total being attributable to this disease, as compared with 63, or 12·8 per cent. for the previous year, and an average of 70, or 12·8 per cent., for the previous decade. Only a comparatively small number of these deaths was due to the epidemic type of the disease, that is Summer Diarrhœa. The majority belonged to quite another category and one much less easy to control. The Medical Superintendent of St. James's Hospital makes reference to it in his section. (See page 95).

The deaths from pneumonia (all forms) numbered 59 or 12·0 per cent. of the total deaths under one year, as compared with 81, or 16·5 per cent. for the previous year and an average of 82, or 15·0 per cent. for the previous decade. This is a very low figure—one of the lowest on record—and corresponds closely to the adult rate which was also below the average.

Deaths in Age Groups.—Of the total (490) infant deaths 94, or 19·2 per cent., took place on the first day; 170, or 34·7 per cent., in the first week; 252, or 51·4 per cent., in the first month; 75, or 15·3 per cent., between one and three months. 69, or 14·1 per cent., between three and six months; 55, or 11·2 per cent., between six and nine months, and 39, or 8·0 per cent., between nine and twelve months.

The percentage changes in the infant death-rates per 1,000 births in 1938 as compared with the average of the previous ten years are as follows :—

Under 1 week decrease	13·6%	3-6 months, decrease	18·0%
Under 1 month ,,	6·8%	6-9 ,, ,,	20·9%
1-3 months ,,	21·4%	9-12 ,, ,,	30·1%
Whole year decrease, 15·8%			

It is interesting to note the changes which have taken place at the various age periods of infancy since the quinquennium 1905-1909. These are set out in the table on page 153. The quinquennial average has been taken in order to make a better comparison.

Neo-natal Death-rate.—The number of deaths of infants occurring in the first month of life was 252, or 10 more than in the previous year, and the neo-natal rate was 33·1.

Of the total deaths under one year, 51·4 per cent. occurred in the first month as compared with 49·3 for the previous year, and of the deaths in the first month 37·3 per cent. occurred on the first day, 67·5 per cent. in the first week, and 83·3 per cent. in the first two weeks.

The deaths in the first month were largely due to prematurity and other congenital defects.

The neo-natal rate for the year (33·1) compares favourably with the average rate for the previous ten years (35·5).

Illegitimate Death-rate.—Of the 429 illegitimate births, 62 or 14·5 per cent., died before reaching the age of one year which is equal to an infant mortality rate of 145. This is an increase of 35 per thousand as compared with 1937 and an increase of 31 as compared with 1936. The rate for 1938 is the highest recorded in Leeds since 1933, when it was 167.

Maternal Mortality.—The number of mothers who lost their lives in childbirth during the year was 14, a decrease of 3 as compared

with the figure for the previous year. The corresponding maternal mortality rate per thousand live births was 1.84 as compared with 2.34 for the previous year and an average of 3.39 for the previous five years. Calculated on the total number of births (live and still) the rate for the year was 1.76 as compared with 2.24 for the previous year and an average of 3.25 for the previous five years.

As already mentioned, the maternal mortality rate for 1938 is the lowest ever recorded. This is the fifth year in succession in which there has been a decline in the rate, an achievement of which the city may be justly proud.

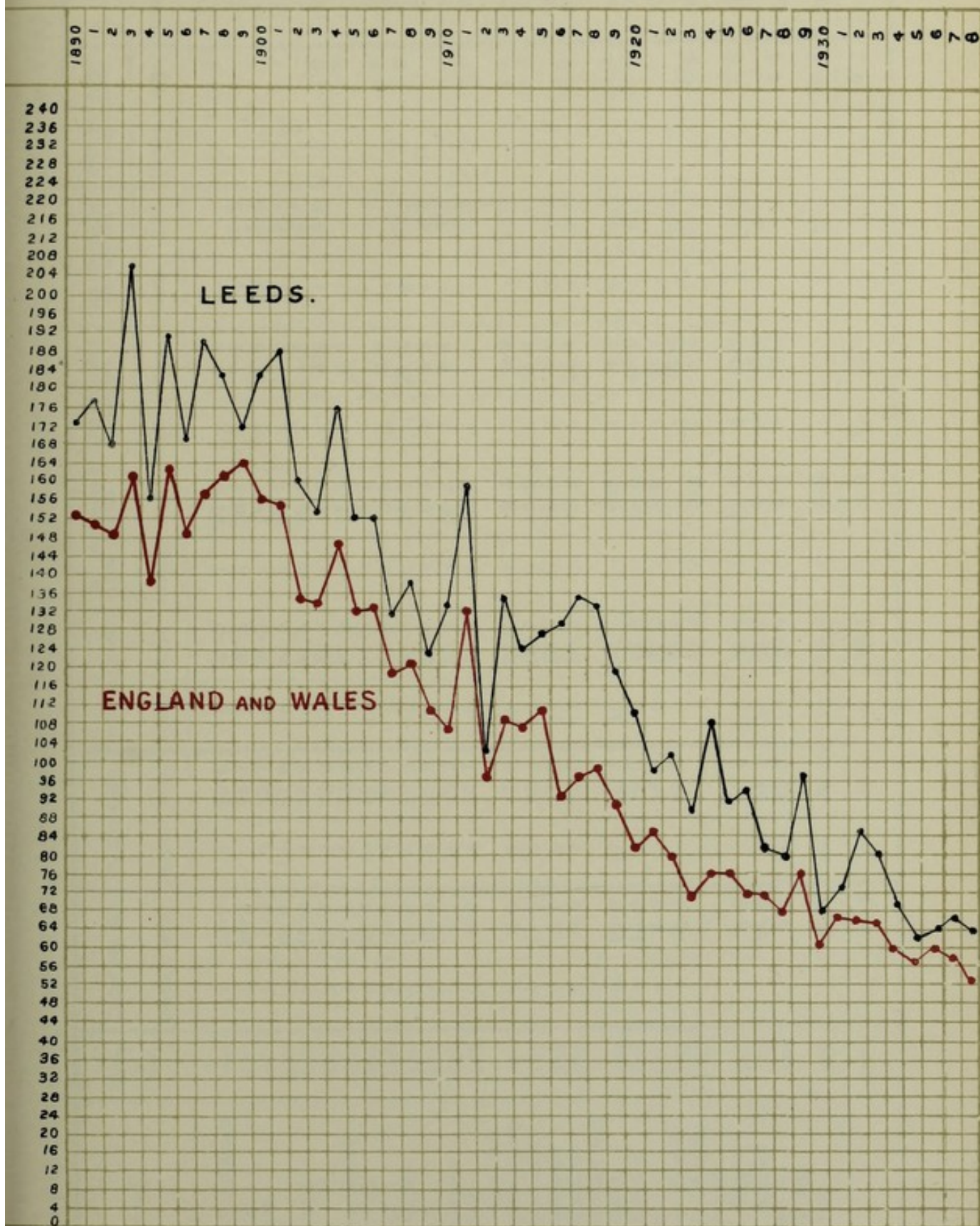
The following table shows the maternal mortality rate per thousand live births and per thousand total (live and still) births for the last ten years.

MATERNAL MORTALITY.

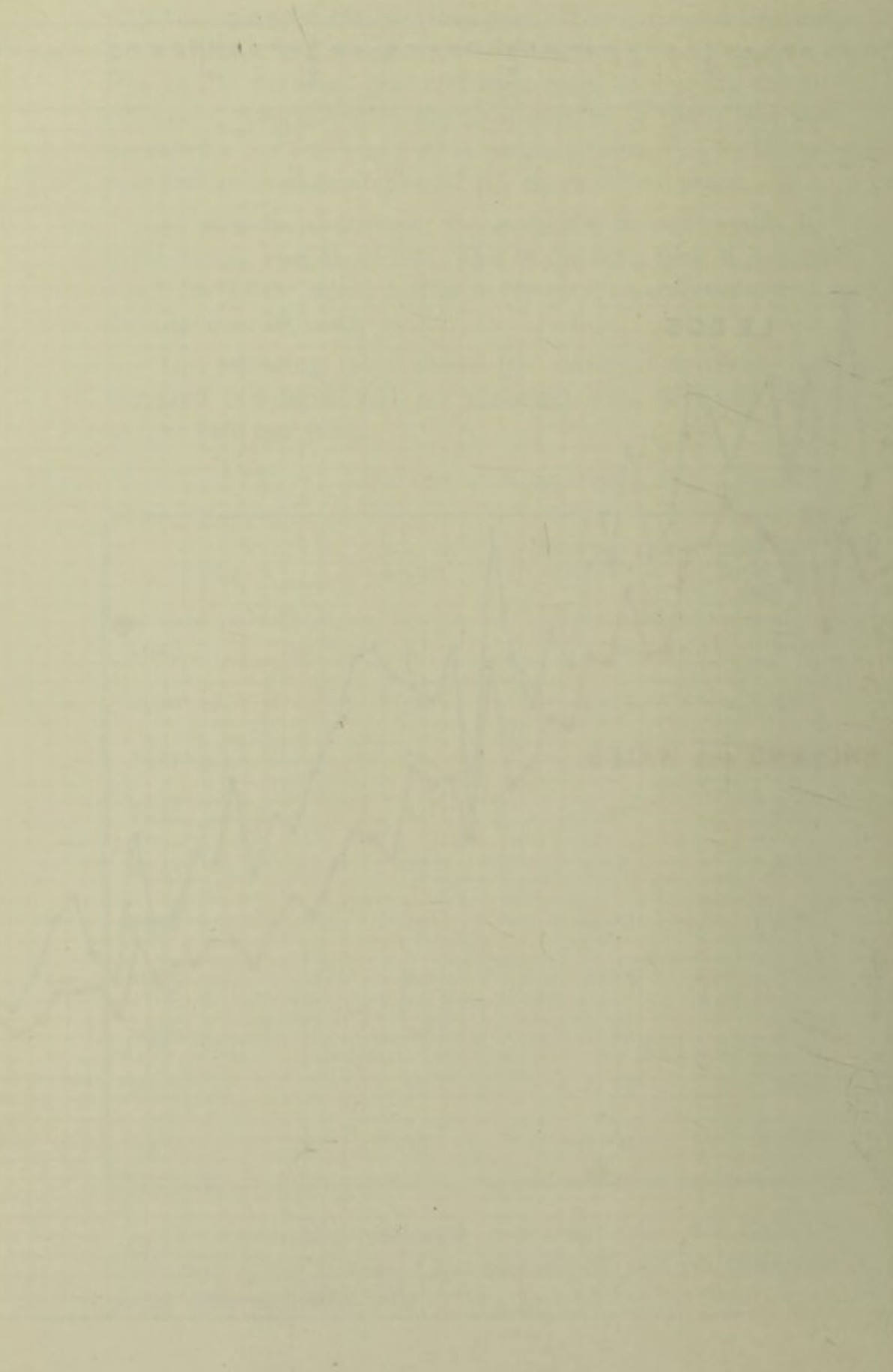
Year.	No. of deaths.	Rate per 1,000 live births.	Rate per 1,000 total (live and still) births.
1929	33	4.44	4.23
1930	32	4.23	4.05
1931	39	5.40	5.14
1932	21	3.00	2.86
1933	27	4.06	3.87
1934	29	4.03	3.86
1935	24	3.33	3.18
1936	24	3.27	3.13
1937	17	2.34	2.24
1938	14	1.84	1.76

The provisional maternal mortality rates for England and Wales were : per thousand live births 3.08, and per thousand total births (live and still) 2.97.

INFANT MORTALITY PER 1000 BIRTHS 1890 - 1938



STANDARD GRADE FOR 1900-1910



INFANTILE MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE, CALENDAR YEAR, 1938.

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WARD.	Births in year.	Under one day.		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.	Deaths.	Rate.
Mill Hill and South	200	2	10.0	3	15.0	5	25.0	2	10.0	1	5.0	..	..	2	10.0	10	50
Westfield ..	267	3	11.2	5	18.7	7	26.2	5	18.7	2	7.5	3	11.2	..	..	17	64
Blenheim ..	321	3	9.3	6	18.7	11	34.3	6	18.7	7	21.8	10	31.2	..	..	34	106
Central ..	372	7	18.8	14	37.6	20	53.8	6	16.1	5	13.4	3	8.1	3	8.1	37	99
Woodhouse ..	241	4	16.6	8	33.2	10	41.5	4	16.6	1	4.1	1	4.1	..	..	16	66
North ..	410	5	12.2	9	22.0	11	26.8	1	2.4	2	4.9	2	4.9	2	4.9	18	44
Far Headingley ..	259	4	15.4	6	23.2	7	27.0	2	7.7	1	3.9	..	..	1	3.9	11	42
Hyde Park ..	194	6	30.9	10	51.5	12	61.9	1	5.2	..	..	..	..	..	..	13	67
Kirkstall ..	346	3	8.7	3	8.7	5	14.5	2	5.8	3	8.7	..	..	3	8.7	13	38
Burmantofts ..	330	5	15.2	6	18.2	11	33.3	10	30.3	7	21.2	4	12.1	1	3.0	33	100
Harehills ..	361	5	13.9	8	22.2	13	36.0	3	8.3	3	8.3	1	2.8	..	..	20	55
Potternewton ..	246	1	4.1	4	16.3	8	32.5	4	16.3	1	4.1	1	4.1	..	..	14	57
Roundhay ..	373	3	8.0	4	10.7	6	16.1	1	2.7	..	..	1	2.7	2	5.4	10	27
Cross Gates and Templenewsam	290	1	3.4	5	17.2	10	34.5	1	3.4	2	6.9	4	13.8	1	3.4	18	62
Richmond Hill ..	181	2	11.0	6	33.1	7	38.7	3	16.6	6	33.1	..	..	3	16.6	19	105
Osmondthorpe ..	333	6	18.0	9	27.0	13	39.0	5	15.0	2	6.0	3	9.0	..	..	23	69
East Hunslet ..	305	2	6.6	7	23.0	12	39.3	3	9.8	5	16.4	2	6.6	4	13.1	26	85
Hunslet Carr and Middleton	435	6	13.8	11	25.3	19	43.7	3	6.9	2	4.6	5	11.5	5	11.5	34	78
West Hunslet ..	201	2	10.0	4	19.9	4	19.9	2	10.0	4	19.9	1	5.0	2	10.0	13	65
Beeston ..	250	2	8.0	4	16.0	6	24.0	1	4.0	3	12.0	..	..	..	..	10	40
Holbeck (South)	195	3	15.4	4	20.5	5	25.6	..	..	3	15.4	3	15.4	..	..	11	56
Holbeck (North)	152	..	..	..	..	5	32.9	1	6.6	1	6.6	2	13.2	1	6.6	10	66
Armley and New Wortley	317	3	9.5	5	15.8	10	31.5	4	12.6	4	12.6	3	9.5	2	6.3	23	73
Upper Armley ..	215	4	18.6	9	41.9	11	51.2	1	4.7	2	9.3	1	4.7	..	..	15	70
Bramley ..	444	3	6.8	9	20.3	11	24.8	2	4.5	2	4.5	..	..	2	4.5	17	38
Farnley and Wortley	376	9	23.9	11	29.3	13	34.6	2	5.3	..	..	5	13.3	5	13.3	25	66
City ..	7,614	94	12.3	170	22.3	252	33.1	75	9.9	69	9.1	55	7.2	39	5.1	490	64

BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1938.

WARD.	TOTAL BIRTHS (nett).	Birth rate 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.
MILL Hill and South	200	14.62	184	16	10	50	9	49	1	63
Westfield ..	267	18.87	245	22	17	64	16	65	1	45
Blenheim ..	321	15.63	263	58	34	106	20	76	14	241
Central ..	372	21.18	333	39	37	99	32	96	5	128
Woodhouse ..	241	15.49	226	15	16	66	14	62	2	133
North ..	410	19.46	399	11	18	44	18	45	..	..
Far Headingley ..	259	11.80	246	13	11	42	10	41	1	77
Hyde Park ..	194	12.51	185	9	13	67	12	65	1	111
Kirkstall ..	346	14.74	332	14	13	38	13	39	..	..
Burmantofts ..	330	18.24	318	12	33	100	29	91	4	333
Harehills ..	361	15.69	342	19	20	55	17	50	3	158
Potternewton ..	246	12.94	215	31	14	57	11	51	3	97
Roundhay ..	373	12.70	364	9	10	27	10	27	..	..
Cross Gates and Templenewsam	290	12.98	285	5	18	62	16	56	2	400
Richmond Hill ..	181	12.47	171	10	19	105	17	99	2	200
Osmondthorpe ..	333	15.98	315	18	23	69	22	70	1	56
East Hunslet ..	305	17.73	295	10	26	85	25	85	1	100
Hunslet Carr and Middleton..	435	17.00	417	18	34	78	31	74	3	167
West Hunslet ..	201	12.22	191	10	13	65	8	42	5	500
Beeston ..	250	14.29	242	8	10	40	9	37	1	125
Holbeck (South)	195	14.68	190	5	11	56	11	58	..	..
Holbeck (North)	152	14.13	140	12	10	66	8	57	2	167
Armley and New Wortley..	317	16.49	299	18	23	73	20	67	3	167
Upper Armley ..	215	12.17	199	16	15	70	13	65	2	125
Bramley ..	444	18.50	422	22	17	38	14	33	3	136
Farnley and Wortley..	376	17.35	367	9	25	66	23	63	2	222
City ..	7,614	15.41	7,185	429	490	64	428	60	62	145

PERCENTAGE CHANGES (5 YEAR PERIODS, ALSO YEARS 1935, 1936, 1937 AND 1938) IN THE INFANT DEATH-RATE per 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

Five year period.	Under one week		Under one month.		One and under three months.		Three and under six months.		Six and under nine months.		Nine and under 12 months.		Under one year.	
	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.	Rate.	Percentage increase or decrease over 5 years period 1905-1909.
1905-1909	26.2	—	44.3	—	25.5	—	28.0	—	23.0	—	18.6	—	139	—
1910-1914	26.6	+1.5%	44.1	-0.5%	24.7	-3.1%	23.9	-14.6%	20.1	-12.6%	18.0	-3.2%	131	-5.8%
1915-1919	26.4	+0.8%	44.4	+0.2%	21.5	-15.7%	25.0	-10.7%	19.7	-14.3%	17.9	-3.8%	129	-7.2%
1920-1924	23.8	-9.2%	42.3	-4.5%	17.9	-29.8%	16.1	-42.5%	13.2	-42.6%	11.6	-37.6%	101	-27.3%
1925-1929	24.3	-7.3%	38.2	-13.8%	15.1	-40.8%	13.4	-52.1%	11.5	-50.0%	10.1	-45.7%	88	-36.7%
1930-1934	26.1	-0.4%	35.8	-19.2%	12.9	-49.4%	10.6	-62.1%	9.5	-58.7%	7.8	-58.1%	77	-44.6%
Year 1935	25.2	-3.8%	33.1	-25.3%	12.2	-52.2%	8.6	-69.3%	5.7	-75.2%	4.6	-75.3%	64	-54.0%
Year 1936	22.6	-13.7%	30.0	-32.3%	9.5	-62.7%	11.9	-57.5%	7.4	-67.8%	6.1	-67.2%	65	-53.2%
Year 1937	25.6	-2.3%	33.2	-25.1%	11.5	-54.9%	11.0	-60.7%	6.6	-71.3%	5.1	-72.6%	67	-51.8%
Year 1938	22.3	-14.9%	33.1	-25.3%	9.9	-61.2%	9.1	-67.5%	7.2	-68.7%	5.1	-72.6%	64	-54.0%

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

Causes of death.	Year 1937.	Year 1938.	Increase or decrease.	Percentage of total deaths under one.
Smallpox	..	..	..	..
Chickenpox	..	..	..	..
Measles	6	6	..	1.22
Scarlet Fever	..	..	..	..
Whooping Cough	10	6	-4	1.22
Diphtheria	..	3	+3	0.61
Influenza	16	..	-16	..
Erysipelas	..	1	+1	0.20
Tuberculous Diseases	4	6	+2	1.22
Meningitis	..	2	+2	0.41
Convulsions	12	9	-3	1.84
Bronchitis	15	7	-8	1.43
Pneumonia (all forms)	81	59	-22	12.04
Other diseases of Respiratory Organs	2	2	..	0.41
Diarrhœa and Enteritis	63	87	+24	17.76
Gastritis	..	1	+1	0.20
Syphilis	2	1	-1	0.20
Rickets	..	..	..	..
Suffocation, including overlying	17	18	+1	3.67
Injury at birth	19	22	+3	4.49
Atelectasis	15	15	..	3.06
Congenital Malformations	49	44	-5	8.98
Premature birth	120	136	+16	27.76
Atrophy, Debility, and Marasmus	21	12	-9	2.45
Other Causes	39	53	+14	10.82
Totals	491	490	-1	100.00

MATERNITY AND CHILD WELFARE SERVICES INCLUDING SUPERVISION OF MIDWIVES.

BY

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Number of Midwives.—The total number of midwives on the register at December 31st, 1937, was 96; 16 new names were added during the year; 17 did not renew their notification to practise; 13 left the district, and one died, leaving a total on the register at December 31st, 1938, of 81.

The actual number of midwives who practised in the city during the year was 73 made up as follows, municipal midwives 25, ambulance nurses 4, municipal midwives employed through the Maternity Hospital 7, practising as independent midwives 22, attached to Institutions, but doing no domiciliary midwifery 15.

The total number of births notified by midwives was 2,691, or 33.0 per cent. of the total births registered, as compared with 2,133 or 27.2 per cent. during the previous year. Of the total 2,629 (97.7 per cent.) were delivered in the patients' own homes, and of these 1,789 were attended by municipal midwives, 36 by ambulance nurses, 428 by Maternity Hospital district midwives, and 376 by independent midwives.

Municipal Midwifery Service.—There were 24 municipal midwives employed directly by the Authority during the year, except for a period of five weeks when there were 23. Three of these midwives act as teachers for the pupil midwives at the Municipal Hospitals.

Municipal midwives employed by the Maternity Hospital numbered seven for eight months and six for the remaining four months.

The cases taken by these were utilised for the district training of medical students and pupil midwives.

The following table gives details of the work done by the municipal midwives for the year.

MUNICIPAL MIDWIVES.

	Municipal Midwives	Maternity Hospital Midwives	Total
Ante-natal visits	8,813	2,423	11,236
Deliveries { Midwife	1,723	466	2,189
{ Maternity Nurse	314	33	347
Post-natal visits	37,295	12,637	49,932
Bookings { Midwife	1,830	354	2,184
{ Maternity Nurse	347	108	455
Examinations at Midwife's home ..	4,912	2,544	7,456
Number of Midwives	24	7—6	..

It will be seen that the number of births notified by midwives does not tally with the totals taken from their weekly sheets. This is explained by the fact that the doctors in attendance did not notify certain of the births, and cases where the midwife was acting as a maternity nurse have been included. In future to avoid this discrepancy, the notification card will definitely state whether it was a midwife's or a doctor's case.

The numbers taken by individual midwives vary and are not really comparable, as the time taken to make one visit in an out-lying district would suffice to make several visits in a congested area. During the year a motor car allowance of £20 was granted to the midwives working in the districts of Armley and Farnley, Bramley, Crossgates, Alwoodley and Cookridge. Three of the midwives had taken advantage of the grant at the end of the year.

Another slight alteration was made in the scheme, and came into force on July 1st. It was found that only a certain number of the mothers provided themselves with sterilised maternity outfits and adequate pads, etc., and it was felt that it would be a great advantage if each patient could be supplied with these accessories. The Ministry of Health's sanction was obtained for this, and the services of a municipal midwife now include the provision of a sterilised outfit for each patient and all drugs, dressings and disinfectants required. In order to meet the additional cost of this provision, the fees were increased from £2 to £2 7s. for a midwife, and from £1 15s. to £2 2s. for a midwife acting as a maternity

nurse. As before, necessitous cases are investigated by the almoner and contribute to the cost according to their means.

Supervision of Midwives.—The municipal midwives are interviewed at the Health Department once a week, when they bring in their weekly report of work done and cases booked. This forms a useful contact between the supervisor and the midwives when difficulties can be discussed and advice given.

The lay supervisor also makes regular visits to the homes of all midwives and inspects bags, books, etc. During the year 170 such visits were made. In addition, 171 other visits were paid for special reasons such as infection, housing, transfer of patients, compensation claims, etc.

Compensation to Midwives.—During the year 10 midwives surrendered their certificates voluntarily, in accordance with the provisions of the Midwives Act, 1936. The total compensation paid by the Corporation in respect of these surrenders was £3,455 12s. 8d. In addition 4 midwives surrendered their certificates to other authorities, the Leeds Corporation being called upon to refund the sum of £50 7s. 8d. in respect of cases attended in this area.

Advising Medical Help.—Notifications of having advised medical assistance were received in 895 cases which may be classified as follows :—

Mother—

Ruptured perineum..	..	..	..	235
Delayed labour ..	..	..	..	154
Illness during pregnancy ..	..	..	..	62
Malpresentation ..	..	..	..	53
Puerperal pyrexia ..	..	..	..	44
Ante-partum hæmorrhage ..	..	..	..	36
Post-partum hæmorrhage ..	..	..	..	23
Illness during puerperium ..	..	..	..	28
Abortion ..	..	..	..	18
Retained placenta or membrane ..	..	..	..	10
Fits or convulsions ..	..	..	..	2

Child—

Discharging eyes ..	..	..	..	96
Illness of child ..	..	..	..	88
Prematurity and feebleness ..	..	..	..	38
Abnormalities ..	..	..	..	8

Midwives Emergencies.—During the year 788 claims were made by medical practitioners in the city for attendance on emergencies of labour under Section 14 of the Midwives Act, 1918, and 644 were dealt with at a total cost to the Corporation of £597 1s. 3d.

Accouchement Sets.—Since July, 1938, every woman attended by a municipal midwife is allowed a sterilised maternity outfit. Outfits can still be obtained at the Health Department, or through the Welcomes, for mothers who are having independent midwives to attend them, and these are paid for by the patient. During the year, 146 small and 54 large outfits were supplied, of which 91 small and 2 large were issued free, and 55 small and 52 large at full price. The total cost to the Corporation being £17 16s. 10d.

Nursing in the Home.—The yearly grant continued to be paid to the Leeds District Nursing Association, which undertakes to nurse in their own homes cases of puerperal pyrexia, mastitis, ophthalmia neonatorum, pemphigus, pneumonia and otitis media. A total of 2,138 cases was attended in this way during the year.

Infectious Diseases.—Particulars are given in the following table of the cases of infectious diseases dealt with.

INFECTIOUS DISEASES.

	Puerperal Pyrexia.	Ophthalmia Neona- torum.	Pemphigus.
Number of cases notified	170	33	4
Number of cases recovered	149	29	4
Number of cases died	7	* 2	..
Number of cases of vision impaired ..	..	..	..
Number of cases result not known..	14	2	..
(out of city)			
Number occurring in			
Doctors' practice ..	10	4	..
" " midwives' ..	12	16	4
" " institutions ..	148	13	..
Number of cases where District Nurse was asked to attend ..	6	12	2
Number removed to Hospital ..	14	5	..
Number of cases visited	136	33	4

* From other causes.

Puerperal Pyrexia.—There were 170 cases of puerperal pyrexia notified during the year. One occurred after an abortion, the others after fulltime delivery. Of these 10 occurred in doctors' practices, 12 in midwives' cases, and 148 in institutions. (*Vide* page 39).

Handywomen.—The Ministry of Health gave an order for Section 6 of the Midwives Act, 1936, to be put into operation in Leeds as from January 1st, 1939. After this date, it will be a penal offence for any person who is not a certified midwife, or a registered nurse, to receive remuneration for attending a woman in childbirth, or at any time during the fourteen days immediately after childbirth.

Home Helps.—The scheme for the provision of Home Helps in maternity cases continued in operation, and applications have steadily increased.

The number of mothers provided with Home Helps in 1938 was 156, as compared with 117 in 1937, and 84 in 1936.

The number of women employed as Home Helps during the year was 36, as compared with 26 for the previous year. Some of these women have been available all the year, but a certain number leave from time to time when other work offers, and new helps are taken on in their place.

The total cost to the Corporation was £492 11s. 6d., of which £70 18s. 1d. was refunded by the patients. The comparable figures for 1937 were £348 15s. 7d. and £32 1s. 9d.

Ante-natal Work.—A total of 3,734 expectant mothers attended the ante-natal clinics during the year, an increase of 555 on the figure for the previous year. A total of 2,939 were new and attended for the first time. The attendances at all the clinics totalled 13,641, as compared with 10,850 for 1937.

The appended table gives an analysis of the new cases admitted to the register of the different clinics during the year with particulars as to the sources of the recommendations.

NEW CASES ADMITTED TO THE REGISTERS OF THE ANTE-NATAL
CLINICS DURING 1938, AND BY WHOM RECOMMENDED.

Welcome.	Midwife.	Self.	Hospital.	Welcome Dr.	Private Dr.	Health Visitor.	Total.	Percentage sent by Midwife.
Ellerby ..	60	55	2	..	1	8	126	47·6
West Street	13	45	..	..	..	2	60	21·7
Burmantofts	83	29	2	3	..	9	126	65·9
Hunslet ..	135	13	6	..	..	20	174	77·6
University ..	274	87	13	2	..	20	396	69·2
Woodhouse..	62	61	8	9	1	30	171	36·3
Holbeck ..	106	83	12	3	2	31	237	44·7
Armley ..	46	156	113	..	1	1	317	14·5
Barrack House ..	90	116	20	10	3	6	245	36·7
St. Nicholas	168	13	6	..	2	5	194	86·6
Bramley ..	35	150	27	1	5	7	225	15·6
Middleton ..	46	88	5	9	..	35	183	25·1
West Hunslet	95	73	20	..	1	28	217	43·8
Crossgates ..	25	38	4	..	..	6	73	34·2
Burley ..	26	50	10	2	..	1	89	29·2
Halton ..	5	..	1	1	..	1	8	62·5
Kirkstall ..	56	33	4	..	1	4	98	57·1
TOTAL ..	1,325	1,090	253	40	17	214	2,939	45·1

The mothers attending the clinics are not only those who are to be confined at home ; there is also an arrangement with the Hospitals that normal cases booked for confinement in hospital can attend the district ante-natal clinics, and only, should some abnormality be found or suspected, are they referred back to the hospital ante-natal clinic.

This means that quite a number of mothers are on the register both of the hospital and the district ante-natal clinics. In order to arrive at the true percentage of mothers who attend an ante-natal clinic, it has been necessary to compare the names on all registers so that each mother is only counted once. This has been done, and the result is as follows :—

Ante Natal Clinics	No.	Per cent. of total births.
St. James's Hospital only	698	9.2
Do. and ordinary ante natal clinics	165	
Leeds Maternity Hospital only	2,470	32.4
Do. and ordinary ante natal clinics	313	
Ordinary ante-natal clinics	3,734	49.0
Total number of women who attended an ante natal clinic	6,902	90.6
Total number of Leeds Births	7,614	

EXPECTANT MOTHERS ON REGISTERS.

Ward.	No. on register at beginning of year.	Registered during year.	Live Births.		On register end of year.	Total attend- ance of expectant mothers.
			Full Term.	Prema- ture.		
Ellerby	37	126	130	3	21	631
West Street ..	22	60	63	4	..	243
Burmantofts ..	38	126	117	6	32	514
Hunslet	38	174	156	6	43	687
University ..	95	396	356	13	96	1,515
Woodhouse ..	65	171	155	7	55	851
Holbeck	53	237	212	8	57	1,149
Armley	84	317	276	14	81	1,823
Barrack House ..	67	245	208	7	73	899
St. Nicholas ..	39	194	162	5	55	628
Bramley	69	225	171	7	88	1,259
Middleton	70	183	165	11	55	1,054
West Hunslet ..	65	217	191	10	70	1,240
Crossgates	7	73	43	1	33	298
Burley	25	89	72	1	32	364
Halton	5	8	9	3	..	7
Kirkstall	16	98	77	6	31	474
Totals	795	2,939	2,563	112	822	13,636

Of the 3,734 mothers on the register 40 miscarried and 80 had still births.
In addition to the above 5 expectant mothers paid 5 visits to Meanwood Centre where
no ante-natal clinic is held, making a total of 13,641 attendances.
Included in the number of live births are 39 sets of twins.

When any abnormality is found at the ante-natal clinic, the mother is referred to a consultant, her own doctor or a hospital. Particulars of these cases for the different clinics are given on page 163.

The reasons for expectant mothers being referred to the different hospitals for ante-natal treatment or confinement are given in the table appended.

ANTE-NATAL CLINICS, 1938.

WOMEN REFERRED TO INSTITUTIONS BECAUSE OF ABNORMALITY.

Reason for Sending	Anti-natal treatment		Obstetrical treatment		General Hospital	Total
	Maternity Hospital	Municipal Hospital	Maternity Hospital	Municipal Hospital		
Albuminuria and Toxaemia	41	13	2	2	..	58
Contracted pelvis and disproportion	..	1	50	13	..	64
Malpresentation and twins	25	4	11	3	..	43
Previous bad obstetrical history	..	..	2	2	..	4
Ante-partum hæmorrhage and placenta prævia	2	..	2	2	..	6
Cardiac disease	7	3	24	7	..	41
Varicose veins	..	1	1	1	..	3
Vaginal discharge	4	..	..	..	..	4
Threatened miscarriage	3	3	..	..	..	6
Anaemia	..	1	..	..	8	9
Miscellaneous medical reasons	7	4	6	4	10	31
TOTAL	89	30	98	34	18	269

A total of 119 women were referred to hospital for ante-natal treatment, the most frequent causes being toxæmia and breech presentations for version. The number referred to hospital for confinement was 132, the reasons for the most part being contracted pelvis and disproportion and cardiac disease.

Milk is supplied to mothers throughout pregnancy, and also eggs to those obviously in need of extra nourishment.

Dried milk was supplied to 951 expectant mothers, 71 at full price, 197 at assisted rates, and 683 free. In addition, fluid milk was supplied to 151 expectant mothers, 99 free and 52 at assisted rates.

NUMBER OF WOMEN REFERRED ON ACCOUNT OF ABNORMALITIES.

Clinic.	Armley.	St. Nicholas.	Hunslet.	University.	Burmantofts.	Ellerby.	Woodhouse.	Holbeck.	Barrack House.	Bramley.	Middleton.	West Hunslet.	Burley.	Kirkstall.	Crossgates.	Halton.	Total.
To whom referred :— Consultant (including consultant medical staff of Hospital) ..	16	16	14	2	31	26	6	27	..	26	4	33	1	4	3	1	210
V. D. Officer ..	4	3	..	..	1	1	..	7	..	1	1	2	..	..	1	..	21
T. B. Officer ..	..	1	..	..	2	..	1	1	2	1	..	1	..	..	1	..	10
General Practitioner ..	4	6	2	7	..	4	1	1	5	2	2	4	2	4	3	..	47
Ante-natal treatment { Maternity Hospital (with reasons, separate table)	3	2	4	9	9	14	6	7	5	6	6	8	6	2	..	2	89
Municipal Hospital (with reasons, separate table)	7	1	2	4	4	2	..	1	2	2	..	1	1	1	1	1	30
Obstetrical treatment { Maternity Hospital (with reasons, separate table)	6	10	1	14	12	11	4	2	15	16	1	2	..	..	4	..	98
Municipal Hospital (with reasons, separate table)	4	2	..	10	3	1	..	2	7	2	..	2	..	..	1	..	34
General Hospital ..	2	..	..	1	..	4	1	..	1	1	..	6	1	1	..	..	18

A total of 65,498 eggs were supplied to 1,012 mothers, as compared with 23,636 eggs to 394 mothers for the nine months of the previous year. Of the total number, 45,457 eggs were supplied free to 668 mothers, of whom 295 were expectant and 373 nursing. The remaining 20,041 eggs were supplied at assisted rates to 344 mothers, of whom 136 were expectant and 208 nursing. The total cost to the Corporation was £438 11s. 2d.

Additional accessory food factors, such as iron, calcium, vitamin A and D, were also supplied where necessary.

Dr. Barker carried out an investigation into the average hæmoglobin content of the blood of 76 expectant mothers attending the West Hunslet clinic and the following are her findings.

Of the total, 4 had hæmoglobin 50-59 per cent., 33 had 60-69 per cent., 34 had 70-79 per cent. and 5 had 80-89 per cent. The following table gives hæmoglobin estimates in relation to parity.

	50% to 59%	60% to 69%	70% to 79%	80% to 89%	No. of cases.
Primipara	..	9	10	2	21
Para 2	1	8	11	2	22
" 3	..	8	4	..	12
" 4	3	2	3	..	8
" 5	..	2	2	..	4
" 6	..	..	2	..	2
" 7	..	1	..	..	1
" 8	..	2	2	..	4
" 9	..	1	..	..	1
" 10	..	..	..	1	1
Total	4	33	34	5	76

All primiparas had over 60 per cent. Hb, and more than half over 70 per cent. Hb.

If we put the 43 first and second paras in one group, and the remaining 33, consisting of paras 3 and over, then one finds that—

Para 1 and 2 41·9 per cent. were under 70 per cent. Hb.

58·1 per cent. were over 70 per cent. Hb.

Para 3 and over 57·6 per cent. were under 70 per cent. Hb.

42·4 per cent. were over 70 per cent. Hb.

Seventy-one of the cases were followed up to find if there was any relationship between hæmoglobin content during pregnancy, and breast feeding later. The following table shows how many of these women successfully breast fed their infants to five months.

	Percentage of hæmoglobin estimated during pregnancy.							
	50% to 59%		60% to 69%		70% to 79%		80% to 89%	
	Breast	Bottle	Breast	Bottle	Breast	Bottle	Breast	Bottle
Primipara	..	..	4	5	4	6	2	..
Para 2	..	1	3	5	7	3	1	1
" 3	..	..	2	5	1	3	..	..
" 4	..	1	..	2	2	1	..	..
" 5	..	..	..	2	1	..	..	..
" 6	..	..	..	..	..	1	..	..
" 7	..	..	..	1	..	..	..	..
" 8	..	..	1	1	1	1	..	..
" 9	..	..	..	1	..	..	..	..
Total	1	3	10	22	16	15	3	1
Total in each group	4		32		31		4	
% in each group Breast fed	25.00%		31.25%		51.61%		75.00%	

Although these figures are too small to be of much value, they do show that the mothers with the larger percentage of hæmoglobin were more able to breast feed their infants.

Consultative Ante-natal Clinic.—A total of 54 women were referred to the clinic during the year, as compared with 50 for 1937. Of those referred, 51 were by clinic doctors, and 3 by private doctors, for the reasons set out in the following table :—

Abnormal presentations, twins	..	..	..	23
Contracted pelvis, disproportion (real or suspected)	..	..	..	9
Albuminuria, toxæmia	..	..	..	8
Previous bad obstetrical history	..	..	..	3
Medical complications of pregnancy	..	..	..	5
Miscellaneous	..	..	..	6

Of the 51 births, 48 were live births (three sets of twins) and 3 were still births. More than half—to be exact 26—of the deliveries took place in hospital and 25 at home.

Most of the toxæmic and cardiac cases were referred to hospital for treatment and observation, and seven cases of breech presentation were sent for version in hospital under anæsthesia.

There were no maternal deaths in the women referred to this clinic during the year.

Natal Work.—Of the total 7,614 nett births which occurred during the year, 4,125 or 54·18 per cent. took place in institutions or nursing homes in the city. The figure for 1937 was 54·42.

The following tables give the number, gross and nett, of the births in the different institutions.

Institution.	No. of births nett.	Percentage of net births.
Leeds Maternity Hospital	2,187	28·72
St. James's Hospital	1,149	15·09
St. Mary's Infirmary	475	6·24
Hospital for Women	5	0·07
Private Nursing Homes	309	4·06
(Total nett Births, 7,614) Total ..	4,125	54·18

Institution.	No. of births gross.	Percentage of total registered.
Leeds Maternity Hospital	2,846	34·88
St. James's Hospital	1,162	14·24
St. Mary's Infirmary	486	5·96
Hospital for Women	8	0·10
Private Nursing Homes	405	4·96
(Total gross births 8,159) Total ..	4,907	60·14

Specialist Service.—The number of claims received from consultants for services rendered in connection with the Corporation's maternity scheme was 46, and 62 (including arrears from the previous year) were dealt with and the total nett cost £194 13s.

The Emergency Unit from the Maternity Hospital was used on two occasions.

Maternity and Nursing Homes.—The number of registered nursing homes in the city on December 31st, 1937, was 23, made up as follows :—Maternity Homes 8, Maternity and General Nursing Homes 11, and General Nursing Homes 4. The following table gives the position at December 31st, 1938 :—

	Maternity Homes.	Other Nursing Homes.
No. of existing registered Homes on January 1st, 1938	19	4
No. of applications for registration ..	..	..
No. of Homes registered	..	..
No. of Orders made refusing or cancelling registration	..	..
No. of Appeals against such Orders ..	..	..
No. of Cases in which such Orders have been :—		
(a) Confirmed on appeal	..	..
(b) Disallowed	..	..
No. of applications for exemption from registration	3	2
No. of Cases in which exemption has been :—		
(a) Granted	3	2
(b) Withdrawn	..	..
(c) Refused	..	..
No. of Cases in which registration voluntarily surrendered	2	..
Existing registration extended to include registrations as—	..	..

All registered homes were visited regularly and inspected, the number of visits paid for this purpose being 60.

Ambulance Service.—For the number of cases removed to the various lying-in Institutions by ambulance, see page 52.

Maternal Mortality.—During the year 14 mothers lost their lives in childbirth. The figure for 1937 was 17, and for 1936, 24. The rate of mortality for the city was 1·84 per thousand live births, and 1·76 per thousand total births (live and still). The corresponding figures for 1937 were 2·34 and 2·24 respectively.

These are the lowest rates ever recorded in the city, and are better than the figures for England and Wales, which were 3·08 and 2·97 respectively.

Of the 14 deaths, 2 were due to sepsis, 2 to toxæmia, one to toxæmia plus hæmorrhage, one to hæmorrhage, 2 to obstetric shock, one to embolism, one to broncho-pneumonia following rupture of uterus, one to nephritis with incomplete abortion, and 3 to other causes. Of the total ten were confined in hospital and four at home.

There were three deaths in mothers who had attended the ante-natal clinics, giving a maternal mortality rate for the clinics of 1·12 per thousand births, and 1·09 per thousand total births (live and still). These mothers were all confined in institutions. One died from syncope and post-partum hæmorrhage, one from pulmonary collapse after a difficult labour, and the third from obstetric shock after a difficult labour.

Stillbirths and Neo-natal Mortality.—The number of stillbirths notified in 1938 was 415, or 4·9 per cent. of the total births notified, as compared with 382, or 4·8 per cent. in 1937.

The number of neo-natal deaths was 252, as compared with 242 in 1937, the corresponding rate being 33·1, as compared with 33·2 in 1937. As in former years, the largest number was due to prematurity, which alone accounted for 126 deaths, or 50·0 per cent. of the total.

MATERNAL MORTALITY 1926-1938—CAUSES OF DEATH.

Year.	Sepsis.	Hæmorrhage.	Hæmorrhage and Sepsis.	Toxæmia.	Toxæmia and Hæmorrhage.	Toxæmia and Sepsis.	Embolism	Ruptured Ectopic	Obstetric Shock.	Ruptured Uterus.	Incomplete Abortion.	Other Causes.	Total.
1926 ..	13	6	..	5	3	..	2	1	1	1	2	2	36
1927 ..	13	9	1	7	..	..	4	1	1	..	1	..	37
1928 ..	17	7	..	5	..	..	1	2	1	1	..	2	36
1929 ..	8	6	2	9	..	..	5	2	..	1	..	..	33
1930 ..	10	8	..	10	..	1	..	2	..	..	..	1	32
1931 ..	17	8	..	9	..	1	2	1	..	..	..	1	39
1932 ..	8	3	..	3	1	..	4	..	1	..	..	1	21
1933 ..	16	1	..	2	1	..	..	2	..	3	..	2	27
1934 ..	16	3	..	5	..	..	1	2	1	1	..	..	29
1935 ..	8	4	..	3	..	..	5	..	2	..	..	2	24
1936 ..	9	6	..	2	1	1	1	1	..	..	..	3	24
1937 ..	6	5	..	3	..	..	2	..	..	..	..	1	17
1938 ..	2	1	..	2	1	..	1	..	2	1	1	3	14

NEO-NATAL MORTALITY.

Cause of death.	Under one week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total.
Congenital malformation	15	8	1	1	25
Premature birth ..	95	17	9	5	126
Atrophy, debility and marasmus	3	2	3	..	8
Atelectasis	14	..	1	..	15
Injury at birth ..	21	1	..	..	22
Suffocation including overlying	10	..	1	..	11
Diarrhœa-enteritis ..	..	4	5	3	12
Syphilis	..	..	..	..	..
Pneumonia	1	3	3	4	11
Convulsions	4	..	1	..	5
Other causes	7	5	3	2	17
	170	40	27	15	252

Post-natal Supervision.—The importance of every woman, in the interests of her future health, being examined after her confinement is being stressed by the clinic doctors, health visitors and midwives. Although this post-natal care affords an excellent opportunity for much profitable work in preventative medicine, the mothers themselves are only very gradually being persuaded of its need. There are at present no separate post-natal clinics for mothers, but all mothers attending the ante-natal clinics are asked to re-attend four weeks after their confinements for examination.

Of the cases seen during the year, 30 were referred to the various hospitals for treatment.

Patients delivered in hospital are examined there post-natally four to six weeks after delivery.

As in previous years, mothers whose health was likely to be impaired by further pregnancy were referred to the gynaecological clinic at the Maternity Hospital, where they received advice and instructions in the use of contraceptives, in accordance with the recommendations of the Ministry of Health embodied in Memorandum 1935, M.C.W. The number so referred was ten.

INFANT LIFE PROTECTION.

PUBLIC HEALTH ACT, 1936. Part vii. Sec. 206-219.

CHILDREN NURSED FOR HIRE OR REWARD DURING THE YEAR 1938.

Number of foster-mothers on the register at the beginning of the year	104
Number of foster-mothers on the register at the end of the year	92
Foster-mothers with one child	88
Foster-mothers with two children	3
Foster-mothers with three children	1
Number of children on the register at the beginning of the year	112
Number of children placed on the register during 1938 (including 9 children transferred to other foster-mothers in Leeds)	62
Number of children who ceased, during the year to come under the provision of this Act	75
Number of children on the books at the end of the year	99

DETAILS AS TO THE NUMBER OF CHILDREN WHO CEASED, DURING THE YEAR, TO COME UNDER THE PROVISIONS OF THE PUBLIC HEALTH ACT, 1936.

Returned to parents or relatives	42
Attained the age of 9 years	9
Adopted without payment	8
Sent to special homes, etc.	3
Removed to other districts	13
Died	..
Foster-mothers removed with child—no trace.. .. .	..
TOTAL	75

Home Visiting.—The total number of visits paid during the year amounted to 131,103, as compared with 131,050 for the previous year.

A complete summary of the work of the health visitors is appended :—

	VISITS.
Notified births including re-visits	91,804
Stillbirths and deaths under one month including re-visits	719
Death investigations of children from one month—five years	539
Ophthalmia Neonatorum	70
Measles	6,094
Whooping Cough	353
Pneumonia	972
Expectant Mothers	7,576
Special visits (medical aid claims 808, and others 1,122)	1,930
Visits for home reports for expectant mothers booked at Municipal Hospitals	1,099
Visits to ill children notified from the Leeds General Infirmary, Public Dispensary and St. James's Hospital	493
Visits to children under the Public Health Act, 1936, Part vii. s.s. 206-219	687
Ineffectual visits	18,767
Total visits for the year	<u>131,103</u>

Infant Life Protection.—During the year a total of 687 visits were paid to foster-children, 619 by the health visitors, and 68 by the superintendent. The table on page 171 gives particulars of the children nursed for reward in the city during 1938.

Infant Welfare Centres.—There were 18 infant welfare centres (Babies' Welcomes) in use at the beginning of 1938. In July the West Street Welcome was discontinued, and the mothers transferred to the Burley Welcome where additional sessions to meet the increased demand have since been held.

BABIES UNDER ONE REGISTERED DURING YEAR 1938.

WELCOME.	0-1 month.	1-3 months.	3-6 months.	6-12 months.	Total.
Ellerby ..	87	73	9	14	183
West Street ..	90	78	25	14	207
Burmantofts ..	130	62	37	36	265
Hunslet ..	93	81	8	13	195
University ..	215	170	34	27	446
Woodhouse ..	183	112	29	21	345
Holbeck ..	114	181	36	21	352
Armley ..	183	203	37	19	442
Barrack House	305	230	53	70	658
St. Nicholas ..	112	74	22	12	220
Bramley ..	111	135	24	23	293
Middleton ..	150	28	21	24	223
Meanwood ..	38	58	16	11	123
West Hunslet	163	121	26	29	339
Cross Gates ..	47	33	8	12	100
Burley ..	126	142	26	25	319
Halton ..	50	45	10	1	106
Kirkstall ..	77	68	16	11	172
†Gipton ..	38	39	35	32	144
Totals ..	2,312	1,933	472	415	5,132

BABIES OVER ONE REGISTERED DURING YEAR 1938.

WELCOME.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	Total.
Ellerby ..	18	10	14	8	50
West Street ..	27	19	7	6	59
Burmantofts ..	30	32	23	14	99
Hunslet ..	16	9	9	6	40
University ..	62	53	39	7	161
Woodhouse ..	38	42	13	8	101
Holbeck ..	35	27	17	8	87
Armley ..	46	52	26	34	158
Barrack House	84	46	44	33	207
St. Nicholas ..	20	12	7	6	45
Bramley ..	31	33	20	9	93
Middleton ..	48	34	52	22	156
Meanwood ..	14	9	7	..	30
West Hunslet..	21	26	27	6	80
Cross Gates ..	12	16	16	4	48
Burley ..	19	24	12	3	58
Halton ..	16	7	12	2	37
Kirkstall ..	20	11	5	7	43
†Gipton ..	45	39	24	11	119
Totals ..	602	501	374	194	1,671

† Gipton Welcome opened 17th May, 1938.

ATTENDANCES MADE AT INFANT WELFARE CENTRES DURING
YEAR 1938

WELCOME.	Consultations and meetings.			Morning treatment.			
	Mothers.	Babies under 1 year.	Babies 1—5 years.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Callers.
Ellerby ..	2,791	2,314	1,272	8	586	102	61
West Street ..	1,267	2,742	1,514	3	445	101	8
Burmantofts ..	2,234	2,918	1,444	105	788	114	105
Hunslet ..	1,579	2,627	1,653	8	306	44	223
University ..	4,068	5,510	3,373	40	1,029	261	120
Woodhouse ..	2,457	5,453	2,964	26	637	66	25
Holbeck ..	1,837	4,238	1,856	3	1,000	147	44
Armley ..	2,637	5,554	3,313	306	1,416	1,537	351
Barrack House	3,219	8,537	4,685	3	1,842	107	99
St. Nicholas ..	2,115	2,000	1,449	28	590	68	437
Bramley ..	1,400	3,492	1,968	4	549	6	36
Middleton ..	4,109	3,288	4,453	24	293	125	40
Meanwood ..	108	1,702	881	3	363	48	5
West Hunslet..	1,327	4,661	2,331	174	1,240	147	344
Crossgates ..	407	1,092	756	1	88	2	5
Burley ..	657	4,325	2,011	2	784	212	15
Halton ..	239	1,627	1,342	2	101	19	11
Kirkstall ..	410	2,170	930	..	303	59	6
†Gipton ..	385	1,062	487	13	59	6	4
Totals ..	33,246	65,312	38,682	753	12,419	3,171	1,939

† Gipton Welcome opened 17th May, 1938.

Since May 18th, one half-day session has been held at the Lady Lane Chapel on the Gipton Estate. This is in the nature of an experiment, and was intended partly to relieve the overcrowding at East Leeds Clinic, and partly to cater for that side of the Gipton Estate.

Attendances at Centres.—The number of new babies under one year admitted to the Welcomes during 1938 was 5,132, between one and two years 602, and between two and five years 1,069.

Of the total children born during the year, 67.4 per cent. attended at one or other of the Welcomes, as compared with 64.8 per cent. last year. The total number of names on the registers at the Welcomes at the commencement of the year was 10,269 which with 6,803 new children registered during the year, made a total of 17,072. This is an increase of 753 on the previous year.

The total attendances of all babies at all the Welcomes during the year was 119,584, an increase of 6,963 on the figure for 1937.

The Infant Mortality rate for infants attending the Welcomes was 21 as against 64 for the city. The majority of babies who come for the first time are two weeks old or over, but 2,312 babies attended before they were a month old. There were 109 deaths in children between 2 weeks and a year old who had attended the Welcomes, as compared with 280 for the city. The corresponding rates for this age were 21.0 for the clinics and 37.8 for the city.

Infant Consultations.—The number of infant sessions at one centre is five a week, at two four, at five three, at five two, and at five one.

Medical Findings at the Welcomes.—The table on page 176 gives details of the condition of children on their admission to the different Welcomes during 1938, with the percentages of normal children for each clinic. Normal children represented 61.9 per cent. of the total in 1938 as compared with 59.4 per cent. in 1937 or 2.5 per cent. higher. The table on page 177 indicates the defects discovered in children during the year. The most prevalent conditions which have to be dealt with are feeding difficulties and minor digestive disturbances and rickets

DEFECTS DISCOVERED IN NEW CASES ON ADMISSION TO THE CLINICS IN 1938.

Condition.	Ellerby.	West Street.	Burmanthorpe.	Hunslet.	University.	Woodhouse.	Holbeck.	Armley.	Barrack House.	St. Nicholas.	Bramley.	Middleton.	Meanwood.	West Hunslet.	Crossgates.	Burley.	Halton.	Kirkstall.	*Gipton.	Total.
Normal ..	106	141	175	135	346	219	226	244	518	152	184	130	99	249	86	239	97	135	54	3,535
Malnutrition ..	36	25	49	34	28	75	16	41	41	38	63	22	4	5	16	29	2	26	6	556
Debility ..	11	8	16	3	3	4	24	5	1	1	14	3	5	21	3	1	1	1	4	31
Rickets ..	19	25	28	15	22	54	25	76	46	17	34	31	17	31	3	25	2	10	8	283
Minor digestive disturbances	13	4	18	5	7	17	8	15	3	3	22	8	1	6	5	15	5	4	1	50
Enlarged Tonsils and Adenoids	6	7	12	1	1	13	1	20	14	1	4	6	1	18	3	6	2	2	4	156
Developmental defects ..	2	5	2	2	5	9	5	2	12	12	3	4	1	1	4	1	1	4	4	131
Skin diseases ..	2	7	1	4	6	2	..	22	3	2	1	16	1	..	1	11	1	4	4	75
Bronchitis ..	..	7	2	4	3	7	..	2	3	..	3	4	..	..	3	3	..	2	6	84
Phimosis ..	..	2	1	4	2	..	..	2	3	..	..	..	..	..	..	3	..	6	3	47
Dental Caries ..	..	1	2	1	3	..	14	3	..	1	..	4	..	14	..	..	..	2	3	53
Infant feeding difficulty	4	..	1	4	2	12	10	20	11	7	3	7	..	7	..	11	..	6	..	113
Inflammatory eye conditions	4	2	4	2	8	3	12	29	35	2	..	..	..	8	..	1	..	2	..	122
Umbilical Hernia ..	..	10	..	3	17	2	10	6	1	..	2	2	..	3	..	1	..	..	..	23
Otorrhoea ..	1	2	1	1	1	11	2	12	8	6	5	6	6	1	1	7	..	3	..	95
Prematurity ..	5	4	9	3	4	3	2	..	1	..	2	1	..	3	..	1	..	..	..	14
Squint ..	1	..	1	1	..	2	..	..	1	..	..	..	..	2	..	..	..	..	..	7
Infectious Diseases	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	46
Acute Gastro Enteritis ..	..	1	2	1	1	..	..	2	1	3	2	1	..	15	..	..	..	1	..	7
Granulating Umbilicus	..	..	..	..	..	..	22	..	..	..	..	..	..	..	..	..	..	..	..	46
Infantile Paralysis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Nocturnal Enuresis	..	..	..	..	2	..	1	..	1	..	..	5	..	1	..	..	..	..	1	11
Cervical Adenitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Mental Deficiency ..	1	..	1	..	..	1	1	..	1	1	1	..	..	..	1	..	..	..	..	6
Abscess or minor sepsis	..	1	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	5
Mongol ..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Worms ..	..	..	..	..	..	2	4	..	1	..	..	2	..	4	..	2	..	..	..	17
Stomatitis ..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Veneral Disease ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Nasal Catarrh ..	..	..	7	1	5	12	10	8	9	7	8	8	5	10	7	6	..	4	..	109
Miscellaneous ..	..	2	..	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	215	247	339	227	490	479	395	540	728	266	359	291	146	404	136	369	110	209	107	6,057
Total number of cases included in the above ..	190	239	303	207	480	449	357	515	728	251	312	272	140	362	133	358	110	201	105	5,712
Percentage of Normal Children	55.8	59.0	57.8	65.2	72.1	48.8	63.3	47.4	71.2	60.6	59.9	47.8	70.7	68.8	64.7	66.8	88.2	67.2	51.4	61.9

*Gipton opened May 17th, 1938.

MEDICAL FINDINGS AT THE INFANT WELFARE CENTRES DURING 1938.

Condition.	Ellerby.	West Street.	Burmanthorpe.	Hunslet.	University.	Woodhouse.	Holbeck.	Armley.	Barrack House.	St. Nicholas.	Bramley.	Middleton.	Meanwood.	West Hunslet.	Crossgates.	Burley.	Halton.	Kirkstall.	*Gipton.	Total.
Defect—																				
Malnutrition	22	45	30	38	35	65	20	91	67	48	25	11	..	30	15	8	22	29	8	609
Debility	10	19	10	3	45	28	4	46	31	2	8	42	12	122	23	13	8	..	18	293
Minor digestive disturbances ..	26	55	47	46	130	69	76	139	160	82	54	65	16	158	21	70	26	44	43	1,289
Rickets	27	24	53	44	96	43	145	178	127	54	50	82	11	111	6	38	54	43	52	1,305
Skin diseases	9	27	21	18	54	40	92	100	105	21	15	23	11	111	6	26	33	19	17	748
Bronchitis	12	11	15	38	74	18	13	21	154	86	11	18	3	8	5	8	26	29	6	556
Developmental defects	40	11	58	10	10	12	14	39	16	20	66	14	10	11	3	15	21	17	1	388
Enlarged tonsils and adenoids ..	13	5	16	13	33	21	29	51	57	16	24	22	8	36	4	5	3	9	7	372
Inflammatory eye conditions ..	4	10	7	13	29	13	28	56	21	13	8	27	5	33	4	29	10	7	3	320
Inflammatory eye conditions ..	4	10	7	13	29	13	28	56	21	13	8	27	5	33	4	29	10	7	3	320
Otorrhoea	2	11	10	9	14	10	11	34	24	10	6	11	..	15	3	11	4	4	1	190
Dental caries	7	11	17	3	25	12	25	28	11	4	9	30	1	38	7	6	10	9	21	274
Infectious disease	..	..	6	1	2	8	2	6	5	4	11	3	..	5	..	..	10	2	..	63
Acute gastro enteritis	2	18	1	..	32	4	2	2	74	..	5	..	..	2	..	3	12	..	..	139
Umbilical hernia	..	..	..	..	..	3	35	58	80	..	..	..	3	24	3	..	20	..	7	309
Phimosis	..	16	..	..	47	..	..	78	28	..	..	..	..	..	5	..	..	..	21	198
Squint	3	5	2	6	15	6	6	13	8	5	2	12	2	11	3	..	4	2	2	107
Adenitis	17	9	13	2	17	8	5	..	25	2	7	12	3	4	..	6	..	1	6	129
Mental deficiency	..	1	..	..	..	3	..	..	1	1	..	3	..	2	..	1	..	1	..	19
Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	4
Rheumatism	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	1	..	..	3
Pneumonia	..	..	..	..	..	..	2	39	..	..	..	..	7	1	..	..	..	..	..	3
Worms	..	5	..	..	..	3	..	15	..	..	..	6	..	..	2	3	..	..	..	55
Prematurity	..	5	..	..	..	8	1	2	3	..	..	..	..	..	..	..	..	..	..	39
Infantile Paralysis	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
Granulating Umbilicus	..	..	..	2	..	1	7	..	..	..	..	..	..	..	..	..	..	..	..	2
Stomatitis	..	..	..	..	..	17	2	..	..	..	3	..	..	6	..	..	..	..	..	14
Anæmia	..	8	..	7	9	17	16	..	3	1	2	..	..	23	..	1	..	2	4	58
Nasopharynx Infection	1	..	1	..	..	..	95	..	..	..	..	..	..	115	..	..	..	..	8	51
Common Cold	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	210
Enuresis	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Rhinitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Miscellaneous	8	10	19	10	1	13	30	43	11	7	10	1	7	34	10	1	15	5	8	243
TOTALS	203	306	326	263	727	405	659	1,040	1,012	377	316	382	93	790	118	244	282	222	234	7,999

* Giption opened May 17th, 1938.

Investigation at the Centres.—The rate of growth is regarded as one of the essential measures of the general state of health and well-being in babies, and during the last few years we have been carrying out an investigation at eleven of the infant welfare centres, in an effort to contribute to a norm for the growth of healthy babies in the first year of life. The material consisted of records of weight and length of babies of both sexes measured at intervals from the 2nd to the 52nd week of life. Two other urban areas carried out a similar investigation, and the figures from all three have been analysed, and the findings published by Drs. Bradford Hill and Magee.

The figures were also divided into groups according as the infants were naturally or artificially fed, but it was found that comparison of the growth rates of these groups was of doubtful value, and to give data of any precision well-nigh impossible.

The chief objective of the investigation, however, was as already stated, to contribute to a norm for the growth of healthy babies during the first year of life, and this has been done. The average weights and lengths have been calculated for each sex for each week, and smooth curves fitted to them, which appear to give a good description of the observed rate of growth, and these should prove most helpful.

Child Guidance.—Although the establishment of a Child Guidance Clinic has been talked of for many years, it is unfortunate that we are still without any provision for the care and treatment of children of normal intelligence, who present problems or are suffering from behaviour defects.

The play groups continue to be held at most of the Centres during clinic hours. The trained psychiatric social worker left during the year, but voluntary workers who are especially interested in the work are helping in the running of the groups.

Leeds Babies' Welcome Association.—The Maternity and Child Welfare department continued to work in close co-operation with the Leeds Babies' Welcome Association during the year. The services of the voluntary workers at the Welcomes continue to be most helpful and much appreciated. I take this opportunity of extending the thanks of the Maternity and Child Welfare Committee and the

Health Department to the Association, President, Officers, Members of Committee and Helpers generally, for their valuable work throughout the year.

Central Clinic.—The work, as in previous years, included dental treatment to expectant and nursing mothers, and to children under five years; orthopædic consultations, artificial sunlight treatment, massage, electrical treatment and remedial exercises, diphtheria immunization and venereal diseases treatment. The number of mothers and children who attend Central Clinic is steadily increasing.

Dental Clinic.—The total number of new patients receiving dental treatment during the year was 927, which included 317 expectant mothers, 396 mothers and 214 children. The total for the previous year was 851.

The number of treatments was:—expectant mothers 2,863, mothers 8,537, and children 977, a total of 12,377, as compared with 10,748 in 1937.

Dentures were supplied to 454 mothers, of which 192 were full upper and lower plates, 46 full upper only, 21 full lower only, 45 partial upper, 36 partial lower, 48 remodels and 66 repairs. In addition, 42 plates had extra teeth added to them.

The total cost to the Corporation was £343 18s. 8d., and £478 15s. 3d. was recovered from the patients.

There is no regular dental inspection at the clinics by the dental officer, but arrangements are made for following up all cases of fillings both in mothers and children. These are given six-monthly appointments, though unfortunately they are not always kept. Of the 68 adults and 27 children who were given follow-up appointments, only 39 adults and 19 children attended.

Despite the fact that the benefits of good dental hygiene and early dental treatment for defective teeth are continually being stressed to the mothers attending the clinics, in health talks to groups and during individual consultations, it is still difficult to persuade many mothers to have the necessary treatment. An investigation was carried out at the Holbeck and West Hunslet clinics into the condition of the teeth of 420 mothers with the following results:—

	Holbeck	West Hunslet	Total
Number of patients	215	205	420
Number with satisfactory teeth or dentures	92	107	199
Number requiring dental treatment ..	123	98	221
Number who refused to see dentist ..	70	48	118
Number who promised to see dentist and for whom appointments were made	53	50	103
Number who kept those appointments	25	32	57
Number who defaulted	28	18	46
Percentage who had the necessary treatment	20.3	32.7	25.8
Percentage who refused any treatment	56.9	49.0	53.4
Percentage who defaulted	22.8	18.4	20.8

It will be noted that only 25.8 per cent. of the mothers requiring dental treatment attended, the figure 32.7 per cent. for West Hunslet being somewhat better than that of 20.3 per cent. for Holbeck. Approximately half of all the patients seen required dental treatment.

These are rather discouraging results, and show that the mothers attending those two clinics, at least, are not yet "tooth conscious."

Orthopædic Clinic.—A total of 429 children was referred to the clinic during the year. Most of the cases were seen at three-monthly intervals to ascertain progress.

The total number of attendances at the clinic was 842, an average of about 18 per session.

The following table indicates the type of case which is referred by the Welcome doctors to the clinic :—

Genu valgum	239
Genu varum	34
Flat foot	28
Talipes	19
Different types of paralysis	18
Torticollis	15
General rickets	8
Disease or deformity of spine	16
Disease or deformity of hip	8
Miscellaneous	44
	429

Four whole time trained masseuses attend regularly at Central Clinic and the various Welcomes ; two of them do artificial sunlight treatment as well. In addition, two temporary part-time masseuses do two sessions weekly at Central Clinic. During the year 15,907 massage treatments were given.

Nineteen cases were referred to hospital for operation, and two cases were admitted to Marguerite Home, Thorp Arch.

Appliances were supplied to 51 cases at a cost of £32 13s. 3d., of which £9 7s. 7d. was refunded by the parents.

Forty cases were transferred to the School Orthopædic Clinic on reaching the age of five years.

Artificial Sunlight.—This treatment was given at the Central Clinic and the Holbeck, Armley and Middleton Welcomes. Cases are mostly referred by clinic doctors, the orthopædic surgeon, and the General Infirmary. All cases are under the supervision of the doctor in charge.

The following table indicates the numbers attending those Clinics :—

Clinic.	Under 1 year.	1-5 years.	Total children.	Mothers.	Total treatments.
Central ..	33	718	751	6	11,434
Holbeck ..	124	130	254	..	1,746
Armley ..	25	315	340	..	2,609
Middleton ..	13	89	102	3	104
TOTAL ..	195	1,252	1,447	9	15,893

This shows an increase of 186 children treated, and an increase of 450 treatments as compared with the figures for last year.

Venereal Diseases Clinic.—There was a total of 65 patients treated at this clinic during the year. Of these the patients continuing from the previous year included 23 mothers, 5 expectant mothers and five infants. The new cases were 2 mothers, 15 expectant mothers and 15 infants.

AMOUNT OF DRIED MILK DISTRIBUTED IN LBS. (YEAR 1938).

WELCOME.	Free.	Assisted.	Full Price.	Issued through Public Assistance Committee.	TOTAL.
Ellerby	1,215½	708	732	44½	2,700
West Street ..	877	399	202	44	1,522
Burmantofts ..	1,828	1,380	486	24	3,718
Hunslet	1,116	947	730	32	2,825
University ..	3,372½	1,512½	1,184¾	244½	6,314¼
Woodhouse ..	2,060	1,213	1,242	84	4,599
Holbeck	1,371	927	949	42	3,289
Armley	1,121	749	1,645	96	3,611
Barrack House ..	4,362½	1,702½	1,678½	239¾	7,983¼
St. Nicholas ..	1,844	1,160	704	67	3,775
Bramley	1,264	786	902	66	3,018
Middleton ..	4,057	1,624	261	7	5,949
West Hunslet ..	552	359	1,387	26	2,324
Crossgates ..	444	214	330	85	1,073
Burley	1,269	769	976	64	3,078
Halton	153	97	372	23	645
Kirkstall ..	407½	366	739	26½	1,539
Gipton	990	371	108	121	1,590
External	839	117	16	..	972
Totals	29,143	15,401	14,644¼	1,336¼	60,524½

NUMBER OF RECIPIENTS, YEAR 1938 (DRIED MILK).

WELCOME.	Free.	Assisted.	Full Price.	TOTAL.
Ellerby	87	62	67	216
West Street ..	81	41	13	135
Burmantofts ..	123	63	36	251
Hunslet	84	72	96	252
University ..	325	78	97	500
Woodhouse ..	152	85	100	337
Holbeck	143	110	80	333
Armley	118	86	137	341
Barrack House ..	292	127	133	552
St. Nicholas ..	155	84	73	312
Bramley	70	48	87	205
Middleton ..	214	98	31	343
West Hunslet ..	87	30	60	177
Crossgates ..	41	16	40	97
Burley	122	59	82	263
Halton	14	10	24	48
Kirkstall ..	50	26	72	148
Gipton	79	32	7	118
External	171	40	2	213
Totals	2,408	1,196	1,237	4,841

AMOUNT OF COWS' MILK DISTRIBUTED IN PINTS. (YEAR 1938).

WELCOME.	Free.	1d. per pint.	2d. and 2½d. per pint.	3d. and 3½d. per pint.	TOTAL.
Ellerby	4,236	4,909½	2,433	..	11,578½
West Street ..	4,667½	1,614	1,626	..	7,907½
Burmantofts ..	8,469½	4,697	3,578½	..	16,745
Hunslet	1,091	1,662	2,208	..	4,961
University ..	9,001½	5,757½	3,580	..	18,339
Woodhouse ..	6,910	3,791	3,666	..	14,367
Holbeck	5,819½	4,688½	3,256	..	13,764
Armley	5,243	2,132½	2,367½	..	9,743
Barrack House ..	12,462½	3,805½	2,328	..	18,596
St. Nicholas ..	4,217½	2,232½	1,810	..	8,260
Bramley	4,456	1,658	1,402½	..	7,516½
Middleton ..	19,992	6,190	4,563	..	30,745
West Hunslet ..	4,391½	2,297	2,774	..	9,462½
Crossgates ..	1,306	500	275	..	2,081
Burley	3,663	914	917	..	5,494
Halton	614	129	..	..	743
Kirkstall ..	1,482	573½	267	..	2,322½
Gipton	797	555½	297	..	1,649½
External ..	2,447	1,302	1,391	..	5,140
Totals ..	101,266½	49,409	38,739½	..	189,415

NUMBER OF RECIPIENTS YEAR 1938.

WELCOME.	Free	1d. per pint.	2d. and 2½d. per pint.	3d. and 3½d. per pint.	TOTAL.
Ellerby	30	37	21	..	88
West Street ..	54	23	18	..	95
Burmantofts ..	65	54	32	..	151
Hunslet	11	13	9	..	33
University ..	87	50	27	..	164
Woodhouse ..	70	32	32	..	134
Holbeck	57	42	39	..	138
Armley	45	47	23	..	115
Barrack House ..	88	40	21	..	149
St. Nicholas ..	44	25	19	..	88
Bramley	38	15	14	..	67
Middleton ..	186	70	62	..	318
West Hunslet ..	43	26	26	..	95
Crossgates ..	9	6	5	..	20
Burley	25	13	11	..	49
Halton	5	3	..	..	8
Kirkstall ..	9	4	4	..	17
Gipton	8	7	2	..	17
External ..	49	24	26	..	99
Totals	923	531	391	..	1,845

NUMBER OF EGGS DISTRIBUTED (YEAR 1938).

WELCOME.				Free.	Assisted.	Total.
Ellerby	..	..	..	2,438	1,539	3,977
West Street	..	..	..	2,220	516	2,736
Burmantofts	..	..	..	3,396	3,579	6,975
Hunslet	..	..	..	456	156	612
University	..	..	..	6,880	2,514	9,394
Woodhouse	..	..	..	1,080	397	1,477
Holbeck	..	..	..	2,228	1,236	3,464
Armley	..	..	..	2,151	1,440	3,591
Barrack House	..	..	..	5,914	1,032	6,946
St. Nicholas	..	..	..	1,022	246	1,268
Bramley	..	..	..	2,030	1,248	3,278
Middleton	..	..	..	9,172	3,030	12,202
West Hunslet	..	..	..	1,662	1,140	2,802
Crossgates	..	..	..	804	198	1,002
Burley	..	..	..	1,746	684	2,430
Halton	..	..	..	156	..	156
Kirkstall	..	..	..	138	48	186
Gipton	..	..	..	378	474	852
External	..	..	..	1,586	564	2,150
Totals	..	..	..	45,457	20,041	65,498

NUMBER OF RECIPIENTS (YEAR 1938).

WELCOME.				Free.	Assisted.	Total.
Ellerby	..	..	..	31	26	57
West Street	..	..	..	42	14	56
Burmantofts	..	..	..	55	46	101
Hunslet	..	..	..	5	5	10
University	..	..	..	104	38	142
Woodhouse	..	..	..	21	9	30
Holbeck	..	..	..	43	28	71
Armley	..	..	..	21	9	30
Barrack House	..	..	..	71	18	89
St. Nicholas	..	..	..	13	3	16
Bramley	..	..	..	33	27	60
Middleton	..	..	..	122	52	174
West Hunslet	..	..	..	25	22	47
Crossgates	..	..	..	11	5	16
Burley	..	..	..	20	15	35
Halton	..	..	..	3	..	3
Kirkstall	..	..	..	3	2	5
Gipton..	..	..	..	9	6	15
External	..	..	..	36	19	55
Totals	..	..	..	668	344	1,012

WORK OF MILK STAFF.

	I. Quarter.	II. Quarter.	III. Quarter.	IV. Quarter.	Year.
Applications dealt with (new)	591	504	617	394	2,106
„ „ (repeat)	5,157	5,430	5,314	4,542	20,443
„ „ (refused)	..	..	..	..	..
No. of re-applications ..	218	336	209	193	956
*No. of external cases dealt with at the office ..	371	332	323	375	1,401
	6,337	6,602	6,463	5,504	24,906
No. of visits to Welcomes paid by the milk secre- taries	163	155	212	224	754

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

COST OF MILK DISTRIBUTION SCHEME FOR YEAR ENDED
31ST DECEMBER, 1938.

Expenditure	£	s.	d.	INCOME.	£	s.	d.
By salaries and wages	670	0	0	To cash received for			
„ Cost of dried milk	3,542	12	1	sale of dried milk	2,216	16	6
„ Cost of cows' milk	2,771	11	4				
„ Cost of eggs ..	455	4	8				
„ Printing, station- ery, etc... ..	64	1	8				
„ Superannuation Contributions ..	33	2	2				
„ Sundries	16	17	8	„ balance—loss ..	5,336	13	1
	£7,553	9	7		£7,553	9	7

Nett cost per head to Corporation, £0 13s. 10d.

Milk Distribution.—Particulars respecting the amount of liquid and dried milk supplied to mothers attending the Welcomes are given in the appended tables.

The Almoning Committee met on 50 occasions and considered 9,179 applications. This is 3,233 more than in the previous year.

Owing to the increased work of the almoning staff, an additional almoner was appointed in August.

During the year the amount of dried milk distributed in Leeds amounted to 27 tons, of which 13 tons were given free to 2,408 mothers and babies, and 13·4 tons were supplied at full or assisted rates to 2,433 mothers and babies. In 1937, the corresponding figures were 10·38 tons free to 2,155 mothers and 11·73 tons supplied at full or assisted rates to 2,550 persons.

A certain amount of dried milk was distributed at the Welcomes to cases in receipt of Public Assistance, the amount in 1938 being 0·6 tons as compared with 1·33 tons in 1937. The cost of this milk is defrayed by the Public Assistance Committee.

The amount of fresh milk distributed during the year was 12,658·3 gallons free to 923 mothers and babies, and 11,018·6 gallons at assisted rates to 922 persons; in 1937 the corresponding figures were 11,790 gallons free to 904 mothers and babies, and 10,465·9 gallons at assisted rates to 950 persons.

Convalescent Treatment for Mothers and Babies and Toddlers.—As in previous years, the arrangement for the convalescence of mothers with their babies through the Leeds Convalescent Society was continued on behalf of the Maternity and Child Welfare Committee. Most of the mothers were sent to the Homes at Withernsea and Harrogate, others being sent to different seaside and country homes. It is regrettable that the money allowed for this service has been cut down, allowing fewer mothers to be sent away. The service is excellent in every way benefiting not only the women themselves, but also their families, who have a mother returning to take up her home duties with renewed vigour and refreshed outlook.

Convalescence was arranged for 9 mothers and babies and 88 mothers without babies. The average period of stay at the Convalescent Home was 13·96 days. The nett cost to the Corporation of

this provision was £394 11s. 9d., or an average of £2 os. 9½d. per case per week.

In addition, 144 children between 3 and 5 years were sent for convalescence to Meanwood Convalescent Home. The average stay of each child was 22·45 days, and the cost to the Corporation was £3 9s. 5d. per case. The total cost to the Corporation was £500 6s. 10d., of which £16 18s. 0d. was refunded by the parents.

Infants' Hospital, Wyther.—The Hospital continued to be a most useful part of the Maternity and Child Welfare service. Details of the work are given in the tables on pages 187 and 188.

The cases admitted to the Hospital consisted for the most part of children suffering from dietetic disorders, malnutrition, marasmus and rickets with various accompanying ailments.

The majority of the recommendations came from the Welcome doctors, but several cases were referred from the orthopædic clinic, the General Infirmary, the Health Clinic and the Public Dispensary.

The 50 cots which the Hospital provides were well occupied during the year. Apart from the five who died, the children all did well. There can be no doubt of the advantage of this Hospital to these young children; not only are lives saved, but crippling deformities and disabilities, which would handicap the children throughout life, are prevented.

Plans are at present under consideration for a modern up-to-date Hospital to take the place of the adapted house at present in use. It is hoped that this time nothing will intervene to prevent these proposals materialising.

SUMMARY OF CASES TREATED IN THE INFANTS' HOSPITAL, WYTHER.

	Males.	Females.	Total.
Remaining in Hospital, January 1st, 1938	22	23	45
Admitted during the year ..	67	59	126
Discharged during the year ..	64	60	124
Died during the year	3	2	5
Remaining in Hospital, December 31st, 1938	22	20	42

Mortality rate per cent. on admission 4·0. Average stay in Hospital 97 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.	
20	47	13	46	33	93	126

ANALYSIS OF CASES TREATED DURING 1938.

Reason for admission.	Under one year.		Over one year.		Total.
	M.	F.	M.	F.	
Rickets	..	..	20	9	29
Rickets and bronchitis	..	..	..	1	1
Rickets and malnutrition	..	..	2	5	7
Rickets with deformity	..	..	2	9	11
Spinal kyphosis	..	..	1	..	1
Malnutrition	12	5	18	26	61
Malnutrition and bronchitis	1	..	4	4	9
Malnutrition and otorrhoea	..	..	2	1	3
Marasmus	7	11	1	1	20
Bronchiectasis	..	..	..	1	1
Talipes	..	..	..	1	1
Broncho pneumonia	1	..	3	..	4
Bronchitis	2	..	1	..	3
Prematurity	1	1	..	..	2
Acute gastro enteritis	1	..	..	..	1
Tuberculous broncho pneumonia	1	..	..	..	1
Tuberculous meningitis	1	..	..	..	1
Pink disease	..	..	1	..	1
Dietetic	..	2	..	..	2
Severe anaemia	..	..	..	2	2
Thyroid deficiency	..	..	2	..	2
Haemoplegia	..	..	1	..	1
Infantile paralysis	..	..	..	1	1
Paralysis	..	..	..	1	1
Congenital heart disease	2	1	..	..	3
Infantile eczema	1	..	..	..	1
Purpura	..	..	1	..	1
TOTAL	30	20	59	62	171

Day Nursery.—The premises at Blenheim Lodge are being used to full capacity, and there is always a waiting list.

The number of children admitted for the first time during the year was 47, as compared with 71 for the previous year. The total attendances are given in the accompanying table.

Residential Nursery.—There were 37 children in residence on January 1st, 1938, 160 cases were admitted during the year, 170 discharged, and 27 remained in residence on December 31st, 1938.

The reasons for admission were as follows :—

Illegitimate children	..	..	..	..	8
Mother expecting confinement	..	..	..	..	85
Illness of mother	..	..	..	..	58
Mother going for convalescence	..	..	..	..	24
Death of the mother	..	..	..	..	15
Mother working	..	..	..	..	4
Removed from parents by Home Office Order	..	..	..	..	3

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I should like once more to express my own appreciation and that of the Maternity and Child Welfare Committee, of the work of the Executive Committee of the Day and Residential Nurseries, whose services given ungrudgingly have been of great value.

TOTAL ATTENDANCES OF CHILDREN AT THE RESIDENTIAL AND DAY NURSERIES, IN AGE GROUPS, FOR THE YEAR ENDED 31ST DECEMBER, 1938.

Nursery.	Whole day attendances.				Half day attendances.			
	Under 3 years.	3-5 years.	Over 5 years.	Total.	Under 3 years.	3-5 years.	Over 5 years.	Total.
Spring Bank Residential Nursery ..	12,602	..	..	12,602	..	..	..	..
Blenheim Lodge Day Nursery	7,055	1,967	..	9,022	656	112	1	769

Health Week.—October 3rd—8th, 1938.—The educational work of the Maternity and Child Welfare Department goes on continuously during the year, but during Health Week in the beginning of October additional special efforts were made.

All the doctors at the Clinics gave short talks, their subjects dealing chiefly with diet, milk, teeth, ante-natal care and diphtheria immunisation. The health visitors also gave talks, and the health visitors and voluntary workers arranged little demonstrations and exhibitions. The latter dealt for the most part with diet, specimen meals for the different ages, cooked dinner for five at cost of 1/-, vitamin charts, mannequin parades for clothing, the care of milk and feeding bottles, a toddler's day, safety first, first aid in the home, improvised cots, specimen lying-in rooms, etc.

Appropriate educational posters were also exhibited.

Inspection and Supervision of Food.

**INCLUDING REPORTS OF THE
CHIEF VETERINARY OFFICER**

MR. J. A. DIXON, M.R.C.V.S.,

on

- (i.) Meat Inspection.
- (ii.) Diseases of Animals Acts.
- (iii.) Milk and Dairies.

also Reports on the Administration of

- (i.) The Food and Drugs Acts and Regulations.
- (ii.) The Fertilisers and Feeding Stuffs Act, 1926.
- (iii.) The Pharmacy and Poisons Act, 1933, Part II.
- (iv.) The Rag Flock Acts, 1911 and 1928 ;

and the

REPORT OF THE CITY ANALYST,

MR. C. H. MANLEY, M.A., F.I.C.,

on The Municipal Laboratory.

MEAT INSPECTION.

BY

J. A. DIXON, M.R.C.V.S., *Chief Veterinary Officer.*

Slaughter-houses.—During the year the number of private slaughter-houses was reduced by two, one being a licensed slaughter-house which was demolished consequent upon a road widening scheme, and the other being a registered slaughter-house which was acquired by the Corporation and later demolished under the terms of a slum clearance Order.

SLAUGHTER-HOUSES IN USE.

	Number in use on December 31st.					
	1920	1934	1935	1936	1937	1938
Public Abattoir	1	1	1	1	1	1
Private slaughter-houses (registered)	63	39	36	36	36	35
Private slaughter-houses (licensed)	8	9	8	8	7	6
Knackers' Yards	2	1	1	1	1	1

The inspectors paid a total of 5,488 visits to the 41 private slaughter-houses, an average of 133 visits, or approximately 2.5 visits per week, to each slaughter-house.

ANIMALS SLAUGHTERED IN THE PUBLIC ABATTOIR AND IN PRIVATE SLAUGHTER-HOUSES.

	Year.	Cattle.	Calves.	Sheep.	Pigs.	Total.
Public Abattoir ..	1936	30,714	25,576	81,135	11,859	149,285
	1937	29,497	18,758	75,278	10,556	134,089
	1938	26,947	18,101	93,323	5,567	143,938
Private Slaughter-Houses ..	1936	13,655	16,199	60,144	52,663	142,661
	1937	13,575	8,650	49,273	53,968	125,466
	1938	11,664	6,704	51,736	53,173	123,277

It will be seen from the foregoing table that although the number of cattle slaughtered in both the Public Abattoir and private slaughter-houses has decreased, the number of sheep

slaughtered has increased, and it has been ascertained that this change is general throughout the country. It is regarded by the meat trade as due to the scarcity of fat cattle throughout the country, but more particularly to a change in the public taste, which for the last few years has shown an increased partiality for mutton and lamb. With regard to pigs, though the number slaughtered at the Public Abattoir is smaller, that slaughtered at private slaughter-houses remains almost stationary. Yet in spite of the drop in the number of cattle and pigs, the Public Abattoir remains inadequate for the City's needs. This disability is likely to be emphasised in the near future when, under the provisions of the Food and Drugs Act, 1938, it is anticipated that a considerable number of private slaughter-houses will be abolished, and the need for better and more adequate provision in a public abattoir will become increasingly urgent.

CARCASES INSPECTED AND CONDEMNED.

A.—FOR TUBERCULOSIS.

	Cattle (exclud- ing cows)	Cows	Calves	Sheep and Lambs	Pigs
Numbers killed	27,129	11,482	24,805	145,059	58,740
Numbers inspected	27,129	11,482	24,805	145,059	58,740
Whole carcasses condemned	82	156	4	1	51
Carcasses of which some part or organ was con- demned	927	1,028	1	..	1,822
Percentage of number in- spected affected	3.71	10.31	0.02	0.00	3.19
*					

B.—FOR DISEASES OTHER THAN TUBERCULOSIS.

Cattle (Including Cows)	Calves	Sheep and Lambs	Pigs
96 whole carcasses	155 whole carcasses	153 whole carcasses	62 whole carcasses
37 part carcasses 2 loins and flanks 3 skirts 56 heads and tongues 31 full beef offals 1,053 livers 191 kidneys 21 hearts 8 spleens 38 udders 112 lungs	2 part carcasses 1 pluck	18 part carcasses 7 trunks 212 plucks	16 part carcasses 2 heads 902 plucks 21 sets of rops

Meat and other Foods Inspection.—At the Public Abattoir and Kirkgate Market, the inspection of meat and other foods is carried on by the Chief Veterinary Officer and two lay inspectors, and all animals are examined ante-mortem and post-mortem. The private slaughter-houses, shops and vehicles used for the sale of meat are examined by two other lay inspectors, and although, as far as can be known, every animal at private slaughter-houses is examined post-mortem, circumstances do not always permit of every animal being examined ante-mortem.

Meat and other foods condemned as unsound.—The appended table indicates the amounts of diseased and unsound meat and other foods condemned and disposed of during the year.

MEAT, ETC., DESTROYED BY CONSENT.

	1938.	1937.	1936.	1935.
Beef	158,753 lbs.	162,079 lbs.	226,459 lbs.	217,021 lbs.
Veal	6,432 "	5,590 "	5,946 "	6,965 "
Mutton	10,883 "	9,323 "	10,787 "	9,189 "
Bacon and Ham ..	..	..	..	40 "
Pork	29,738 lbs.	34,158 lbs.	41,071 lbs.	41,314 "
Offals	110,184 "	121,026 "	101,784 "	89,287 "
Rabbits	10,831 "	7,844 "	11,624 "	7,446 "
Poultry	1,540 "	2,209 "	7,521 "	785 "
Game	73 "	27 "	174 "	73 "
Cheese	..	..	280 "	18,127 "
Fish	27,721 lbs.	29,433 lbs.	35,957 "	37,895 "
Shellfish	31,921 "	30,786 "	11,770 "	29,065 "
Fruit	8,471 "	12,649 "	9,455 "	6,627 "
Vegetables	91,763 "	50,085 "	124,633 "	44,861 "
Edible fungi	788 "	94 "	40 "	205 "
Inedible fungi ..	..	..	..	..
Yeast	..	..	..	..
Tinned Goods ..	1,900 lbs.	2,626 lbs.	2,864 lbs.	2,761 lbs.
Sundries	30 "	75 "	..	5,043 "
TOTALS ..	491,028 lbs.	468,004 lbs.	590,365 lbs.	516,704 lbs.
No. of Eggs ..	612	1,728	468	304

Slaughter of Animals Act, 1933.—During the year, 12 licences to slaughter or stun animals were granted by the City Council, all of which will expire on January 1st, 1941; 3 licences which expired on January 1st, 1938, were renewed during the year, and applications for the renewal of 21 licences which expire on January 1st, 1939 have been received and approved.

Shellfish.—The condition of all shellfish coming into the city for sale continues to receive special attention. Oysters are received from Whitstable, Colchester, Cornwall, King's Lynn, Carlingford (Eire) and Yeasake (Holland); and mussels from King's Lynn, Lindisfarne (Northumberland), Lytham St. Anne's and sources in Scotland, Eire and Holland. Samples of oysters and mussels from the main sources of supply were submitted for bacteriological examination and found to be satisfactory but samples of mussels from Dumfries, Musselburgh and Creetown and Omeath (Eire) were reported to be unsatisfactory. The wholesale fishmongers to whom the mussels were forwarded were each advised by letter that the mussels were not considered fit for human consumption and they undertook not to receive mussels from these four sources.

Public Health (Meat) Regulations, 1924.—The following is a summary of the cases taken into court under the Regulations during the year.

No.	Article.	Result of Hearing.					Remarks.
1	21 (1) (b)	Fined	£2..	..	..	..	Meat carrier
2	9	Fined	£1..	..	..	..	Butcher
3	9	Fined	£2..	..	..	..	Employee

Food-preparing Places.—The following table gives a summary of the work done under Section 44 of the Leeds Corporation Act, 1930 :—

Number of premises on the register	..	..	224
Applications submitted for registration	..		10
Applications approved :—			
(a) Pork butchers	..	..	3
(b) Beef butchers	..	..	5
(c) Potted meat makers	..	..	1
(d) For preparation of meat pies and cooking of tripe, etc.	..	..	1
		—	10
Applications disapproved	..	..	..
Number of visits to food-preparing places	..		208

DISEASES OF ANIMALS ACTS.

BY

J. A. DIXON, M.R.C.V.S., *Chief Inspector.*

During the year, under the provisions of the Agriculture Act, 1937, the strictly veterinary duties of local authorities under the Diseases of Animals Acts and Orders were taken over by the Ministry of Agriculture and Fisheries who have established a State Veterinary service and renamed the section dealing with the diseases of animals the "Animal Health Division." At the same time the Chief Veterinary Officer for the City retained the post of Chief Inspector for these Acts and Orders, with responsibility for their enforcement. Although the Ministry of Agriculture and Fisheries assumed responsibility for the strictly veterinary duties, they approached the City Council with a request that the Corporation's Chief Veterinary Officer should continue to inspect the Victoria Cattle Market and Whitkirk Auction Mart as heretofore, and for this purpose the Chief Veterinary Officer was appointed the Local Veterinary Inspector for the Ministry and as such has been called upon not only to inspect the markets but also to carry out diagnostic inquiries into reported outbreaks of scheduled diseases. The work of the Chief Veterinary Officer in this connection is therefore very little changed; he continues to inspect the livestock markets and to carry out work under the Tuberculosis Order, the Anthrax Order, and other Orders, as required by the Ministry of Agriculture and Fisheries, and in addition he is called upon frequently to undertake inquiries into reported outbreaks of swine fever, which work, before the establishment of the State Veterinary Service, had always been done in this City by the Ministry's whole-time Inspectors. The most important change brought about by the Act is that the City Council now receives a considerable revenue from the Ministry of Agriculture and Fisheries in respect of fees and the travelling expenses of the Chief Veterinary Officer,

Tuberculosis Order of 1925.—This Order ceased to have effect when the Tuberculosis Order of 1938 came into operation on the 1st April. The new Order in its effect is merely a repetition of the previous Order except that all work of a veterinary character under the Order is now organised by the Divisional Inspector of the Ministry, and all claims for compensation in respect of animals slaughtered are settled direct by the Ministry.

ANNUAL RETURN OF THE WORKING OF THE TUBERCULOSIS ORDER
OF 1925, FOR THE QUARTER ENDING 31st MARCH, 1938.

TOTAL NUMBER OF ANIMALS REPORTED	17
(a) By Owner	10
(b) By Veterinary Officer acting under the:—	
1. Milk and Dairies Order, 1926	1
2. Milk (Special Designations) Order, 1936	4
3. Tuberculosis Order of 1925	2
ANIMALS EXAMINED	438
(a) Cows in milk	368
(b) Other Cows or Heifers	65
(c) Other Bovine animals.. .. .	5
ANIMALS TESTED WITH TUBERCULIN	..
ANIMALS FOUND DISEASED	11
(a) Having Tuberculosis of the Udder	3
(b) Giving Tuberculous Milk and showing lesions of Tuberculosis	..
(c) Suffering from Tuberculous Emaciation	..
(d) Affected, but not as in a, b, or c	8

Tuberculosis Order of 1938.—The table hereunder is compiled from information supplied to the local authority by the Ministry of Agriculture and Fisheries.

No. of suspected animals reported or found.	No. of animals slaughtered.		No. of animals found to be not amenable to the Order.
	Affected with tuberculosis (not being advanced tuberculosis)	Affected with advanced tuberculosis.	
72	23	40	9

Swine Fever Order of 1908 or Swine Fever Order of 1938.—During the year there were received 21 reports of suspected swine fever, all of which were investigated by the Veterinary Inspector on behalf of the Ministry of Agriculture and Fisheries. In 2 cases the diagnosis was confirmed, as compared with 4 in the previous year.

No proceedings were taken during the year for infringements of the Orders.

Regulation of Movement of Swine Order of 1922.—The administration of this Order has necessitated the issue of 899 licences for the dispersal of 9,538 pigs from the Whitkirk Auction Mart, and 1,006 visits have been paid to pig-keeping premises to ascertain whether the recently-removed store pigs were detained and isolated for the appropriate period.

Movement of Animals (Records) Order of 1925.—The need for proceedings in respect of infringements of the Order did not arise during the year.

Transit of Animals (Amendment) Order of 1931.—This Order has, on the whole, been satisfactorily observed by the persons engaged in the transportation of livestock by road. No proceedings were necessary in respect of contraventions of the Order.

Parasitic Mange Orders of 1911 and 1918 or Parasitic Mange Order of 1938.—No case of parasitic mange was reported during the year.

Exportation and Transit of Horses, Asses and Mules Order of 1921.—No horses, asses or mules were despatched from the city for slaughter at British ports during the year.

Anthrax Order of 1928 or Anthrax Order of 1938.—During the year, 2 cases of suspected anthrax were reported, but microscopic examination of the blood gave a negative result in both cases, and on post-mortem examination of the carcasses it was found that death was due to other causes.

Sheep Scab Order of 1928 or Sheep Scab Order of 1938.—No case of sheep scab occurred in the city during the year.

Several consignments of contact sheep were received for immediate slaughter in the city and the skins were immersed in an approved sheep dip in accordance with the Order.

Foot-and-Mouth Disease Order of 1928.—No case of this disease occurred in the city during the year, and the city was not affected by the various Orders made by the Minister of Agriculture and Fisheries in connection with outbreaks of foot-and-mouth disease in other parts of the country.

Animals (Landing from Ireland, Channel Islands and Isle of Man) Order of 1933.—The administration of this Order has entailed the issue of 100 licences for the removal from the Victoria Cattle Market of 447 cattle recently landed from Ireland. In addition to these, 216 licences were issued for the movement of 2,504 cattle and 10,660 sheep recently landed from Ireland but dispersed without passing through the Victoria Cattle Market.

Irish store cattle to the number of 46 were received at premises in the city, and these were all duly inspected on arrival, and further visits paid to see that they were isolated and detained for the prescribed period of six clear days following their arrival, in accordance with the Order.

No proceedings were necessary under the Order during the year.

Importation of Canadian Cattle Order of 1933.—No Canadian cattle were received in the city during the year.

Warble Fly (Dressing of Cattle) Order of 1936.—Careful observation of cattle kept on premises in the city failed to reveal any animal infested with this parasite, but observation of fat cattle arriving for sale in the markets and arriving at the Public Abattoir for slaughter revealed a number of infested animals, the majority of which were of Irish origin.

General.—The following Orders were issued by the Minister of Agriculture :—

- *Anthrax Order of 1938.
- *Cattle-Plague (Amendment) Order of 1938.
- *Epizootic Lymphangitis Order of 1938.
- *Foot-and-Mouth Disease (Amendment) Order of 1938.
- *Parasitic Mange Order of 1938.
- *Pleuro-Pneumonia (Amendment) Order of 1938.
- *Rabies Order of 1938.
- *Sheep Scab Order of 1938.
- *Swine Fever Order of 1938.
- *Animals (Miscellaneous Provisions) Order of 1938.
- *Tuberculosis Order of 1938.
- *Glanders or Farcy Order of 1938.
- *Sheep-Pox Order of 1938.
- Importation of Horses, Asses and Mules (Great Britain)
Order of 1938.
- Importation of Canadian Cattle (Amendment) Order of 1938.
- Foot-and-Mouth Disease (Infected Areas Restrictions) Order
of 1938.
- Foot-and-Mouth Disease (Controlled Areas Restrictions)
General Order of 1938.

The two Orders relating to foot-and-mouth disease are new, and are intended to be standing Orders which can be applied at any moment when the city is declared by the Minister to be in either an infected area or a controlled area.

* These Orders were issued consequent upon the application of the provisions of Part IV. of the Agriculture Act, 1937, and became operative as from the 1st April, 1938.

MILK AND DAIRIES.

BY

J. A. DIXON, M.R.C.V.S., *Chief Veterinary Officer.*

The most notable event of the year in this connection is that although the local authority remains responsible for the administration of the Milk and Dairies Acts and Orders and continues to be the licensing authority under the Milk (Special Designations) Orders, the Ministry of Agriculture and Fisheries on the establishment of the State Veterinary Service as from 1st April, 1938, took over the veterinary inspection, and where necessary, the tuberculin testing, of dairy cows.

At first it was expected that the Chief Veterinary Officer as a local veterinary inspector of the Ministry would be requested to continue this work on behalf of the Ministry, but it was later decided that so far as was possible, the Ministry would do this work with their whole-time veterinary inspectors and call upon the services of the local authority's veterinary officer only as and when required. As a result of this arrangement it was decided to postpone the appointment of an Assistant Veterinary Officer in place of Mr. E. F. McCleery (who had been appointed to the Corporation of the City of London), pending observations as to how the work proceeded. During the month of April the local authority's veterinary officer carried out the routine dairy inspections on behalf of the Ministry, but for the remainder of the year this work was done by the Ministry's whole-time inspectors.

During the three months prior to the operation of the Agriculture Act, 1937, the Veterinary Officers found on their routine inspection of dairy farms, 15 cows affected with disease, one having tuberculosis of the udder, two tuberculosis in other forms and 12 having diseases other than tuberculosis. In all cases, the animals were dealt with in accordance with the provisions of the Milk and Dairies (Consolidation) Act, 1915, and the Tuberculosis Order of 1925. No case of contagious abortion was found.

Town-produced Milk.—As compared with the previous year, the number of cowsheds was reduced from 149 to 139 with a corresponding reduction in the average number of milk cows kept at these farms from 2,665 to 2,576. So long as the building of houses on the fringe of the city continues without a corresponding extension of the city boundary, it must be anticipated that dairy farms will continue to disappear and the amount of home produced milk diminish accordingly.

Country Milk.—As previously mentioned, country-produced milk becomes increasingly important each year, and it is noticeable that there is a considerable expansion in the amount of country-produced milk received at the wholesale dairies in the city. By visits to the wholesale dairies and to railway stations at times when milk is arriving, and the taking of samples for chemical, bacteriological and biological tests, every effort is made to ensure that the milk is sound and of good quality and that the methods of transport are satisfactory.

The retail dairies are supervised by the Sampling Officers under the Food and Drugs (Adulteration) Act, and they, as officers of the Food and Dairies Section of the Public Health Department are closely associated with the Chief Veterinary Officer and the Cowsheds and Dairies Inspector.

During the year, the premises of a retail purveyor were removed from the register of retail dairy premises by reason of the fact that the public health was likely to be endangered by the carrying on from those premises of the trade of a milk purveyor.

Legal proceedings were also instituted against a retail purveyor of milk who continued to carry on his trade from unregistered premises after conviction by the Stipendiary Magistrate for his offence in the previous year under the Milk and Dairies (Consolidation) Act, 1915. He was bound over for a year on condition that he ceased to carry on his trade from unregistered premises.

Graded Milk and Issue of Licences.—The number of licensed producers of "Accredited" milk increased from 71 to 73, with approximately 1,569 cows. During the first quarter of the year at these farms the Corporation's Veterinary Officers carried out the

quarterly clinical inspection of the cows as a free service. Samples of milk were collected from all licensed producers each quarter, and of the 396 routine samples examined, 327 were found to be satisfactory. Where the samples were unsatisfactory appropriate action was taken and further samples examined until the milk conformed to the bacteriological standard laid down in the Order.

The number of "Tuberculin Tested" herds in the city was reduced from 6 to 4 by reason of the fact that two producers found it more economical to revert to the production of "Accredited" milk. The approximate number of cows in the remaining four herds is 135.

During the year, owing to breaches of the conditions under which their licences were held, it was necessary to report four producers of "Accredited" milk to the Committee with a view to the suspension or revocation of their licences. In the case of three of the producers it was decided to take no action since the methods of production, in the interval between the reports to Committee and the hearing of the evidence had considerably improved. In the case of the fourth producer—a woman—it was decided to suspend the licences to produce "Accredited" milk at her three farms and the licensee decided to lodge an appeal to the Ministry of Health against the Council's decision. Before the appeal could be decided, however, the licensee died. Subsequently her successors applied to be licensed at the three farms and the applications were granted subject to an undertaking to carry out certain improvements in the methods of milk production at each of the three farms in question.

The sale of "Pasteurised" milk continues to expand, although no additional licences were issued during the year. The licensed pasteurising establishments are supervised by the Sampling Officers who pay regular and frequent visits to them for the purpose of inspection and examination of the records.

Samples are taken from each licensed establishment weekly and are submitted to the Phosphatase test in addition to being examined bacteriologically. In 19 cases only was the maximum number of bacteria laid down in the order exceeded, and the Phosphatase test revealed inefficient pasteurisation in but 2 of the 282 samples examined.

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS)
ORDERS, 1936 AND 1938.

Description of Licences.	Number in force on 31st December	
	1937	1938
To use the designation "Tuberculin Tested"—		
1. To produce and bottle	6	4
2. To produce, but not bottle	2	..
3. To sell by retail	132	118
4. To bottle and sell	2	2
To use the designation "Accredited"—		
1. To produce and bottle	8	10
2. To produce, but not bottle	66	65
3. To sell by retail	53	50
4. To bottle and sell	2	2
To use the designation "Pasteurised"—		
1. Pasteurisers' Licences	5	4
2. To sell by retail	32	28

Dairy Farms, Milk Shops and Milk Sellers.—The following tables show the number of registered dairy farms, milkshops and milk sellers in the city on December 31st, 1938.

DAIRY FARMS.

On the register on December 31st, 1937	149
Added to the register during the year	2
Removed from the register during the year	12
On register on December 31st, 1938	139

COWKEEPERS.

On the register on December 31st, 1937	137
Added to the register during the year	1
Removed from the register during the year	12
On the register on December 31st, 1938	126

MILKSHOPS.

On the register on December 31st, 1937. (The total of 509 includes the premises of 44 retail purveyors of milk in the surrounding County area who are registered to sell milk within the area of the Leeds City Council)	509
--	-----

Added to the register during the year	6
Removed from the register during the year	53
On the register on December 31st, 1938 (including the premises of 36 retail purveyors of milk in the surrounding County area)	462

RETAIL PURVEYORS OF MILK.

Retail purveyors of milk on the register on December 31st, 1937. (The total of 529 includes 44 retail purveyors of milk with premises in the surrounding County area who are registered to sell milk within the area of the Leeds City Council)	529
Added during the year	6
Removed from the register during the year	51
On the register on December 31st, 1938 (including 36 retail purveyors of milk in the surrounding County area)	484

The following visits were paid during the year by the Food and Drugs Inspectors, and Cowsheds and Dairies Inspectors in connection with the Milk and Dairies Acts and Orders :—

	VISITS.
To milkshops	1,124
To cowsheds	2,206
To railway stations.. .. .	107
To farms or milkshops <i>re</i> infectious disease	7
To food shops and bottled milk stores	489

Biological Tests.—During the year 221 samples were submitted to the City Bacteriologist for biological investigation for the presence of tubercle bacilli. Of these, 5 were special samples, and one a control sample, taken in connection with the administration of the Tuberculosis Order and two of these were found to contain tubercle bacilli. Of the remaining 215, which may be considered as routine samples, 8 (3.72 per cent.) were found to be tuberculous. Five of the 8 positive samples were from milk produced in the West Riding, one from milk produced in Cumberland and 2 from milk produced in the city. Investigations into the sources of supply of these positive samples revealed in two cases cows suffering from tuberculosis of the udder. These animals were subsequently slaughtered under the provisions of the Tuberculosis Order.

The accompanying table gives details :—

BIOLOGICAL TESTS.

Ordinary Samples.	No.	Positive.	Negative.
" Tuberculin Tested " milk	33	1	32
" Accredited " milk	64	2	62
" Pasteurised " milk	8	..	8
Ungraded milk	110	5	105
TOTAL	215	8	207

Samples taken under the Tuberculosis Order.			
	No.	Positive.	Negative.
Control Samples—			
" Tuberculin Tested " Milk ..	1	..	1
Special samples—			
" Tuberculin Tested " milk ..	3	2	1
Ungraded milk	2	..	2

Public Health (Prevention of Tuberculosis) Regulations, 1925.—

It was not found necessary to take action under these Regulations during the year.

Leeds Corporation Act, 1930.—Ice Cream.—The following table shows a summary of the work done during the year.

Number of premises registered for the manufacture for sale of ice cream	6
Number of premises registered for the sale of ice cream ..	78
Number of instances where registration was refused :—	
(a) for premises used for manufacture for sale	..
(b) for premises used for sale	2
Number of premises removed from the register :—	
(a) used for manufacture for sale	7
(b) used for sale	22
Number of visits paid :—	
(a) to premises used for manufacture for sale	1,652
(b) to premises used for sale	1,079
(c) to premises used as depôts for storage of ice cream	18
(d) to fairgrounds	4
Number of contraventions found on premises	33
Number of contraventions removed	33
Number of samples of ice cream taken for bacteriological examination in departmental laboratory	56
Number of samples of ice cream and ice cream powder submitted to City Analyst	50
Number of premises on the register 31st December, 1938—	
(a) used for manufacture for sale of ice cream	123
(b) used for the sale of ice cream	423

Departmental Laboratory.—During the year 1,857 samples of milk were submitted to the Departmental Laboratory for bacteriological examination. Of this number 101 were of "Tuberculin Tested" milk, 964 "Accredited" and 281 "Pasteurised" milk, the remainder (511) being of ungraded milk. These samples were taken at farms and distributing centres, in course of delivery to local institutions, at railway stations and from road vehicles used for the conveyance of milk. The accompanying tables give detailed information of the results of the tests applied.

Of the total of 1,065 samples of graded milk (excluding "Pasteurised" milk) 32 samples of "Tuberculin Tested" and 264 samples of "Accredited" milk failed to comply with the standard laid down in the Milk (Special Designations) Order, 1936. Of these unsatisfactory samples, 3 samples of "Tuberculin Tested" milk and 69 samples of "Accredited" milk were from farms within the city. In each case appropriate action was taken to prevent the recurrence of the offence.

Ice-cream.—Samples of ice-cream from local vendors to the number of 56 were submitted for bacteriological examination. The results are shown in the tables on pages 209 and 210.

Milk samples tested by the Gerber Method.—During the year 2 samples of milk were tested in the Departmental Laboratory by the Gerber Method, the results being as follows:—

Total.	Genuine.	Deficient in fat only.	Deficient in Solids-not-fat only.	Deficient in fat and Solids-not-fat.
* 2	1	1	..	..

* These were all informal samples.

The average composition of the two samples was:—

Fat		2.25 per cent.
Solids-not-fat		8.70 per cent.

Total solids		10.95 per cent.
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Miscellaneous.—Samples of water from farms and other premises, 52 in all, were examined for the presence of coliform bacillus with the following results :—

Containing coliform bacillus in 1 c.c.	..	..	9
Free from coliform bacillus in 1 c.c.	..	..	43

The following investigations were also undertaken :—

Milk for the presence of tubercle or other bacilli	15
Sputum for the presence of tubercle or other bacilli	 6

Other work :—

Rinsings from milk churns examined as to sterility	1
Rinsings from filter cloth examined as to sterility	1
Microscopic slides prepared and examined	.. 44
Tubes of media prepared	 4,018

SAMPLES EXAMINED BY THE METHYLENE BLUE REDUCTION TEST.
WINTER PERIOD (1st November—30th April).
minimum reduction period allowed, 5½ hours.

Time hours	Town produced milk.		Institution		Road-borne		Rail-borne		Un- graded	Total
	T.T.	Ac- credited	T.T.	Ac- credited	T.T.	Ac- credited	T.T.	Ac- credited		
½	..	1 0·56%	..	..	..	..	..	..	1 0·36%	2 0·27%
1	..	1 0·56%	1 9·09%	..	..	..	..	..	4 1·44%	6 0·82%
1½	..	1 0·56%	1 9·09%	2 1·69%	..	..	..	..	..	4 0·55%
2	..	1 0·56%	..	..	..	..	..	..	3 1·08%	4 0·55%
2½	..	2 1·12%	..	3 2·54%	..	1 1·16%	..	..	2 0·72%	8 1·09%
3	..	3 1·68%	2 18·18%	2 1·69%	1 3·45%	2 2·33%	..	..	3 1·08%	13 1·77%
3½	..	4 2·23%	1 9·09%	5 4·24%	..	1 1·16%	1 20·00%	..	8 2·89%	20 2·73%
4	1 9·09%	3 1·68%	2 18·18%	4 3·39%	2 6·90%	1 1·16%	..	..	2 0·72%	15 2·05%
4½	..	1 0·56%	1 9·09%	7 5·93%	1 3·45%	4 4·65%	..	1 5·88%	7 2·53%	22 3·00%
5	1 9·09%	4 2·23%	..	3 2·54%	3 10·34%	1 1·16%	..	..	5 1·81%	17 2·32%
5½	1 9·09%	6 3·35%	..	1 0·85%	..	2 2·33%	..	..	13 4·69%	23 3·14%
Satis- factory	8 72·73%	152 84·92%	3 27·27%	91 77·12%	22 75·86%	74 86·05%	4 80·00%	16 94·12%	229 82·67%	599 81·72%
TOTAL	11	179	11	118	29	86	5	17	277	733

SUMMER PERIOD (1st May—31st October).
Minimum reduction period allowed, 4½ hours.

Time hours	Town produced milk		Institution		Road-borne		Rail-borne		Un- graded	Total
	T.T.	Ac- credited	T.T.	Ac- credited	T.T.	Ac- credited	T.T.	Ac- credited		
½	..	..	2	13	..	..	..	..	11	26
1	..	5	10·53%	4·83%	1	..	..	..	4·66%	3·07%
1½	..	2·30%	2	26	9·09%	..	..	..	11	45
2	..	5	10·53%	9·67%	..	3	1	..	4·66%	5·32%
2½	..	2·30%	1	33	..	3·85%	50·00%	..	12	55
3	..	3	5·26%	12·27%	..	..	..	..	5·08%	6·50%
3½	..	1·38%	2	17	..	..	..	..	12	34
4	..	..	10·53%	6·32%	..	1	..	..	5·08%	4·02%
4½	..	..	..	13	..	1·28%	..	..	11	25
5	..	4	..	4·83%	..	..	..	..	4·66%	2·96%
5½	..	1·84%	1	12	..	..	..	..	9	26
6	..	5·26%	5·26%	4·46%	..	1	1	..	3·81%	3·07%
6½	..	12	1	9	..	1·28%	50·00%	..	9	33
7	..	5·53%	5·26%	3·35%	..	1	..	..	3·81%	3·90%
7½	..	5	..	14	..	1	..	..	12	32
8	..	2·30%	..	5·20%	..	1·28%	..	..	5·08%	3·78%
8½	..	8	1	9	..	3	..	..	13	34
9	..	3·69%	5·26%	3·35%	..	3·85%	..	..	5·51%	4·02%
Satis- factory	14	175	9	123	10	69	..	..	136	536
	100·00%	80·65%	47·37%	45·72%	90·91%	88·46%	..	..	57·63%	63·36%
TOTAL	14	217	19	269	11	78	2	..	236	846

PHOSPHATASE TEST.

Number of samples tested.	Number efficiently Pasteurised.	Number inefficiently Pasteurised.
282	280 99·3%	2 0·7%

SAMPLES EXAMINED AS TO BACTERIAL CONTENT.

Bacterial Content per c.c.	Tuber- culin Tested Milk	PASTEURISED			Ice Cream	Total
		Ordin- ary Milk	School Milk	Institu- tion Milk		
1—50,000	1 100·0%	191 92·3%	45 93·8%	14 53·8%	24 42·9%	275 81·4%
50,000— 100,000	..	9 4·3%	3 6·3%	..	11 19·6%	23 6·8%
100,000— 500,000	..	7 3·4%	..	12 46·2%	9 16·1%	28 8·3%
500,000— 1,000,000	..	..	..	..	7 12·5%	7 2·1%
1,000,000+	..	..	..	..	5 8·9%	5 1·5%
Total Samples	1	207	48	26	56	338

SAMPLES EXAMINED AS TO COLIFORM CONTENT.

Degree of Contamination	Town Produced			Pasteurised			Institution.			Road-borne			Rail-borne			Ice Cream	Miscellaneous	Total
	T.T. Milk	Accred-ited Milk	Un-graded Milk	Ordinary Milk	School Milk	Pasteurised Milk	T.T. Milk	Accred-ited Milk	Un-graded Milk	T.T. Milk	Accred-ited Milk	Un-graded Milk	T.T. Milk	Accred-ited Milk	Un-graded Milk			
Coliform bacillus present in 1/10 c.c.	..	..	..	34 16.5%	8 16.7%	1 3.9%	..	..	..	..	..	20 12.3%	..	..	3 11.1%	14 25.0%	1 14.3%	81 7.6%
„ 1/100 c.c.	..	46 28.6%	1 33.3%	17 8.3%	2 4.2%	2 7.7%	8 36.4%	143 63.3%	..	6 22.2%	10 15.6%	21 12.9%	1 20.0%	..	1 3.7%	7 12.5%	..	265 24.7%
„ 1/1000 c.c.	..	..	2 66.7%	19 9.2%	2 4.2%	13 50.0%	..	..	1 20.0%	..	..	75 46.0%	..	..	12 44.4%	8 14.3%	2 28.6%	134 12.5%
Coliform bacillus absent	16 100%	115 71.4%	..	136 66.0%	36 75.0%	10 38.5%	14 63.6%	83 36.7%	4 80.0%	21 77.8%	54 84.4%	47 28.8%	4 80.0%	10 100%	11 40.7%	27 48.2%	4 57.1%	592 55.2%
Total Samples	16	161	3	206	48	26	22	226	5	27	64	163	5	10	27	56	7	1,072

PHARMACY AND POISONS ACT, 1933. PART II.

The administrative year for the purpose of the above Act is the period 1st May to 30th April.

The following table gives a detailed summary of the work done during the year ended 30th April, 1939 :—

Persons on the List on 30th April, 1939	..	..	256
Premises on the List on 30th April, 1939	..	..	461
Premises in respect of which listing was refused	..		—
Premises added to List during the year	..	..	28
Premises removed from the List during the year	..		18
Persons added to the List during the year	..		26
Persons removed from the List during the year	..		16

Visits paid to :—

1. Listed Premises in connection with New Applications	..	..	..	..	..	26
2. Listed Premises in connection with Unpaid Fees						10
3. Listed Premises for routine inspection	..	..				1,300
4. Unlisted Premises	..	..	..	..	..	503

CONTRAVENTIONS :—

Persons found to be selling Part II. Poisons on Unlisted premises	..	..	..	..	..	10
Listed sellers found with incorrectly labelled Part II. Poisons in stock	..	..	..	..		25
Listed sellers found selling Part I. Poisons	..					1
Listed seller found selling Part II. Poisons not in a manner prescribed by the Poisons Rules	..					1

CONTRAVENTIONS DEALT WITH :—

Persons ceasing to sell Part II. Poisons from unlisted premises	8
Persons selling Part II. Poisons from unlisted premises who subsequently applied for listing ..	2
Listed sellers who have corrected labels found to be not in accordance with requirements as to labelling	35
Listed sellers ceasing to sell Part I. Poisons from listed premises	1
Listed seller who has discontinued the sale of a Part II. Poison in contravention of the Poisons Rules	1

FOOD AND DRUGS.

FERTILISERS AND FEEDING STUFFS.

RAG FLOCK.

Food and Drugs.—The Sampling Officers took 409 formal and 70 informal samples of food other than milk and cream. The total number of formal samples of all kinds taken during the year was 2,348, and of informal samples, 160. For the results of the analyses of these samples see the City Analyst's report on page 214.

Fertilisers and Feeding Stuffs Act, 1926.—During the year 33 samples, all informal in character were taken under the above-mentioned Act and submitted to the Agricultural Analyst for examination. Of this number, 18 were samples of feeding stuffs and 15 of fertilisers.

All the samples of feeding stuffs were found to be satisfactory. Three samples of fertilisers were found to be slightly deficient in quality, due to faulty mixing of ingredients.

No complaints have been received during the year from farmers or from members of the public.

Rag Flock Acts, 1911 and 1928.—Seventeen samples of rag flock were taken and submitted to the City Analyst for analysis. Of these, 16 were found to be satisfactory, and the remaining sample was found to contain slightly more than the statutory standard of 30 parts per 100,000 of chlorine, viz., 37 parts per 100,000. This sample of rag flock was manufactured outside the city and the person on whose premises the sample was taken was warned, and has now given up the use of rag flock entirely. The average amount of chlorine found to be present was 14.9 parts per 100,000 as compared with 13.6 parts per 100,000 in the previous year.

A Departmental Committee has been set up by the Ministry of Health to consider the Rag Flock Acts and Regulations with a view to amendment. The Medical Officer of Health attended and gave evidence at a sitting of the Committee held in London on November 1st and 2nd, 1938.

During the year, one of the firms manufacturing rag flock in the city has begun to export rag flock to South Africa. In order to comply with the requirements of the Government of the Union of South Africa regarding the entry of such material, each batch of rag flock has to be accompanied by a certificate, given by the Medical Officer of Health of the place of origin stating that the rag flock has been efficiently disinfected to his satisfaction, prior to disintegration. The firm in question have an efficient steam disinfecter and 11 visits have been paid to observe the process of disinfection of rags intended for export, after pulling, to South Africa.

MUNICIPAL LABORATORY.

BY

C. H. MANLEY, M.A., F.I.C., *City Analyst.*

This is the eleventh annual report issued since the inauguration of the Municipal Laboratory. The total number of samples analysed in 1938 was 4,698, of which 2,508 were food and drugs and 33 were fertilisers and feeding stuffs.

Analyses have been made during the year for twelve Corporation Departments, viz., Public Health (including St. James's Hospital), Waterworks, City Police, City Coroner, Cleansing, Central Purchasing, Parks and Cemeteries, Education, Public Assistance, Housing, City Engineer, and Transport, as well as for the General Infirmary and the West Riding of Yorkshire Smoke Abatement Committee.

The following is a summary of the analyses made during 1938 :—

Samples submitted by inspectors under the Food and			
Drugs (Adulteration) Act, 1928			2,508
Samples submitted by inspectors under the			
Fertilisers and Feeding Stuffs Act, 1926.. ..			33
Samples submitted by inspectors under the Rag Flock			
Acts, 1911-28			17
Samples submitted by inspectors under the Pharmacy			
and Poisons Act, 1933			2
Samples analysed for the Public Health Department			23
"	"	Waterworks Department ..	12
"	"	City Police	7
"	"	City Coroner	7
"	"	Cleansing Department ..	1
"	"	Central Purchasing Depart-	
		ment	10
"	"	Parks and Cemeteries	
		Department	1
"	"	Education Department ..	2
"	"	Public Assistance Depart-	
		ment	1

Carried forward .. 2,624

	<i>Brought forward</i>	..	2,624
Samples analysed for the Housing Department	..	6	
" " " City Engineer's Department		3	
" " " Transport Department	..	2	
" " " St. James's Hospital	..	8	
" " " General Infirmary	..	4	
" " " West Riding Regional Smoke Abatement Committee :—			
(1) Rain Gauges	..	58	
(2) Light Tests	..	1,966	
(3) Sulphur Dioxide tests		24	
Private samples	..	3	
TOTAL	..	4,698	

FOOD AND DRUGS.

The table on pages 221, 222 and 223 summarises the samples taken under the Food and Drugs (Adulteration) Act, 1928, along with the number and percentage of adulteration. The percentage of samples found to be adulterated was 7·2, as compared with 5·5 for 1937, and 5·5 for England and Wales for that year.

Milk.—Of 2,009 samples 169 (8·4 per cent.) were adulterated.

The quarterly figures for the past year were :—

	Quarter 1938.				Year.	
	1st.	2nd.	3rd.	4th.	1938.	1937.
Watered samples	2·6%	1·1%	0·7%	3·6%	2·3%	2·9%
Fat deficient						
Samples	5·9%	9·1%	9·5%	1·7%	6·1%	3·0%
Total adultera- tion figure	8·6%	10·2%	10·2%	5·3%	8·4%	5·9%

Of the 169 samples adulterated, 33 contained added water, 123 were deficient in fat, and 13 showed both added water and fat deficiency. The greatest amount of added water found in any sample was 26·6 per cent. and the greatest fat deficiency 67·0 per cent. (informal) and 63·3 per cent. (formal).

The results of court proceedings instituted are given on pages 224, 225 and 226. The average composition of all samples examined was as follows (the figures for 1936 and 1937 being given for comparison) :—

		1936		1937		1938
Non-fatty solids	..	8.81%	..	8.82%	..	8.77%
Fat		3.72%	..	3.76%	..	3.63%
Total Solids		12.53%	..	12.58%	..	12.40%

Cream.—All the 17 samples of fresh cream examined were of satisfactory composition and free from preservative, the average butter fat content being 51.5 per cent. (variation 37.4 per cent. to 57.9 per cent.). The average composition of the 3 tinned creams analysed was 20.8 per cent.

Butter.—The 15 samples examined were all genuine and free from preservative. The average water content was 14.54 per cent., the maximum permitted being 16.0 per cent. (Variation 12.3 per cent. to 15.5 per cent.).

Margarine.—The 15 samples examined were satisfactory, the average water content being 14.59 per cent. (Variation 13.25 per cent. to 15.50 per cent.).

Condensed and Dried Milks.—One formal sample of condensed and 6 informal samples of dried milk were submitted and found to conform to the 1923-27 Regulations as regards their fat contents.

Cheese.—The 3 formal samples and 1 informal sample submitted had an average butter fat content of 26.6 per cent., equivalent to 43.8 per cent. in the moisture free substance.

A complaint was received from a private purchaser that the informal sample, No. 602C, contained glass. On examination there were found a large number of small wedge shaped transparent crystals, composed, not of glass, but of lactose (milk sugar), constituting 1.5 per cent. of the total weight of the cheese. The latter was a processed one and no previous record of a similar occurrence can be found in the literature.

Curds.—One formal sample viz., No. 1066C was submitted and found to have been made from skimmed milk and adulterated with 1.8 per cent. flour. No action was taken.

Oatmeal.—One formal sample, viz., No. 267C was submitted and found to contain 7.0 per cent. wheat flour. A warning letter was sent by the Medical Officer of Health to the firm of retailers concerned.

Sausages.—Of the 33 formal samples submitted 3 samples viz., Nos. 161C, 162C, and 199C (9.1 per cent.), contained 140, 120, and 175 parts respectively of sulphur dioxide preservative per million without declaration of the fact at the time of sale. Each of the retailers concerned was warned by letter from the Medical Officer of Health. The maximum amount of the above preservative allowed with declaration is 450 parts per million.

Malt Vinegar.—All the 11 formal samples were brewed products, but two, viz., Nos. 1056C and 1059C (18.2 per cent.), were swarming with vinegar eels. On receipt of the reports the sampling officer revisited the vendors shops and advised as to the satisfactory sterilisation of the barrels.

Vinegar and Artificial Vinegar.—The 5 samples sold as "Artificial vinegar" were of satisfactory composition, but, despite the Stipendiary Magistrate's ruling of December 1937, concerning vinegar sold without qualification, 3 out of 5 formal samples (60.0 per cent.) sold as "Vinegar" failed to conform to the requirements that vinegar shall be solely the product of a process of fermentation. Nos. 50L and 656L were both entirely artificial vinegars and No. 264C contained only 20.0 per cent. malt vinegar. In the first of these cases a verbal warning was administered to the manufacturer, who undertook to label his product as artificial in future; in the other two cases warning letters were sent by the Medical Officer of Health.

Winphos.—An informal sample, No. 239L, of this wine, purporting in large letters to contain hypophosphites, having been found to be unsatisfactory, a formal sample, No. 326L, was submitted for analysis. The wine was found to contain 28.5 per cent. Proof Spirit, but no hypophosphites. The manufacturer was summoned on May 25th for supplying a false warranty to the retailer concerned and fined 40/—, this sum including the costs.

FERTILISERS AND FEEDING STUFFS.

Fertilisers.—Of the 16 informal samples submitted for analysis, 3 failed to conform to warranty, these being a Rose Fertiliser, a Lawn Fertiliser, and a Carbonate of Lime.

Feeding Stuff.—Of the 17 informal samples received 1 sample of M. G. Ration, No. 33, contained 11.6 per cent. fibre as against 5.5 per cent. declared (111.0 per cent. excess). The remaining samples were satisfactory.

OTHER ANALYSES.

Rag Flocks.—Of the 17 samples submitted 1 contained 37 parts per 100,000 of chlorine, or 7 parts in excess of the limit of 30 parts allowed by the Rag Flock Regulations, 1912.

Pharmacy and Poisons Act, 1933.—Two samples of Ammonia were tested for strength, which was satisfactory in each case, but one of the bottles was incorrectly labelled.

Public Health Department (Special Enquiries) (23).—These related to 2 samples of canned herrings, 3 eggs, 1 ice cream fat, 2 ice creams, 9 well waters, 1 carbolic disinfectant fluid, 1 yellow soap, 2 samples of tinned crab, and samples of salt and sugar.

The herrings contained respectively 2.0 grs. and 1.6 grs. of tin per lb., the interiors of the cans being very badly corroded.

The tinned crab, salt, and sugar were examined for poisons with negative results in connection with suspected cases of food poisoning.

Waterworks Committee (12).—The City water monthly analyses have been continued throughout the year with satisfactory results the total number carried out by this Laboratory up to the end of 1938 being 126.

Watch Committee (7).—In connection with a woman's death, examination was made of five drugs, as well as of the stomach contents and urine of the deceased. Veronal was isolated from the body fluids, the indication being that it had been taken in the form of Medinal (soluble Veronal).

City Coronor (7).—In connection with the sudden death of a woman asthmatic, the stomach contents and various organs were examined for poison, but with negative results.

Cleansing Committee (1).—One sample of fertiliser manufactured from household refuse was assessed for manurial value.

Central Purchasing Committee (10).—Five hard soaps, 2 liquid toilet soaps, 2 soap powders, and 1 scouring powder were analysed in connection with tenders. Of these 1 carbolic soap and 1 liquid toilet soap failed to conform to specification.

Parks and Cemeteries Committee (1).—One sample of the River Aire water at Kirkstall was analysed and reported upon.

Education Committee (2).—Two samples of ink, submitted in connection with tenders for schools, were analysed, and the lower priced article, purchase of which indicated an appreciable annual saving, recommended as the superior.

Public Assistance Committee (1).—One boiler deposit from North Lodge, Beckett Street, was analysed, and certain recommendations made.

Housing Committee (6).—Six samples of green paint, intended for external use in connection with the year's programme, were analysed.

Improvements Committee (3).—The City Engineer submitted 1 sample of so-called white lead paint and 2 samples of turpentine. The latter were satisfactory, but the paint contained less than 1 per cent. white lead, the pigment consisting of zinc white and barytes, and the volatile thinner of white spirit in place of turpentine.

Transport Committee (2).—One black powder formed in a bus safety switch and 1 trolley wire grease were analysed. The former consisted of amorphous mercury and the latter contained finely divided copper formed from contact of the bows with the overhead wires.

St. James's Hospital (8).—Four samples of urine were examined for indications of lead poisoning, one of these giving a positive result. Also, a set of 4 organs was examined for poisons, in connection with a case of sudden death, with negative results.

General Infirmary (4).—One milk, 2 dried milks, and 1 washing powder were analysed.

Regional Smoke Abatement Committee.—The monthly analyses (58) of the rain, water and soot collected at the five stations in the city have been continued, as have also the daily light tests (1,966) and the monthly estimations of the atmospheric sulphur dioxide (24). The figures obtained are included in the section devoted to Smoke Abatement in the Report of the Medical Officer of Health.

Private Samples (3).—1 sample of drinking water was analysed, and the stomach and intestinal contents of a cow examined for poisons.

In conclusion, I wish to express to my Assistant and Deputy, Mr. A. Houlbrooke, M.Sc., F.I.C., and to the other members of my staff my sincere thanks for their loyal co-operation in the varied work of the Department during the year.

FOOD AND DRUGS (ADULTERATION) ACT, 1928. SAMPLES SUBMITTED
TO THE CITY ANALYST DURING 1938.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
Almonds (ground) ..	4	..	4	..	..	..	..
Almond oil	1	..	1	..	..	..	..
Ammoniated tincture of Quinine	1	..	1	..	..	..	..
Arrowroot	1	..	1	..	..	..	..
Aspirin tablets	2	..	2	..	..	..	..
Baking powder	18	..	18	..	..	..	..
Beans	1	..	1	..	..	..	..
*Beer	28	..	28	..	..	..	..
Bicarbonate of soda ..	1	..	1	..	..	..	..
Bisto	1	..	1	..	..	..	..
Black beer	8	..	8	..	..	..	..
Blanc mange powder ..	1	..	1	..	..	..	..
Boric powder	1	..	1	..	..	..	..
*Brawn	1	..	1	..	..	..	..
*Butter	15	..	15	..	..	..	..
Cakeflour	1	..	1	..	..	..	..
Castor oil	1	..	1	..	..	..	..
*Cheese	3	1	4	..	..	..	..
Chemical food	1	..	1	..	..	..	..
*Chocolate Swiss roll ..	1	..	1	..	..	..	..
*Chocolate wafers ..	1	..	1	..	..	..	..
*Cider	1	..	1	..	..	..	..
Cocoa	5	..	5	..	..	..	..
Cod liver oil	1	..	1	..	..	..	..
Coffee	5	..	5	..	..	..	..
Coffee (French)	6	..	6	..	..	..	..
Coffee extract	1	..	1	..	..	..	..
*Compound syrup of figs	1	..	1	..	..	..	..
Condensed milk	1	..	1	..	..	..	..
Cooking fat	1	..	1	..	..	..	..
Corn flour	1	..	1	..	..	..	..
* Cream	19	1	20	..	..	..	..
Cream of tartar	3	..	3	..	..	..	..
*Curds	1	..	1	1	..	1	100.0
Custard powder	6	..	6	..	..	..	..
*Dried apricots	7	..	7	..	..	..	..
Dried milk	..	6	6	..	..	..	..
*Dried pears	1	..	1	..	..	..	..
Dripping	2	..	2	..	..	..	..
Carried forward ..	154	8	162	1	..	1	..

* Tested for preservative.

FOOD AND DRUGS (ADULTERATION) ACT, 1928. SAMPLES SUBMITTED
TO THE CITY ANALYST DURING 1938—Continued.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal	Informal	Total	Formal	Informal	Total	
Brought forward ..	154	8	162	1	..	1	..
Epsom salts	1	..	1	..	..	..	..
Flour	2	..	2	..	..	..	..
Flour (self-raising) ..	3	..	3	..	..	..	..
Gin	2	..	2	..	..	..	..
Glauber salts	1	..	1	..	..	..	..
Glycerine	1	..	1	..	..	..	..
Glycerine, honey and lemon syrup	1	..	1	..	..	..	..
Glycerine of Thymol ..	1	..	1	..	..	..	..
*Gooseberries	1	..	1	..	..	..	..
Gravy salt	1	..	1	..	..	..	..
Ground ginger	5	..	5	..	..	..	..
Ham fat	1	..	1	..	..	..	..
Health salts	4	..	4	..	..	..	..
Ice-cream	..	54	54	..	..	..	..
Ice-cream powder	..	2	2	..	..	..	..
*Jam	1	..	1	..	..	..	..
*Jelly	5	..	5	..	..	..	..
Lard	17	..	17	..	..	..	..
Lard compound	1	..	1	..	..	..	..
*Lemon cheese	3	..	3	..	..	..	..
Lemonade powder	4	..	4	..	..	..	..
Liver salts	1	..	1	..	..	..	..
Macaroni	1	..	1	..	..	..	..
Malted milk	1	..	1	..	..	..	..
*Margarine	13	2	15	..	..	..	..
Marjoram	1	..	1	..	..	..	..
*Milk	1,920	89	2,009	161	8	169	8.4
Milk powder	..	1	1	..	..	..	..
Milk pudding mixture ..	2	..	2	..	..	..	..
*Minced beef	..	1	1	..	..	..	..
*Mincemeat	1	..	1	..	..	..	..
Mint	2	..	2	..	..	..	..
*Mixed fruit	1	..	1	..	..	..	..
Oatmeal	1	..	1	1	..	1	100.0
Olive Oil	3	..	3	..	..	..	..
Paraffin (liquid)	1	..	1	..	..	..	..
*Pearl barley	8	..	8	..	..	..	..
Peas	8	..	8	..	..	..	..
Carried forward ..	2,173	157	2,330	163	8	171	..

* Tested for preservative.

FOOD AND DRUGS (ADULTERATION) ACT, 1928. SAMPLES SUBMITTED
TO THE CITY ANALYST DURING 1938.—Continued.

Article.	No. examined.			No. adulterated.			Per-centage adultera-tion.
	Formal.	Informal.	Total.	Formal.	Informal.	Total.	
Brought forward ..	2,173	157	2,330	168	8	171	..
Pepper	12	..	12	..	..	..	..
*Polony	1	..	1	..	..	..	..
Port	1	..	1	..	..	..	..
*Potted meat ..	3	..	3	..	..	..	..
*Prunes	1	..	1	..	..	..	..
Raisin wine ..	1	..	1	..	..	..	..
Rice	14	..	14	..	..	..	..
Rum	5	..	5	..	..	..	..
Rum and butter toffee	1	..	1	..	..	..	..
Sage	1	..	1	..	..	..	..
*Salmon paste ..	1	..	1	..	..	..	..
*Sauces	3	..	3	..	..	..	..
*Sausages	33	..	33	3	..	3	9.1
Semolina	3	..	3	..	..	..	..
Senna pods	1	..	1	..	..	..	..
*Shandy gaff ..	1	..	1	..	..	..	..
Shredded suet ..	6	..	6	..	..	..	..
Spirit of Sal Volatile	1	..	1	..	..	..	..
*Sponge cakes ..	2	..	2	..	..	..	..
*Sponge fingers ..	1	..	1	..	..	..	..
*Sponge pudding ..	1	..	1	..	..	..	..
Steamed pudding mixture	1	..	1	..	..	..	..
*Stout	1	..	1	..	..	..	..
Sugar	4	..	4	..	..	..	..
Sugar (raw)	..	1	1	..	..	..	..
*Sultanas	2	..	2	..	..	..	..
Sweet Spirit of Nitre	1	..	1	..	..	..	..
Tapioca	2	..	2	..	..	..	..
Tartaric acid ..	2	..	2	..	..	..	..
Tea	15	..	15	..	..	..	..
*Temperance beverages	20	1	21	..	..	..	..
Tomato soup	1	..	1	..	..	..	..
*Tripe	3	..	3	..	..	..	..
*Vinegar	5	..	5	3	..	3	60.0
*Artificial vinegar	5	..	5	..	..	..	..
*Malt vinegar ..	11	..	11	2	..	2	18.2
Whisky	8	..	8	..	..	..	..
Winphos	1	1	2	1	1	2	100.0
TOTAL	2,348	160	2,508	172	9	181	7.2

* Tested for preservative.

SUMMONSES ISSUED DURING 1938 UNDER THE FOOD AND DRUGS
(ADULTERATION) ACT, 1928.

No. of Sample	Article.	Adulteration or Deficiency.	Fines. £ s. d.	Remarks.
5C	Milk	17.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 10/6 costs: Retailer.
28C	Milk	4.9% of added water ..	..	Discharged under the Probation of Offenders' Act on payment of £1 11s. 6d. costs: Producer.
91L	Milk	2.5% of added water ..	..	Discharged under the Probation of Offenders' Act on payment of £2 os. 9d. costs by each of the two producers.
83C	Milk	20.0% deficient in fat and 18.7% of added water	..	Discharged under the Probation of Offenders' Act on payment of 16/10 costs: Producer.
84C		20.0% deficient in fat and 18.7% of added water		
85C		13.3% deficient in fat and 9.1% of added water		
116C	Milk	38.0% deficient in fat ..	1 0 0	Ordered to pay £1 4s. 6d. costs: Producer.
118C	Milk	13.0% deficient in fat ..	1 0 0	Ordered to pay 17/6 costs: Producer.
203L	Milk	23.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 10/6 costs: Retailer.
223L	Milk	18.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs: Retailer.
245L	Milk	20.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 9/3 costs each—two defendants: Retailers.

SUMMONSES ISSUED DURING 1938 UNDER THE FOOD AND DRUGS
(ADULTERATION) ACT, 1928—Continued.

No. of Sample	Article.	Adulteration or Deficiency.	Fines. £ s. d.	Remarks.
447C	Milk	15.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs: Retailer.
487C	Milk	12.6% of added water ..	..	Ordered to pay £1 11s. 6d. costs: Producer.
589L	Milk	4.0% of added water	..	Discharged under the Probation of Offenders' Act on payment of £1 8s. od. costs: Producer.
595L	Milk	20.0% deficient in fat		
603L	Milk	1.9% of added water		
634C	Milk	15.0% deficient in fat	..	Discharged under the Probation of Offenders' Act on payment of £1 15s. od. costs: Producer.
635C	Milk	13.0% deficient in fat		
637L	Milk	20.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs: Retailer.
669L	Milk	11.0% deficient in fat	..	Discharged under the Probation of Offenders' Act on payment of £2 17s. 6d. costs: Producer.
670L	Milk	18.0% deficient in fat		
671L	Milk	18.0% deficient in fat		
680C	Milk	28.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 14/6 costs: Retailer.
737C	Milk	4.7% of added water and 3.3% deficient in fat	..	Discharged under the Probation of Offenders' Act on payment of £1 1s. 6d. costs: Producer.
790C	Milk	26.0% deficient in fat ..	1 0 0	Ordered to pay 14/6 costs: Retailer.
794C	Milk	20.0% deficient in fat ..	..	Discharged under the Probation of Offenders' Act on payment of 10/6 costs: Retailer.

SUMMONSES ISSUED DURING 1938 UNDER THE FOOD AND DRUGS
(ADULTERATION) ACT, 1928—Continued.

No. of Sample	Article.	Adulteration or Deficiency.	Fines.			Remarks
			£	s.	d.	
837c	Milk	32.0% deficient in fat ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of 10/6 costs: Retailer.
961L	Milk	7.5% of added water ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of £1 4s. 6d. costs: Producer.
991c	} Milk	10.6% of added water ..	..	..	..	Discharged under the Probation of Offenders' Act on payment of 16/3 costs: Producer. do. do. do.
992c		7.9% of added water ..	..	..	..	
998c		13.4% of added water ..	..	..	..	
999c		16.0% of added water ..	..	..	..	
1102c	Milk	3.3% deficient in fat and 7.7% of added water	5	0	0	Ordered to pay 14/- costs: Producer.
1100c	Milk	2.6% of added water ..	..	..	..	Discharged under the Probation of Offenders' Act with costs remitted: Producer.
1109c	Milk	2.6% of added water ..	..	..	..	do.

Sanitary Circumstances.

SANITARY CIRCUMSTANCES.

BY

ERNEST STANDISH, M.R.San.I., *Chief Sanitary Inspector.*

Rivers and Streams.—Close co-operation continued to be maintained between the Health Department and the West Riding Rivers Board, which administers the powers conferred by the Rivers Pollution Prevention Act, 1876, in respect of the Leeds area. During the year the abatement of pollution was secured on six occasions.

Water.—Mr. H. Shortreed, the Waterworks Manager, has kindly furnished me with the following particulars regarding the water supply of the city during 1938.

Rainfall during the year 1938 was again above the average, there being 41.13 inches of rain as compared with an average of 33.42 inches for the past 62 years.

The smallest quantity of water in the reservoirs during the year was from the 1st to the 6th January, when they held a supply equal to 129 days.

During the year 45,248 yards of new distribution and feeder mains, 3 inches to 9 inches in diameter, were laid.

The total daily consumption for the year ended 31st December, 1938, was 18.84 million gallons, as compared with 18.69 million gallons in the previous year (exclusive of Compensation water) the domestic consumption in the city and the area of direct supply being 24.69 gallons per head per day.

The monthly analyses (chemical and bacteriological) indicate a high standard of purity, for, in addition to the slow sand filtration, the water is afterwards chlorinated before it enters the covered service reservoirs and mains of the distribution system. Prior to this treatment, hydrated lime is added in order to prevent plumbo-solvent action.

During the year 33 samples of drinking water were taken for chemical analysis and bacteriological examination. Of these, 31 samples were found to be good drinking water and 2 samples were either polluted or of a suspicious character and unfit for

drinking. Twenty-five of the samples were taken from springs, wells, and water storage tanks and 8 samples were taken from the ordinary domestic water tap in dwelling-houses and were of the town's supply.

Sewage Disposal.—I have to thank Mr. J. Clemishaw, the Sewerage Engineer, for the following information.

During the year under review no further alterations or extensions have been carried out at the City Sewage Disposal Works.

The works, both at Rodley and Thorpe Stapleton, continue to function satisfactorily, and a good degree of purification is obtained.

No alteration has been made in the established method of treatment. Experience has now demonstrated that this method is the most satisfactory for dealing with the sewage of the city.

Drainage and Sewerage.—Sixty-six yards of additional branch sewers were constructed during the year. This enabled 10 privies and 4 pail-closets to be converted, 4 cesspools to be abolished, and the drainage of 29 houses to be connected to the sewer. Thanks are due to officials of the City Engineer's Department for their willing co-operation and courteous consideration of all requests made to them.

Public Health Act, 1936.—The routine inspection of offices is now a duty imposed upon local authorities under this Act, and in this connection the work of inspection was not commenced until late in December. I shall report hereon next year.

Closet Accommodation.—The position with regard to the various types of sanitary conveniences in the city at the end of the year was as follows:—privies 167; pail-closets 152; trough-closets 84; and cistern water-closets approximately 153,409. There were also 348 cesspools.

Ten privies and four pail-closets were replaced by modern water-closets, and four cesspools were abolished during the year.

The existing privies and pail-closets are mostly in rural districts where no sewer is at present available. The conversion into water-closets of the 14 conveniences mentioned was the result of town planning schemes making the necessary sewers available in the areas concerned.

TABLE SHEWING NUMBERS OF TROUGH CLOSETS, PRIVIES AND PAIL CLOSETS IN THE CITY DURING THE LAST THIRTY-FOUR YEARS.

Year.	Trough Closets.	Privies.	Pail Closets.
1905	10,507	1,669	231
1906	10,461	1,193	229
1907	10,424	963	228
1908	10,410	875	202
1909	10,120	851	198
1910	10,047	821	165
1911	9,963	785	164
*1912	9,934	1,284	221
1913	9,790	1,269	217
1914	9,760	1,211	207
1915	9,738	1,047	188
1916	9,725	1,026	185
1917	9,723	1,023	169
1918	9,693	1,022	166
1919	9,655	1,014	166
†1920	9,594	1,051	155
1921	9,521	900	128
1922	9,324	651	111
1923	9,256	558	102
1924	8,781	472	101
1925	8,222	332	94
‡1926	7,685	332	219
1927	6,447	294	197
§1928	4,440	435	267
1929	3,647	360	256
1930	2,772	322	230
1931	1,589	300	227
1932	1,158	248	205
1933	1,063	228	185
1934	1,030	215	181
1935	626	208	179
1936	270	198	159
1937	153	177	156
1938	84	167	152

*Roundhay, Seacroft, Shadwell and Crossgates were added to the city in this year. In this area there were 502 privies and 61 pail closets.

†Middleton was absorbed in this year. In this area there were 148 privies.

‡Portion of Adel was added to the city in this year. In this area there were 65 privies and 136 pail closets.

§Eccup, Alwoodley, Templenewsam and Austhorpe were added to the city in this year. In these areas there were 192 privies and 106 pail closets.

||This is a corrected figure obtained as a result of a recent census.

Public Cleansing.—I am indebted to Mr. A. Mann, the Director of Public Cleansing, for the following information. Household refuse, collected by the Cleansing Department during 1938, amounted to 162,644 tons, of which 104,275 tons were dealt with at the destructors and 58,369 tons were disposed of at controlled tips and for agricultural purposes.

Further progress has been made during the year with the mechanisation of the system of collection and transport of refuse and the effects of this is beginning to be felt in all parts of the city.

Ashpits and Dustbins.—During the year 386 ashpits were abolished, of which 26 were of the sunken type. On 31st December, 1938, there still remained in the city 237 sunken ashpits and 2,874 ashpits of other types. Of these, approximately 167 and 678 respectively will disappear in consequence of slum clearance proposals, and the remainder will be dealt with as part of the Health Committee's scheme of ashpit conversions.

Since the commencement of the scheme, the total number of ashpits dealt with to 31st December, 1938, was 1,759, and dustbins provided 5,756, at a total cost to the Corporation of £3,891 19s. 2d. The average cost per conversion was £2 4s. 3d. From the continuous number of applications still being received it is evident that the scheme continues to have the support of the property owners. I feel sure that the 2,266 ashpits remaining in the city would quickly disappear if the money necessary for the work could be found. The present reservation is so small that it does not permit of more than 250 ashpits being dealt with in a single year.

In response to representations from the Department a further 4,121 metal dustbins were provided to replace bins which were worn or missing, an increase of 644 over the preceding year. Of this number 67 were supplied in default.

Particular attention is being paid by the sanitary inspectors to the misuse of dustbins, and in this connection occupiers are reminded from time to time of their duty to see that the receptacles provided are used in the proper manner.

Public Conveniences.—The need still exists for additional public conveniences in various parts of the city as well as for the

reconstruction of certain of those still existing. The two conveniences in City Square are very much out of date and should be replaced. In their present state they are anything but a credit to the city.

The reconstruction of the conveniences at Balm Road, Stanley Road, Roundhay Road and Dewsbury Road has now been completed, and the work in connection with the erection of new conveniences at the Hyde Park end of Woodhouse Moor, and Town Street, Stanningley, is nearing completion.

With regard to new sites, a tender has been accepted for the erection of a convenience at Easterly Road (near Harehills Lane), and further tenders are being invited for conveniences at Stonegate Road and Harrogate Road, Moortown. A site has also been secured for a convenience at the Cross Gates tram terminus.

Flushing.—The flushing services continued as previously. The work has been carried out efficiently and during the past year 8,584 flushing operations were effected in connection with public conveniences, and 142 flushings at private properties. The income derived from private flushings was £78 17s. 6d.

Rent and Mortgage Interest Restrictions Acts, 1920 to 1935.—There was one application for a certificate during the year. Since the introduction of the above Acts in 1920, up to the end of 1938, 1,455 applications for certificates have been received and 1,375 certificates and 40 reports issued by the Department.

Section 9, Housing Act, 1936.—Under this section of the Act 26 houses were dealt with and in 23 the necessary repairs were executed and the houses rendered fit for habitation. At the remaining three houses work was in progress at the year end. Housing repairs of a more general character have been continuously carried out in the city, and in this respect a total of 19,869 nuisances and housing defects were remedied under the Public Health Act, 1936, an increase of 5,274 on the 1937 figures. Further, a continuous demand is made on the inspectors' time in connection with overcrowding and the inspection of rent books. In this respect 250 houses were measured for overcrowding and 2,095 rent books examined for permitted numbers. During the year 2,599 houses were surveyed

at the request of the Housing Director to enable him to supply owners with "permitted numbers" and a report was forwarded to him in each case.

A complete survey of the working class houses in the city is at present in progress the object of which is to determine the number of houses requiring repair or reconditioning in order to render them in all respects reasonably fit for human habitation and thus prevent their deteriorating into slum dwellings. If owners will co-operate, as I hope they will, the slum problem will cease to exist, at any rate as far as those houses outside the Corporation's present programme of slum clearance are concerned. With houses as with human individuals prevention is better than cure and it is certainly much cheaper. The results of the Survey will be published in due course.

Leeds Corporation Act, 1927, Section 95.—During the year no cases were dealt with under these powers. It is interesting to note that two cases were dealt with and removed voluntarily, without application to the Court.

Offensive Trades.—Below is a table showing the nature and number of scheduled offensive trades which were being carried on in the city at the end of the year.

OFFENSIVE TRADES.

Nature of Trade.					Number of each Trade.
Bone Boiler	..	..	..	..	5
Fellmonger	..	..	..	..	2
Fat Melter	..	..	..	..	11
Glue Maker	..	..	..	..	2
Gut Scraper	..	..	..	..	5
Leather Dresser	..	..	..	..	23
Rag and Bone Dealer	..	..	..	..	33
Size Maker	..	..	..	..	4
Soap Boiler	..	..	..	..	5
Tanner	..	..	..	..	16
Tripe Boiler	..	..	..	..	11
Fish Frier	..	..	..	..	507
Total					624

During the year 2,928 visits of inspection were made to premises in which offensive trades were carried on or in respect of which applications had been received for permission to establish such trades. This represents an increase of 1,479 visits over the figure for 1937.

Fish Frying.—During the year 5 applications were received for permission to establish the offensive trade of a fish frier, all of which were granted.

The internal renovation of existing fish shops, excluding those in scheduled areas, has now reached completion, and a very much improved standard of cleanliness and hygiene is the result.

District Sanitary Inspection.—During the year 19,869 nuisances were abated, an increase of 5,274 on the figures for 1937. (See tables on pages 235 and 236).

The number of preliminary notices served during the year for the abatement of nuisances was 6,627, and the number of statutory notices 1,617, being 323 more than last year. Of the latter 1,436 have been effective and 181 were outstanding at the end of the year.

In connection with common lodging-houses, houses-let-in-lodgings, etc., there were served during the year 142 preliminary and 91 statutory notices.

In addition 286 preliminary and 37 statutory notices were served in connection with factories, workshops and workplaces.

During the year a survey of 110 in-city farms has been undertaken, and investigations made into their sanitary conditions with special reference to water supply and the drainage of buildings, cesspools, manure pits, and the pollution of beck and streams. Improvements have been carried out to a number of these farms and negotiations are still taking place with respect to others. This work has been made possible by the rapid development in recent years of the landward portions of the city.

Infectious diseases accounted for 3,062 visits, chiefly in connection with cases of diphtheria and scarlet fever.

ANALYSIS OF WORK DONE BY DISTRICT INSPECTORS, 1938.

	EASTERN DIVISION.	WESTERN DIVISION.	CITY TOTALS.
HOUSE INSPECTION.			
1. Houses and premises { Infectious disease ...	1,460	1,803	3,263
2. } completely examined { Alleged nuisances ..	22	19	41
on account of			
3. Houses and premises { Occupants	172	78	250
4. } examined only { Alleged nuisances ..	2,644	2,416	5,060
5. } as to { Drainage	157	214	371
6. Number of houses wholly or partly examined	4,455	4,530	8,985
7. Total number of above houses where sanitary defects or nuisances were found	2,687	2,525	5,212
NUISANCES FOUND DURING ABOVE EXAMINATIONS AND DAILY INSPECTIONS.			
8. Houses dirty	46	47	93
9. Overcrowded houses	49	50	99
10. Defective roofs, fallpipes and spouting, &c. .	2,227	2,666	4,893
11. Defective drains	585	363	948
12. Houses without proper drains	18	14	32
13. " without proper water supply	11	17	28
14. Privies	7	9	16
15. Pail closets	6	1	7
16. Additional closets required	4	23	27
17. Defective or unsuitable water closets	802	699	1,501
18. Ashpits { (a) Sunken	1	6	7
{ (b) Other than sunken	39	40	79
19. Houses with unsuitable or insufficient ashes accommodation	1,972	2,051	4,023
20. Dirty closets	94	51	145
21. Defective or dirty yard surfaces	250	70	320
22. Stopped drains	939	796	1,735
23. Other nuisances	3,372	2,395	5,767
24. Other housing defects	3	168	171
25. Number of houses affected by above nuisances	9,083	8,780	17,863
26. Offensive accumulations and other outside nuisances including manure pits and cess-pools	256	62	318
27. Animals (pigs, poultry, etc.) improperly kept	65	37	102
28. Total nuisances and housing defects found ..	10,746	9,565	20,311
29. Pollutions of river or streams	4	3	7
30. Complaints unfounded	264	131	395
31. Additional { Infectious disease	544	379	923
32. } visits paid { Non-abated Nuisances	8,986	9,448	18,434
33. } to houses { Inspection of work in progress ..	2,344	1,456	3,800
34. } for { Other causes	4,716	1,570	6,286
35. Visits on account of special enquiries	4,849	5,787	10,636
36. *Visits to offensive trades	1,316	1,512	2,828
37. Visits to bakehouses	1,810	1,565	3,375
38. Visits to rat-infested premises	914	475	1,389
39. Appointments	703	425	1,128
DRAIN TESTING.			
40. Number of tests { Nuisance complaints	317	168	485
41. } applied to { Requests	113	35	148
42. } drains on { Infectious disease	1,336	1,726	3,062
43. } account of { Work in progress	547	177	724

* In addition to the above, 100 visits were paid by the Workshops Inspectors to Offensive Trades.

ANALYSIS OF WORK DONE BY DISTRICT INSPECTORS, 1938—contd.

	EASTERN DIVISION.	WESTERN DIVISION.	CITY TOTALS.
44. Number of informal notices served	3,899	2,728	6,627
45. Number of statutory notices served.. ..	982	635	1,617
NUISANCE ABATEMENT.			
46. Metal ashbins provided	2,167	1,954	4,121
47. Houses cleansed.. .. .	29	33	62
48. Cases of Overcrowding sent to Housing Dept.	16	3	19
49. Defective roofs, fallpipes and spouting, &c. repaired	2,215	2,669	4,884
50. Disconnection of house drains	66	62	128
51. Defective drains repaired	506	278	784
52. Houses provided with proper drains	22	7	29
53. Houses supplied with town's water	9	13	22
54. Privies abolished or converted into water closets	1	9	10
55. Pail closets abolished or converted into water closets	3	1	4
56. Water closets erected { (a) Outside	4	1	5
(b) Inside	..	5	5
57. Trough closets converted into water closets ..	14	21	35
58. Water closets repaired	738	593	1,331
59. Ashpits abolished { (a) Sunken	6	13	19
(b) Other than sunken ..	175	101	276
60. Houses provided with suitable ashes accom- modation	2,489	2,214	4,703
61. Closets cleansed (limewashed, etc.)	63	60	123
62. Yard surfaces repaired or renewed	214	59	273
63. Stopped drains cleared.. .. .	939	728	1,667
64. Other nuisances remedied	2,888	2,136	5,024
65. Other housing defects remedied	3	109	112
66. Total houses for which above work done ..	9,207	8,624	17,831
67. Offensive accumulations removed	186	55	241
68. New manure pits or metal receptacles provided	16	1	17
69. Manure pits repaired	1	3	4
70. Animals improperly kept removed	88	4	92
71. Total nuisances and housing defects abated	10,691	9,178	19,869
72. Abated in response to prelim. notices or volun.	9,698	8,592	18,290
73. Abated in response to statutory notices ..	993	586	1,579
74. Pollutions of river or streams abated ..	3	3	6
75. Cesspools filled up	2	2	4
76. Public or private wells abolished	..	..	..
HOUSING ACT, 1936 SECTION 9.			
77. Number of houses where defects found ..	1	25	26
78. Number of houses where defects remedied..	3	20	23
79. Defects remedied { (a) Prelim. Notices or Volun	3	20	23
80. in response to (b) Statutory Notices ..	..	..	..
81. Number of informal notices served	..	..	..
82. Number of statutory notices served.. ..	..	..	..

Training of Sanitary Inspectors.—Ten student sanitary inspectors received training in the Department during the year.

In connection with the Corporation's scheme for the training of sanitary inspectors, instituted in 1933, one student probationer completed his second year of training and was successful in obtaining the Sanitary Inspector's Certificate of the Royal Sanitary Institute. Two first year students and one second year student were appointed under the scheme during the year.

Air Raid Precautions.—For several weeks the Inspectors were engaged on Air Raid Precautions work at first aid posts, preparing plans and carrying out the duties of clerks of works.

Common Lodging Houses.—Strict supervision of the 12 common lodging-houses in the city has been maintained, and it can safely be claimed that the standard of cleanliness in these is high.

During the year it was not found necessary to take legal proceedings against any keeper of a common lodging-house.

At the end of the year there was available in the city the following accommodation in registered premises :—

For men 12 houses with 936 beds.

Included in the above are three registered lodging-houses for men controlled by the Salvation Army and by the Church Army, with a total of 376 beds.

In the year under review the beds in the 12 men's lodging-houses were occupied on 259,674 occasions, the average number of beds vacant nightly being 220. On the 1st January, 1938, No. 54, Weaver Square, registered for 46 beds, and 89-91, East Street, registered for 30 beds, were closed.

As many of the common lodging-houses stand in areas included in the Corporation's programme of slum clearance, it may be anticipated that there will be a considerable reduction in the present total within the next few years. Already in consequence of slum clearance 15 houses (men) and 4 houses (women) no longer exist. To compensate for this loss the Housing Committee has built in Beeston Road a new and up-to-date hostel for working men and women known as Shaftesbury House. The hostel which has accommodation for 516 persons (324 men and 192 women) was opened

in December, 1938. By kind permission of the Housing Director a short description of the Hostel is appended to this section of the report.

During the year three changes of deputy keeper have taken place.

The table on page 239 sets forth the work carried out in respect of common lodging-houses during 1938.

Houses-let-in-Lodgings.—The control of this type of house continues to be a difficult problem and frequent inspections are necessary. The number of statutory notices served for breaches of the byelaws was 67, of which 53 were complied with.

At the end of the year 82 houses with 600 rooms were on the register, to which 479 visits were made.

During the year 20 houses were found to come within the byelaws, of which 13 have been closed or are now occupied by one family, and 7 are still under consideration.

In addition to the above, 126 houses, with 767 rooms, have been visited and inspected. These are occupied by members of the professional classes or other persons who do not come within the legal definition of working classes.

Details of the work in connection with houses-let-in-lodgings will be found in the table on page 239.

Working Class Tenement Houses.—Visits of inspection were made to 19 working class tenement houses containing 749 flats.

University Lodgings.—As in previous years the usual procedure has been followed and the lodgings on the register of approved premises for the use of University students were duly inspected and the results reported to the University Authorities. In this connection the following details are given :—

	HOUSES.	ROOMS.
New Lodgings inspected during 1938 ..	129	386
Drains tested—260 drains in 129 houses ..		
Total number of visits to the above houses	130	

Details of the sanitary defects found and rectified are included in the table under houses-let-in-lodgings.

COMMON LODGING-HOUSES.

Number registered—						
Men's 12 Beds available 936	..	..	..	..	..	
Routine visits to all common lodging-houses..					352	
Visits as to drain tests and abatements	..				17	
Visits to smallpox contacts	..	..	..		..	
Visits for infectious disease	..	..	..		..	
Preliminary notices served	..	..	..		9	
Statutory notices served	..	..	..		3	
Nuisances found and abated :—					FOUND.	ABATED.
Dirty closets	..	..	..	..	..	..
Dirty rooms	..	..	..	..	2	2
Dirty bedding	..	..	..	..	76	76
Defective or stopped drains	..	..	..		1	1
Defective roofs or eaves spouts	..	..	..		3	3
Other nuisances	..	..	..	..	23	23
Total	..	..	..	..	105	105

HOUSES-LET-IN-LODGINGS.

					HOUSES.	ROOMS.
Registered during 1938, let as furnished rooms					..	..
On register at end of 1938					82	600
Houses-let-in-lodgings visited though not registered					126	767
Drains tested 18, in 7 houses						
Drains re-tested 6, in 2 houses						
Visits for inspection of nuisance abatement and requirements of byelaws..					213	
Visits for other causes					288	
„ infectious disease (7 cases) ..					7	
„ additional inspection ..					362	
Preliminary notices served					129	
Statutory notices served					88	
Nuisances—					FOUND.	ABATED.
Dirty or bad bedding					8	8
Dirty rooms					34	34
Overcrowding					22	..
Dirty closets					6	6
Other nuisances					176	126
Structural defects					103	93

Residential Flats.—The special inspector concerned paid 7 visits to 7 houses containing 105 flats.

It might be added that in connection with the overcrowding survey and up to the end of December, 1938, there were measured 54 houses with 280 sub-tenancies.

Cellar Dwellings and Underground Sleeping-rooms.—During the year 4 underground sleeping-rooms were found, and alternative accommodation was found in each case.

Below are particulars of visits paid, nuisances found and abated, and notices issued :—

Visits to cellar dwellings	..	..	..	..
Visits to underground sleeping-rooms ..	..	..	..	4
Visits on account of nuisance abatement ..	..	..	..	6
Visits for other causes	..	..	..	..
Preliminary notices served	..	..	..	4
Statutory notices served	..	..	..	..
Nuisances :—				
Underground sleeping-rooms	..	..	..	FOUND. 4 ABATED. 4
Other nuisances	..	..	..	2 2

Tents and Vans.—During the year 13 additional camping grounds were found, bringing the total to 19. Of these camping grounds, 13 have been closed and 16 tents and vans removed. There still remained at the year end 6 camping grounds with 43 caravans.

No legal proceedings were taken during the year.

The following table gives details of the inspections made :—

Visits to vans (315 vans)	..	..	..	507
Visits to tents	..	..	..	25
Visits on account of infectious disease ..	..	..	..	2
Visits to camping grounds	..	..	..	67
Visits on account of nuisances	..	..	..	10
Camping grounds closed	..	..	..	13
Statutory notices served	..	..	..	..

Nuisances :—				FOUND.	ABATED.
Dirty camping grounds	..	..	..	2	2
Dirty vans and tents	..	..	..	..	..
Overcrowded vans	..	..	..	..	..
Camping places without sanitary accom- modation	..	..	..	10	10
Tents and vans not habitable	..	..	..	1	1
Other nuisances	..	..	..	48	48

Canal Boats.—The work in connection with the registration and inspection of canal boats has been carried on as in past years.

No legal proceedings were instituted under the Canal Boats Act, 1877, or under the Canal Boats Amendment Regulations, 1925, there being no serious contraventions.

CANAL BOATS.

Registered during the year 1938	..	..	..	2
Re-registered and Transferred to fresh owners	..	..	..	2
Re-registered owing to structural alterations	..	..	..	..
Struck off register (on revising register)	..	..	..	..
Remaining on register at end of year	..	..	..	121
Visits of inspection to wharves and locks	..	..	..	187
Complete inspections of boats	..	..	..	236
Cases of infectious disease	..	..	..	..
Cases of overcrowding	..	..	..	..
Dirty cabins	..	..	..	..
Absence of registration certificate	..	..	..	2
Boats not marked with registered number	..	..	..	2
„ not provided with water cask	..	..	..	..
„ requiring painting or repairing	..	..	..	..
„ found to be not registered	..	..	..	..
Number of children of school age found on registered boats—Nil.				

Sanitation of Schools.—A separate report is issued by the School Medical Officer, and this includes particulars relating to the sanitary circumstances of the Leeds schools.

Rat Suppression.—As in past years, the annual Rat Week was held in November when an effort was made to educate the public concerning the damage to health and property occasioned by rats, and thanks to the valuable support given by the Press a good deal of interest was created. The co-operation of the City Engineer's Department, Cleansing Department, Markets Department and Sewerage Department was enlisted and special measures were taken against sewer rats. Tips and refuse dumps received special attention.

The number of complaints received was 874. Particulars of the work done under the Rats and Mice (Destruction) Act, 1919, are as follows :—

Complaints received	874
Premises inspected	1,407
Premises cleared	716
Rats caught or found poisoned	4,365
Visits for purposes of observation of work in progress	1,639
Visits for other purposes—interviews with owners of infested premises and the like	544
Informal notices served	196
Notices complied with	177

Pig Keeping.—Constant supervision has continued during the year. No legal action had to be taken to ensure compliance with the byelaws.

Buslingthorpe Piggeries.—As a result of complaints of nuisance from occupiers of adjoining properties action was taken to close these piggeries. With the assistance of the Housing Department to which the land belonged, the leases of 14 pig keepers were terminated and 355 pigs removed. Only three pig-keepers remained on this land at the end of December.

Clark Lane Piggeries and Allotments.—As reported last year these allotments are still in a very unsatisfactory condition. The matter is still under consideration by the Health and Improvements Committees.

Plans.—The system whereby those plans submitted to the Building Surveyor which deal with schemes involving sanitary works, offensive trades, houses-let-in-lodgings, and factories and shops, etc., are reviewed by this Department before being finally approved by the Corporation, was continued during 1938. The total number of plans examined and commented upon was 357.

Factories Act, 1937.—This Act became operative on July 1st, 1938. Its provisions in so far they affect local health authorities are very similar to those of the previous Act. Water supply, drainage and sanitary accommodation in factories of both types, that is, factories with and without mechanical power, are the responsibility of the Local Authority while such things as cleanliness, ventilation, temperature and overcrowding remain in the hands of H.M. Inspector of Factories. Factories without mechanical power are dealt with by local authorities in their entirety as also are bakehouses.

The number of factories handed over by the Home Office to be dealt with as regards sanitation was 3,655. In addition there were 875 non-mechanical factories comprising 124 trades and 275 factory bakehouses.

A Supervisory Inspector was appointed on November 1st, 1938, to take charge of the work done by two inspectors of factories, two shops inspectors and one offices inspector. The two women inspectors also do part duties in this section.

A complete summary of the work done during the year under the Factory and Workshops Act, 1901, and the Factories Act, 1937, appears on pages 244 and 245.

Other visits by Inspectors on account of :—

	Factories with mechanical power	Factories without mechanical power	Other premises
Non-abatements	206	309	..
Drain Inspection	82	22	..
Drains tested	46	6	..
Infectious disease enquiries	343	118	..
River pollution	..	..	..
Complaints	117	57	..
Measurement of rooms ..	..	78	..
Bakehouses—Underground	..	22	..
Above ground	14	1	..
Other causes	77	73	..
Appointments	58	68	..
TOTAL	943	754	..

Close co-operation continued to be maintained between the Department and H.M. Factory Inspectorate.

FACTORIES AND WORKSHOPS.

1.—INSPECTION.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories with mechanical power ..	565	173	..
Factories without mechanical power ..	2,579	148	..
Other premises	2	2	..
Total	3,146	323	..

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Want of cleanliness (S. 1)	43	44	..	..
Overcrowding (S. 2)	..	..	..	..
Unreasonable temperature (S. 3) ..	..	..	..	..
Inadequate ventilation (S. 4) ..	6	5	1	..
Ineffective drainage of floors (S. 6)	1	2	..	..
Sanitary Conveniences (S. 7)—				
Insufficient	17	18	..	..
Unsuitable or defective	245	161	..	..
Not separate for sexes	8	7	..	..
Other offences	394	420	..	..
Total	714	657	1	..

3, 4, 5.—OTHER MATTERS.

	Number of		
	Lists.	Outworkers.	
Homework :—		C.	W.
<i>List of Outworkers (S. 110) :—</i>			
Lists received twice in the year	128	556	482
„ once in the year	15	20	14
Addresses of \ received from other Authorities ..	149		
outworkers / forwarded to other Authorities ..	..		
Notices to occupiers as to keeping or sending lists ..	363		
Prosecutions.. .. .	..		
Inspection of Homeworkers' premises	614		
<i>Homework in unwholesome premises :—</i>			
Instances	8		
Notices (S. 111)	8		
Prosecutions.. .. .	..		
†Homework in infected premises :—			
Instances	7		
Orders made } Public Health Act, 1936 (S. 153) ..	7		
Prosecutions } ..	..		
[Infectious cases removed, disinfection carried out under ordinary powers.]			
Factories on the Register (S. 8) at the end of year :—			
With mechanical power	2,445		
Without mechanical power	875		
Bakehouses on register as workshops	275		
Do. domestic	285		
Total number of workshops on Register	3,880		
Matters notified to H.M. Inspectors of Factories :—			
Failure to affix Abstract of the Factory and Workshop Act (S. 128)	..		
Action taken in matters referred by { Notified by H.M. Inspector ..	52		
H.M. Inspectors { Reports (of action taken) sent to H.M. Inspectors..	49		
Other	..		
Underground Bakehouses (S. 54) :—			
Certificates granted during the year	..		
In use at the end of 1938	23		

† 3 Diphtheria, 4 Scarlet Fever.

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

Work of Women Inspectors.—During the year the two women inspectors carried out their various duties, comprising the visiting of outworkers, investigation of outbreaks of infectious diseases in factories, the routine inspection of shops, non-mechanical factories and certain restaurants, and the investigation of complaints received from the factory inspectors or other sources relating to sanitary defects affecting the health of female workers. The following is a summary of the year's work :—

Infectious Diseases.—The following visits were made :—

To mechanical factories (172 cases)	186
To non-mechanical factories including restaurants (62 cases)	63
To absent employees	7
Special visits (Typhoid carriers)	53

Factories.—Part of the work done by the women inspectors under this heading appears on pages 244 and 245.

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

Outworkers' homes	614
Outworkers, employers' premises	133
Factories	20
Non-mechanical factories (routine and complaint)	655
Restaurants (routine and complaint)	1,234
Special visits	68
	2,724

Inspections of public sanitary conveniences for women	379
Nuisances found 93, abated 86.	

The work done in connection with the inspection of shops is included under the heading of Shops Act, 1934.

Public Health Act, 1936, Sections 83 and 84.—Power is given under this Act on the certificate of the Medical Officer of Health or Sanitary Inspector to deal with articles and premises infested with vermin. In connection with the Corporation's slum clearance

scheme, an inspection is made of all condemned houses where re-housing of the tenant in a new house is proposed for the purpose of ascertaining whether they are infested or not. If the house to which the tenant is to be moved has already been occupied it also is inspected.

The following is a summary of these inspections and the action taken :—

ERADICATION OF BED BUGS.

(a) Council Houses :—				
(1) Found to be infested	..	..	..	484
* (2) Disinfested	..	..	..	811
(b) Other Houses :—				
(1) Found to be infested				
† By Health Department	..	..	..	2,732
(2) Disinfested				
By Owners or occupiers	..	..	..	115

*Includes houses adjacent to those found to be infested.

†Majority dealt with by demolition.

The disinfestation of Council houses is carried out by the application of hydrogen cyanide, the work of disinfestation being undertaken by private contractors on behalf of the Corporation.

The methods employed in the disinfestation of other houses include (a) H.C.N. fumigation where infestation is severe, (b) the use of "Bromar" blocks (Sulphur), and (c) "Zaldecide" spray in cases where infestation is slight. Where an infested house is to be demolished, all combustible material is burned on the site.

The furniture and effects of all persons becoming tenants of Council houses are removed by the Corporation in special steel furniture containers to the disinfestation station and dealt with by hydrogen cyanide. Bedding and articles of a like nature are disinfested by steam. Details of this work will be found in the table on page 55.

Shops Act, 1934.—The work of inspection during the year has gone ahead with a swing. The total number of shops inspected was 2,946 as against 1,275 during 1937. Contraventions of the Act were found in 479 premises, necessitating the service of 497 preliminary and 121 statutory notices.

Particulars of contraventions relating to ventilation, sanitary conveniences, lighting, washing facilities, facilities for the taking of meals, and temperature are set out in the table on page 248.

During the inspection of shops there were observed some 272 defects remediable under the law relating to public health, and of these defects 206 were remedied. In this connection there were served 196 preliminary notices and 56 statutory notices.

In connection with this branch of the Department's activities there were paid 725 visits for the purpose of securing the remedy of existing defects and 230 visits to inspect works in progress.

It is interesting to note that since the Shops Act became operative on 31st December, 1934, a total of 6,001 shops have been inspected, of which number 986 were found to contravene the Act.

Public Health Act, 1936, Section 154.—It is an offence to distribute any article of food or drink to any person, or any article whatsoever to a person under the age of fourteen years, by any collector or dealer in rags, old clothes, or similar articles. In this connection one rag and bone dealer was proceeded against, but as this was the first offence under the new Act the case was dismissed on payment of four shillings costs.

Removal of Offensive or Noxious Matters.—During the year 25 persons who contravened the byelaws were warned and a sharp look-out is being kept for offenders.

Mortuary Accommodation.—The number of bodies dealt with at the Marsh Lane Mortuary during the year was 337, comprising 307 admitted from private houses, workshops, etc., 24 admitted as a result of street accidents, and 6 unclaimed bodies. The number dealt with in the previous year was 363.

Shaftesbury House, Beeston.—By kind permission of the Housing Director, Mr. R. A. H. Livett, the following short description of the hostel is given below.

Shaftesbury House is a Lodging House planned to provide accommodation for permanent and casual lodgers.

The site is situated one mile south-west of the centre of the city with easy transport from and to City Square, the workmen's single fare being $\frac{1}{2}$ d., and the ordinary single fare 1d.

The building is of brick construction with cavity walls, faced with straw coloured bricks set with raked joints and the roofs, other than flat roofs, covered with hand-made sand-faced golden brown tiles. The windows are steel casement windows throughout, and the floors and staircases of fire resisting construction, the floors generally furnished with wood blocks.

The building is divided into two sections, one for men and one for women, each section being self-contained, but sharing common services such as the Reception Office, Kitchens, Laundry, Boiler House, Stewards' Quarters, etc.

On each of the four floors provision is made for 129 lodgers.

	Men's Section.		Women's Section.	
Large bedrooms ..	..	11	..	9
Small bedrooms ..	..	70	..	39
		—		—
Total ..	..	81	..	48
		—		—

The large bedrooms are not less than 90 feet super and the small bedrooms 52 feet super each with a minimum of 416 cubic feet of air space.

The services include electric light, power and bells, wireless relays, gas, steam, hot water and central heating on all floors.

The building has been furnished and decorated throughout.

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.	
Mill Hill and South	42	in 8	14	1	in 1	..	142
Westfield	33	.. 18	13	..	..	..	323
Blenheim	46	.. 10	12	5	.. 3	..	110
Central	133	.. 24	4	2	.. 2	..	116
Woodhouse.. ..	21	.. 10	19	1	.. 1	1	223
North	23	.. 10	5	2	.. 2	..	178
Far Headingley ..	17	.. 13	6	..	..	..	130
Hyde Park.. ..	30	.. 13	2	5	.. 4	1	177
Kirkstall	22	.. 10	14	2	.. 2	..	188
Burmantofts ..	19	.. 5	14	1	.. 1	..	95
Harehills	39	.. 19	18	..	..	..	129
Potternewton ..	15	.. 8	7	..	..	2	82
Roundhay	38	.. 11	1	..	..	..	77
Cross Gates and Templenewsam ..	16	.. 11	5	..	..	..	211
Richmond Hill ..	7	.. 4	12	..	..	..	122
Osmondthorpe ..	11	.. 7	8	..	..	..	102
East Hunslet ..	13	.. 5	25	..	..	..	157
Hunslet Carr and Middleton	9	.. 5	4	..	..	2	67
West Hunslet ..	31	.. 14	14	..	..	1	60
Beeston	7	.. 6	11	..	..	..	48
Holbeck (South) ..	45	.. 6	4	..	..	..	37
Holbeck (North) ..	87	.. 9	12	..	..	..	151
Armley and New Wortley	11	.. 9	9	..	..	..	68
Upper Armley ..	8	.. 5	16	..	..	..	65
Bramley	25	.. 15	17	..	..	..	177
Farnley & Wortley	5	.. 4	12	..	..	..	140
Totals	753	in 259	278	19	in 16	7	3,375

These visits made by Ward Inspectors only. This work is included in the figures in the table on page 235.

SMOKE ABATEMENT.

Smoke is the one remaining sanitary nuisance that defies all efforts to control. Since 1875, and long before that, local health authorities have been trying to find a solution to the problem of the dirty atmosphere in our large towns but so far the solution, if there is one, has escaped them. We still suffer—perhaps not so much as our forbears did but very much more than we should—from the deliberate fouling of the air by coal smoke. Why have we failed? First, because our efforts have been half-hearted and have had little or no support from the industrialist and still less from the householder, secondly, because the law has been weak, and thirdly, because the greatest good to the greatest number has been sacrificed to personal prejudice and expediency. We shall make no progress until we adopt the firm line and prohibit entirely the burning of coal in its raw state except for certain specified trades where the use of coal is necessary. This is not an impossible or utopian suggestion. It can be done if only the Government has the will to do it. The benefit to human health, to vegetation, and to the appearance of our towns would be immediate and would more than repay the initial inconvenience and expense caused by the change.

The table on page 255 shows the work of the smoke inspectors during the year. The average duration of black smoke per observation was 33·4 seconds as compared with 32·2 seconds for the previous year, and the number of chimneys found offending against the byelaw was 56 as against 57 for the previous year.

The ratio of offending chimneys to observations in 1938 was 1 to 120 which works out at a percentage of 0·8 as compared with 1 to 122 and a percentage of 0·8 for the previous year. For the previous five years the average ratio was 1 to 125 or a percentage of 0·8.

West Riding of Yorkshire Regional Smoke Abatement Committee.—The Executive Committee held five meetings during the year, and the average attendance was fifteen.

The principal matters discussed during the year were nuisances arising from a coking plant and burning spoilbanks. The smoke abatement bye-laws under Section 104 of the Public Health Act, 1936, were also considered.

Details of the work of the Committee will be found in the Annual Report, copies of which may be had from the Honorary Secretary at 12, Market Buildings, Leeds, 1.

Smoke Gauges.—The table on page 256 shows the monthly deposit of soot and ash in English tons per square mile for the years 1937 and 1938. As compared with the previous year decreases were recorded at all the stations. The station with the highest monthly average was Park Square (29.96) and that with the lowest Headingley (10.89). The table on page 258 gives the yearly records from 1936-1938.

Sunlight and Daylight Gauges.—The table on page 257 shows the amount of daylight registered at Headingley, Park Square, York Road, Hunslet and Middleton for the years 1937 and 1938. As compared with the previous year increases were recorded at all stations. The station showing the highest monthly average was Middleton (5.66) and that with the lowest Hunslet (4.79). It should be pointed out, however, that the table also shows that Headingley No. 2 station, which was only opened on March 1st, had an average for 10 months of 6.14. The table also gives the results at Garforth which is outside the city, for the years 1937 and 1938. The monthly average at Garforth for 1938 was 6.69.

Sulphur Pollution of the Atmosphere.—The following table gives the estimation of sulphur compounds in the atmosphere ascertained by the lead peroxide method at Headingley and Park Square for the years 1937 and 1938.

The analyses in connection with the smoke gauges, sunlight and daylight gauges, and sulphur pollution of the atmosphere have all been carried out by Mr. C. H. Manley, City Analyst.

ESTIMATION OF ATMOSPHERIC SULPHUR POLLUTION BY LEAD PEROXIDE METHOD.

Weight of SO_3 calculated per 100 sq. cms. of exposed fabric in milligrammes per day.

Period.	STATIONS.			
	Headingley.		Park Square.	
	1937	1938	1937	1938
January	3.46	2.42	3.88	3.68
February	2.24	1.86	4.00	2.82
March	*	2.01	3.18	3.01
April	1.64	0.72	2.99	1.26
May	1.18	0.93	2.11	1.53
June	1.07	1.27	1.94	2.16
July	1.01	1.15	1.69	1.71
August	0.86	1.01	1.69	1.48
September	1.56	1.59	2.51	2.62
October	2.24	2.75	3.85	3.56
November	2.56	2.80	4.57	3.61
December	3.23	2.38	5.17	3.52
Monthly Average ..	1.91	1.74	3.13	2.58

* Accident in analysis—no result.

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

	(1)	1937.	1938.
Furnaces inspected		1,924	1,887
Observations of chimneys		6,953	6,741
Number of minutes of black smoke during observations		3,735½	3,752¾
Average duration of black smoke per observation		32·2 secs.	33·4 secs.
Number of chimneys offending against the byelaws		57	56
Furnaces altered or reconstructed		67	64
Firms who have adopted smokeless fuel		4	7
Chimneys newly erected		7	—
Furnaces in connection with new chimneys..		7	—
Notices served on owners and occupiers		57	56
Prosecutions		—	—

SMOKE OBSERVATIONS, 1922-1938.

(2)

Year.	Observations of Chimneys.	No. of Chimneys found offending against the byelaw.	Percentage.
1922	3,853	275	7·1
1923	6,007	202	3·3
1924	6,773	113	1·7
1925	4,373	92	2·1
1926	4,114	63	1·5
1927	4,185	58	1·4
1928	3,492	38	1·1
1929	3,384	77	2·3
1930	4,670	80	1·7
1931	6,397	62	1·0
1932	7,066	57	0·8
1933	6,539	67	1·0
1934	7,105	55	0·8
1935	7,074	50	0·7
1936	7,447	52	0·7
1937	6,953	57	0·8
1938	6,741	56	0·8

SOOT AND ASH GAUGES.
MONTHLY DEPOSIT IN ENGLISH TONS PER SQUARE MILE.
YEARS 1937 AND 1938.

Period.	STATIONS.									
	Headingley.		Park Square.		York Road.		Hunslet		Temple Newsam.	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January ..	14.00	13.70	41.00	35.99	32.82	31.18	22.01	26.20	11.32	16.27
February ..	12.98	7.42	*	22.01	29.93	20.12	25.03	17.67	11.09	8.85
March ..	11.02	6.78	31.16	20.32	28.87	23.08	24.80	16.35	8.95	8.87
April ..	11.17	5.92	32.38	16.43	26.31	21.39	27.24	15.50	11.58	7.47
May ..	11.60	11.93	32.59	30.52	26.49	26.69	26.43	20.24	13.67	13.31
June ..	14.89	9.64	31.06	29.66	26.31	26.26	26.13	18.46	12.70	10.91
July ..	11.50	13.90	34.01	29.28	22.72	24.69	21.83	33.32	12.39	9.84
August ..	9.87	12.49	27.67	38.31	32.30	24.53	17.54	*	*	13.08
September ..	8.95	11.98	23.56	26.74	26.52	19.85	29.04	22.52	12.93	11.70
October ..	13.74	12.70	24.40	37.87	27.42	28.28	33.45	27.57	12.42	12.88
November ..	7.24	13.34	25.27	40.38	22.03	23.58	25.82	15.81	7.75	9.76
December ..	8.97	*	28.43	32.00	23.63	19.91	22.39	17.75	8.59	10.43
Year ..	135.93	119.80 (11 months)	331.53 (11 months)	359.51	325.35	289.56	301.71	231.39 (11 months)	123.39 (11 months)	133.37
Monthly Average ..	11.33	10.89	30.14	29.96	27.11	24.13	25.14	21.03	11.22	11.11

* Bottle broken.

TABLE SHOWING AMOUNT OF DAYLIGHT FOR THE YEARS 1937 AND 1938.
(Value expressed as Milligrams of Iodine liberated by the action of daylight on a mixture of dilute Sulphuric Acid and Potassium Iodide Solution—Daily Average).

Period.	STATIONS.													
	*Headingley. No. 1		†Headingley No. 2	Park Square.		York Road.		Hunslet.		Middleton.		Garforth.		
	1937	1938	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	
January ..	1.24	2.97	..	1.18	2.21	1.36	2.84	1.24	2.41	3.48	3.27	2.57	3.94	
February..	2.70	4.10	..	2.37	3.55	3.14	4.27	2.30	3.58	5.07	4.78	4.04	5.98	
March ..	3.85	5.61	6.08	3.40	5.45	3.92	5.91	2.99	5.50	5.25	7.25	5.16	8.15	
April ..	4.23	6.89	7.05	4.28	6.36	5.46	6.98	4.29	6.53	6.24	7.10	6.49	9.33	
May ..	5.33	7.46	7.56	6.29	7.21	7.22	7.83	6.42	7.73	7.86	7.97	8.38	9.18	
June ..	7.86	7.31	9.13	7.71	7.93	7.74	8.15	6.80	6.73	8.08	7.98	8.90	9.36	
July ..	8.79	7.04	7.02	7.43	6.54	8.27	6.65	8.01	5.51	7.53	7.04	9.47	7.83	
August ..	7.23	7.39	7.89	6.50	6.26	6.73	6.85	5.93	6.24	6.71	7.23	7.83	8.49	
September	5.13	5.35	6.55	5.62	5.49	5.61	5.91	4.86	4.93	4.71	6.08	7.65	6.96	
October ..	3.51	3.67	4.77	3.32	4.00	4.03	4.51	3.22	3.80	4.73	4.54	4.97	5.11	
November	2.70	3.05	3.19	1.84	2.18	2.71	3.00	1.59	2.75	3.43	2.89	3.77	3.38	
December	2.00	2.38	2.18	1.10	1.69	1.78	1.99	1.06	1.77	2.27	1.78	2.63	2.67	
Monthly Average	4.55	5.27	6.14	4.25	4.91	4.83	5.41	4.06	4.79	5.45	5.66	5.99	6.69	

* Station No. 1 (Filter Beds) closed December 31st, 1938. † Station No. 2 (Carnegie College) opened March 1st, 1938.

SOOT DEPOSIT RECORDS, 1926-1938.
ENGLISH TONS PER SQUARE MILE PER ANNUM.

Year.	STATIONS.				
	Heading- ley.	Park Square.	York Road.	Hunslet.	Temple- newsam.
1926	98.02	307.7	*288.1	362.8	..
1927	*133.5	354.5	391.9	501.2	..
1928	141.9	349.5	319.2	304.3	†61.2
1929	*108.4	321.0	302.6	305.4	†80.4
1930	123.9	344.3	299.5	290.5	101.8
1931	126.5	336.2	*266.9	268.5	109.3
1932	105.8	320.7	264.7	255.6	87.5
1933	107.86	305.00	277.83	*276.32	*81.59
1934	124.28	341.70	284.74	294.49	86.24
1935	*131.92	358.88	321.25	*317.55	†108.67
1936	136.95	381.40	301.89	290.13	*118.20
1937	135.93	*331.53	325.35	301.71	*123.39
1938	*119.80	359.51	289.56	*231.39	133.37

* 11 months.

† 10 months.

‡ 7 months.

Housing.

HOUSING.

Last year—1938—was the fifth year in the City Council's programme of Slum Clearance and the table on page 274a sets forth the work accomplished.

A resumption of the work of Slum Clearance has been possible, and 2,579 houses in 11 Unhealthy Areas situated in various parts of the city have been represented during the year.

Number of Houses.—The total number of houses in the city on December 31st, 1938, was 150,262, made up approximately of 85,436 through houses and 64,826 back-to-back houses.

Empty Houses.—At the year end there were 3,820 unoccupied houses, chiefly the larger type in the centre of the city, now out of favour and gradually deteriorating.

New Houses.—The number of new houses completed during the year was 5,686 made up as follows:—

Working Class Houses :—					
Cottage flats with 1 bedroom	..	..	..	..	592
Houses and Flats with 2 bedrooms	..	..	..	..	859
" " " 3 "	..	..	..	..	3,005
" " " 4 "	..	..	..	..	150
" " " 5 "	..	..	..	..	175
Not Working Class :—					
Houses of a larger type	..	..	..	..	905

The total number of houses, including flats, built by the City Council since the War is 18,412 and by private enterprise 30,355.

Housing Shortage.—The number of applications for new houses standing in the registers at the Housing Department on December 31st, 1938, was 2,131.

Application lists have been open during the year for the parlour type of houses on some estates, for non-parlour houses at Middleton, and on various estates for Ageing Persons Flats,

Quarry Hill Flats.—As indicated in my last annual report, several blocks of these flats have come into occupation during the present year, the actual number being 158 at December 31st.

Many others are in the final stage of completion, and it is expected that the whole scheme will be completed during 1939.

As promised in my previous report I append, through the courtesy of Mr. R. A. H. Livett, the Housing Director, a brief description of these Flats :—

They are situated within half a mile north-east of the centre of the city and form the focal point at the East end of the Headrow.

The site is well elevated and has a gradual rise from the South-west to the North-east, and is bounded on the North by New York Road, on the South and East by York Street and Marsh Lane, and on the West by St. Peter's Street and Eastgate.

It is surrounded by wide thoroughfares and served with bus and tram transport. The Central Bus Station, now in course of erection, adjoins the site. Schools are adjacent to the site, also the Leeds Parish Church, St. Mary's Church, and St. Patrick's Roman Catholic Church and School.

The principal shopping streets of the city and the Kirkgate Market are within a few minutes walk.

The scheme has been planned as a self-contained community and arranged with the object of obtaining the maximum amount of light, air and open space.

Dwellings.—938 dwellings are included in the scheme, the allocation being as follows :—

Type A1—two-room dwellings	..	80
„ A2—three-room	„	400
„ A3—four-room	„	394
„ A4—five-room	„	36
„ A5—six-room	„	28
		938

Density.—36 dwellings per acre.

Number of storeys.—Vary from 2 to 8.

Population.—It is estimated that the dwellings will house 3,280 persons or 125 persons per acre.

The dwellings are planned in a series of units, each dwelling having direct staircase access with only two dwellings accessible from any one staircase landing.

In the scheme there are 92 staircases.

Units of four floors and over are provided with small automatic electric passenger lifts serving all floors.

There are 88 lifts in all.

The Plan.—Each dwelling contains an entrance hall, a living-room facing sunwards, a scullery leading on to a self-contained balcony also facing sunwards, a combined bathroom and w.c. which includes a lavatory basin, 1-5 bedrooms, the first bedroom containing a built-in wardrobe and the second bedroom an angle clothes hanger.

In addition, there is a larder, linen cupboard, a combination of cupboards and drawers in the scullery, a china cupboard in the living-room and a fuel store.

A back-to-back range is provided in each dwelling, giving heat to the living-room, cooking facilities and warmth to the scullery, and hot water to the sink, bath and lavatory basin. In addition, a gas griller with a penny slot meter supply is provided to each dwelling.

There is a coal fire in each principal bedroom and all fires are designed for coke consumption and provided with gas poker points.

All rooms are planned so as to obtain the maximum amount of light, and with living-rooms and balconies facing sunwards.

The amenities include :—

Thirty-one stores available for prams, cycles, and hawkers' barrows.

A refuse disposal station (known as the Garchey System) providing for the disposal of all refuse, which will be conveyed from the dwellings in underground suction pipes.

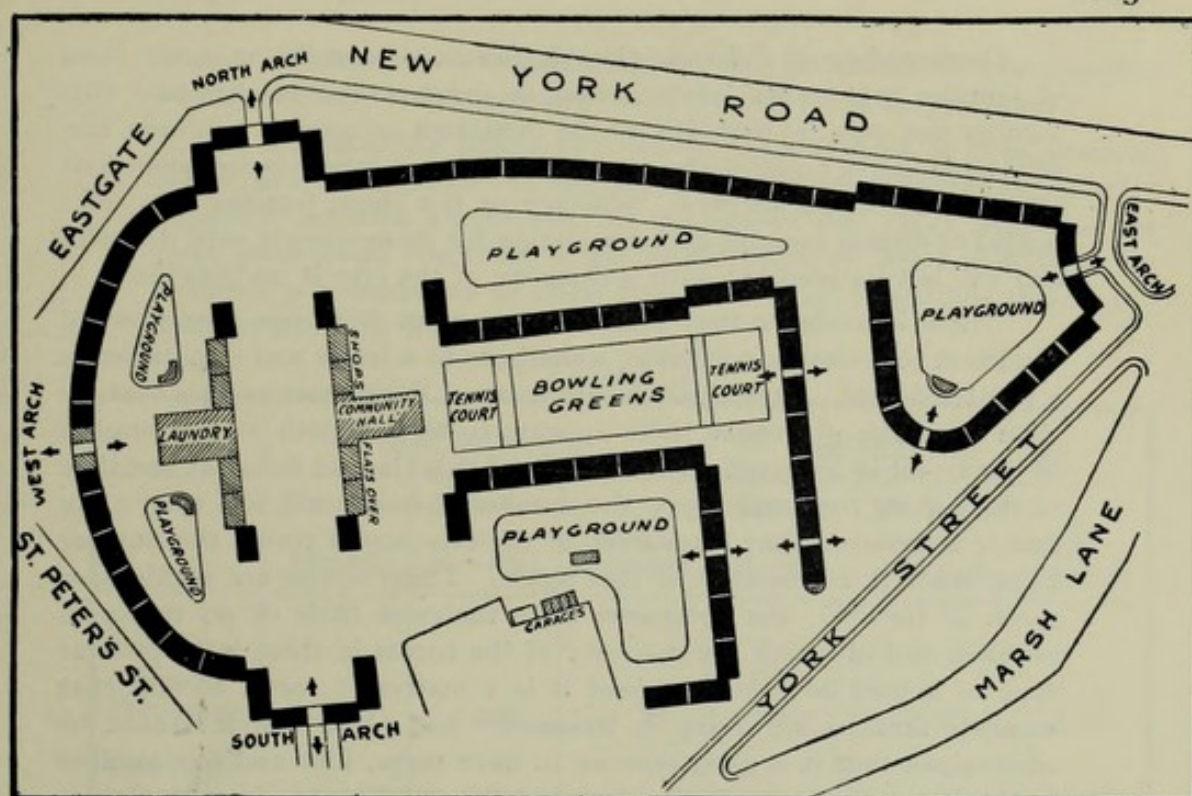
A communal laundry fitted with steam and electrical equipment and providing for 64 sets of washing and drying equipment, together with ironing room, attendants' room, cloak room and lavatories, also a boiler house with special provision for obtaining auxiliary heat generated in the incinerator in the refuse disposal station.

The development provides for 18 shops with basement stores.

Playgrounds.—Five equipped playgrounds (incorporating small shelters with lavatories and drinking fountains) are included for children of varying ages.

Recreation Grounds.—In the centre of the development, provision is made by the terracing of the land for two bowling greens and two tennis courts.

Ornamental Greens.—Large areas will be laid out as ornamental greens and shrubberies and planted with varieties of flowering trees and provided with adequate seating accommodation.



A plan showing the lay-out of the flats.

Housing Act, 1936, Part IV., Sections 57 to 68, Prevention and Abatement of Overcrowding.—By the courtesy of Mr. R. A. H. Livett, the Housing Director, I am able to reproduce the following particulars from the Second Annual Report on the prevention and abatement of overcrowding :—

“ The Housing (Financial Provisions) Act, 1938, is the first Act in which financial provision is specifically made for re-housing provision in connection with the abatement of overcrowding.

“ The Act which became effective on the 1st January, 1939, marks an important stage in the efforts being made towards the prevention and abatement of overcrowding, but as long as the task of slum clearance remains and rehousing continues, it will not be possible to utilise the provisions of the Act for the immediate entire abatement of overcrowding without at the same time interfering with the progress of slum clearance. A recent decision of the Housing Committee to allocate 10 per cent. of new houses erected and relets for the abatement of overcrowding will help materially in the abatement of overcrowding in the city.

The total number of dwelling-houses which have now been surveyed as to overcrowding is 116,639.

Overcrowding on Municipal Estates has been substantially reduced, the percentage now being only 1·05 of the houses occupied. The number of houses overcrowded at the time of the original survey was 605 and although the number abated is 752 there still remain 175 families living in overcrowded conditions due to the fact that during the same period a further 322 municipal houses became overcrowded by the increase in the size of families.

Overcrowding of Privately Owned Houses.—As many as 2,027 cases of families are known to be living in overcrowded conditions; this number can only be regarded as the minimum as contact has been lost with hundreds of families who were found living in overcrowded conditions at the time of the surveys. Whether or not these families have succeeded in finding suitable accommodation for themselves is very doubtful and will not be revealed until a resurvey of the city is undertaken.

There is evidence that some families move from one over-crowded condition to a similar condition, sometimes to a lesser and sometimes to a greater degree. Investigation into some of these cases reveals that, as slum clearance progresses there appears to be a growth in the number of houses-let-in-lodgings. The number of this class of house at the time of the survey 1936 was 1,545, the number to-day is not less than 2,019 and it is believed that a resurvey of the city would reveal the number to be much in excess even of that figure. These houses are within easy reach of the city, the occupants have therefore little or no transport problem and although the majority of the rooms in these large pre-war type of houses do not lack space it is a matter of regret to find that separate families are living in basements and attics and it cannot be maintained that it is good housing to have three, four and five families occupying a house originally designed for one family, even though it may be a large type of house. Where the overcrowding is illegal, the provisions of Part IV of the Act require the Local Authority to serve notices on landlord and tenant to abate within 14 days. This results in the tenant, already unsatisfactorily housed and in whose interest the Act was framed, having to vacate with little prospect of finding satisfactory accommodation in accordance with his or her circumstances, and he is found later in similar or worse conditions, while the landlord has no difficulty in reletting the room or rooms, in some cases repeating the offence. This is an unsatisfactory feature revealed in the enforcement of the provisions of the Act.

"It will be observed in the report which follows that over 60 per cent. of the known cases of overcrowding are in Red Areas. This fact will make the task of rehousing much lighter.

The number of private dwelling-houses surveyed is 97,024, of which not less than 2,027 are known to be overcrowded at the present time. Information of a permanent nature has been obtained in regard to each of the 97,024 houses, as to type, number of rooms, size of each room and the relevant permitted number, but so far as occupants are concerned it must be pointed out that the survey is made over a period of time, actually since December, 1935. Very little information has been available as to the movement of the population in the city other than that on Municipal Estates. No details as to changes and increases in the size of families living in private properties are available. The original survey revealed that there were 1,940 families living in houses where the permitted number equalled the number in family, a child in the family reaching the age of one or ten would automatically overcrowd the house. There were a further 2,415 families where the margin between the number in family and the permitted number was only half

a unit. There would therefore appear the possibility of overcrowding having occurred or occurring at any time in these 4,355 houses.

In following the policy of reviewing known cases of overcrowding, it has been found that 1,127 families have removed from the overcrowded condition revealed at the time of the survey and apart from the few cases since found elsewhere living under similar or worse conditions, no evidence is available as to where and under what conditions these 1,127 families are now living.

TABLE A.

	1936 SURVEY.			31st MARCH, 1939.		
	Number of Houses	Number over-crowded	% over-crowded	Number of Houses	Number over-crowded	% over-crowded
Privately Owned Properties	60,287	1,740	2·88	97,024	2,027	2·09
Municipal Estates	11,298	605	5·35	19,615	175	0·88
TOTAL	71,585	2,345	3·27	116,639	2,202	1·89

"The above table shows that the number of overcrowded families revealed in the original survey was 2,345 and that there were 2,202 known cases of overcrowding on the 31st March, 1939; it will be noted from Table B. that the actual number of cases revealed during the surveys to 31st March, was 5,199.

TABLE B.

Overcrowded Families Rehoused since 1st April, 1937* ..	712
Abatements due to change of tenancy since 1st April, 1937 ..	1,127
Abatements due to reduction in size of families since April 1st, 1937	1,158
Total abatements	2,997
Overcrowded families on Municipal Estates at 31st March, 1939	175
Confirmed cases of overcrowding in privately owned properties at 31st March, 1939	
In Red Areas	1,217
Outside Red Areas	810
Total number of cases of overcrowding revealed by Surveys	5,199

* 1st April, 1937, Appointed Day. Section 59, Housing Act, 1936.

" REHOUSING.

Of the 2,027 families known to be overcrowded in private properties, 1,217 families are occupying houses in Red Areas and rehousing provision will be made for these families in the slum clearance programme. An examination of the remaining 810 cases reveals requirements as set out in the following table.

Houses required to abate overcrowding in private properties outside Red Areas.							
	A1	A2	A3	A4	A5	A7	Total
Number of families	*9	75	310	296	96	24	810

* Owing to a single person occupying a room of less than 70 sq. feet.

" Attention is drawn to the proportion of the various types required.

" OVERCROWDING ON MUNICIPAL ESTATES.

The number of houses on Municipal Estates at the time of the survey in 1936 was 11,298 and of these 605 were overcrowded. The number of houses on Municipal Estates at the 31st March, 1939, inclusive of Grouped Dwellings at Quarry Hill was 19,615, an increase of 8,317.

" The number of houses overcrowded at the same date was 175.

" Overcrowding has been entirely eliminated from 15 of the 29 Municipal Estates and on each of 4 Estates there is only a single case.

" 104 of the 175 are on the Middleton Estate.

" 106 of the 175 are cases of overcrowding in houses of the 3 bedroom type.

" This latter fact demonstrates the necessity of the policy adopted by the Housing Committee of building houses with bedrooms in excess of three.

No. of cases of overcrowding at date of Survey, 1936.	No. of houses that have since become overcrowded.	No. of cases where overcrowding has been abated.	No. of houses overcrowded at 31st March, 1939.
605	322	75 ²	175

" It will be noted from the above statement that the number of abatements is considerably in excess of the number of cases of overcrowding revealed in the survey. This is due to the fact that a further

322 houses have since become overcrowded on account of increases in ages of members of the families.

OVERCROWDED FAMILIES REHOUSED.			
	To 31st March, 1938	To 31st March, 1939	Total since Appointed Day
From Municipal Estates ..	220	207	427
From Private Properties ..	93	192*	285
	313	399	712

* 59 of the 192 families rehoused have been dealt with in the course of Slum Clearance.

" REPORTS OF OVERCROWDING BY MEDICAL OFFICER OF HEALTH.

During the year 130 recommendations in connection with overcrowded families have been received from the Medical Officer of Health, and 40 of these cases have already been provided with suitable accommodation on Housing Estates.

	1937-8	1938-9	Total since Appointed Day.
Reported by the Medical Officer of Health	165	130	295
Rehoused	61	40	101

" CERTIFICATES OF PERMITTED NUMBERS.

The number of Certificates of Permitted number issued during the year was 2,859, making a total of 83,096 Certificates issued by the Department. Although two years have elapsed since the Appointed Day, requests are still being received daily. A number are repeat requests due to change in ownership or agency, while others are the result of rent book inspection.

" TEMPORARY LICENCES.

Section 61 of the Act provides, where it appears to the Local Authority having regard to the existence of exceptional circumstances, to be expedient so to do, they may, on the application of the occupier or intending occupier of a dwelling-house, grant him a licence authorising him to permit such a number of persons, in excess of the permitted number as may be specified in the licence, to sleep in the house. The following figures show the number of cases that have been considered by the Housing Committee since the Appointed Day.

	1937-8	1938-9	Total.
Number of applications for licences for overcrowding during the year	17	9	26
Number granted	9	5	14
Number refused	8	4	12
Number of licences lapsing during the year ..	8	6	14

HOUSING ACT, 1936, PART IV.—OVERCROWDING.
January 1st to December 31st, 1938.

Number of cases of overcrowding discovered in houses owned by the Corporation	108
Number of cases of overcrowding in houses owned by the Corporation which have been relieved	343
Number of overcrowding cases relieved during the year in course of slum clearance operation	14
A. (1) No. of dwellings overcrowded at the end of the year	3,267
(2) No. of families dwelling therein	3,325
(3) No. of persons dwelling therein	23,533
B. No. of new cases of overcrowding reported during the year	640
C. (1) No. of cases of overcrowding relieved during the year	777
(2) No. of persons concerned in such cases	5,046
D. Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	None
E. Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	—

Verminous Houses.—The disinfestation of furniture removed from condemned houses on the slum clearance areas has continued during the year.

Particulars of the number of houses dealt with at the disinfestation station are given in the table on page 55.

The disinfestation of houses on the municipal housing estates has been undertaken by outside contractors on behalf of the Housing Department. The number dealt with during the year was 812 and no failure has been recorded.

Unfit Houses.—The number of houses inspected and found not to be in all respects reasonably fit for human habitation was 26, of which 23 were repaired in response to notices served under Section 9 of the Housing Act, 1936. In addition, 8,985 houses were found to be defective in one respect or another and were repaired. During the year 4 houses were represented as "individual unfit houses" under Section 11 of the Housing Act, 1936, and were ordered by the Housing Committee to be demolished.

A further 63 houses because of their condition were demolished in anticipation of formal proceedings.

Unhealthy Areas.—During the year, which as stated earlier in this section of the report is the fifth of the Council's slum clearance programme, 11 Unhealthy Areas have been officially represented, involving 2,579 houses and a population of 8,027 persons.

Particulars of the Areas are set out in detail in the table on page 270.

In the same period two Public Inquiries were held, the first on July 19th, into

Shannon Street	}	592 houses.
Burmantofts		

and the second on December 13th, into

Black Bull Street	}	567 houses.
Hunslet Road		
Bowman Lane		
Greenwood Street		
Reuben Street		

The Confirming Order for the Burmantofts Unhealthy Area was received during the year under review, particulars of which are set out in the table on page 274a.

Demolition.—This work continues to progress steadily, with the result that many cleared sites now appear in various parts of the city.

The work done in the different Areas appears in the table on page 271.

The total number of dwelling-houses demolished during the year was 3,427.

OFFICIAL REPRESENTATIONS MADE IN THE FIFTH YEAR OF THE CORPORATION'S PROGRAMME UNDER SECTION 25 OF THE HOUSING ACT, 1936, with DETAILS OF HOUSES, POPULATION AND DATES OF REPRESENTATION.

Area.	Scheme.	No. of houses.	Popula- tion.	Date of Representation.
Shannon Street	Compulsory Purchase	175	585	Feb. 16th, 1938
Burmantofts	" "	417	1,365	" "
Black Bull Street	Compulsory Purchase and Clearance	93	258	April 11th, 1938
Hunslet Road	Compulsory Purchase	35	117	" "
Bowman Lane	" "	59	200	" "
Greenwood Street, Hunslet	" "	103	330	" "
Reuben Street	" "	277	854	" "
Glasshouse Street	" "	663	1,995	Sept. 14th, 1938
St. James' Street	" "	94	253	" "
Canning Street	" "	473	1,459	Oct. 19th, 1938
Waterloo Road, Hunslet	" "	190	611	" "
Individual Unfit Houses	Under Housing Act, 1936, Section II.	4	12	Jan. to Dec., 1938.
		2,583	8,039	

Cleared Sites.—As the work of slum clearance progresses, together with the consequent demolition of the old houses, vacant sites are to be seen in many parts of the city.

As regards some of the larger Areas plans for re-development are being prepared. At Sweet Street re-building is in progress and will take the form of blocks of flats of modern construction.

Many other cleared sites remain bare and looking somewhat desolate. Because of their surroundings some of these are quite unsuitable for housing purposes but there are others which though small are well situated and might be used for the erection of houses for working folk desiring to live near the centre of the city.

In addition to the houses which have disappeared under the Slum Clearance Programme, *vide* page 274a, it must be remembered that a certain number of houses which stood on the fringe of various Unhealthy Areas, and which should have been included when those Areas were represented, have already been demolished to make way for certain street improvements. These houses, of course, must be regarded as part of the 30,000 unfit houses included in the Slum Clearance Programme.

The following is a list of the areas in which these houses were and the number of houses demolished :—

Quarry Hill	700
Site of Civic Hall	100
West Street	48
Meadow Lane	30
York Road, 1, 2 & 3	23
Regent Street	150
Spence Lane & Domestic Street	50
Low Road, Hunslet	61
St. James's Street	21
Burmantofts	40
Saville Green	30
Balm Road	10
Total	1,263

TABLE SHEWING THE NUMBER OF HOUSES ERECTED IN LEEDS DURING THE LAST THIRTY-SEVEN YEARS, ENDED 31st MARCH, 1939.

Year.	By Private Enterprise.	By Leeds City Council.	Total.
1903	2,572	..	2,572
1904	2,923	..	2,923
1905	2,442	..	2,442
1906	1,748	..	1,748
1907	1,135	..	1,135
1908	919	..	919
1909	836	..	836
1910	584	..	584
1911	505	..	505
1912	350	..	350
1913	220	..	220
1914	287	..	287
1915	228	..	228
1916	146	..	146
1917	51	..	51
1918	5	..	5
1919	4	..	4
1920	7	..	7
1921	104	92	196
1922	118	930	1,048
1923	108	1,810	1,918
1924	354	264	618
1925	593	358	951
1926	1,044	332	1,376
1927	1,522	856	2,378
1928	1,553	830	2,383
1929	1,254	618	1,872
1930	1,696	976	2,672
1931	913	738	1,651
1932	1,439	1,195	2,634
1933	1,758	689	2,447
1934	2,990	710	3,700
1935	3,180	854	4,034
1936	3,211	670	3,881
1937	3,166	2,379	5,545
1938	2,889	2,625	5,514
1939	3,138	2,569	5,707
Totals	45,992	19,495	65,487

TABLE SHEWING THE TOTAL AMOUNT OF HOUSING WORK DONE
BY THE LEEDS CITY COUNCIL TO 31ST MARCH, 1939.
ASSISTED SCHEMES. (1919 ACT).

NAME OF ESTATE.	Sewers laid. Length in yds.	Roads formed, pitched or concreted and ashed. Length in yds.	No. of Houses, Flats and Shops for which Contracts have been signed.	No. of Houses Flats and Shops com- pleted.	No. of Houses, Flats and Shops on which work has been com- menced (including those in previous column).
Hawthornth 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
Demonstration Houses, Meanwood ..	included	above.	6	6	6
Crossgates ..	4,510	6,063	488	488	488
Middleton ..	4,239	5,477	697	697	697
Ivy House ..	Existing	Existing	46	46	46
Section 12/3 Houses	do.	do.	398	398	398
Halton ..	do.	do.	118	118	118
Totals ..	21,436	26,628	3,447	3,447	3,447

OTHER THAN ASSISTED SCHEMES

Wyther House ..	1,058	1,650	244	244	244
Meanwood ..	3,287	3,761	584	584	584
Crossgates ..	included	in A.S.	176	176	176
Middleton ..	10,800	11,999	2,149	2,149	2,149
Hollin Park ..	2,647	2,396	357	357	357
York Road ..	8,470	10,659	1,923	1,923	1,923
Harehills ..	690	868	112	112	112
Hawthornth ..	1,426	1,981	510	510	510
Greenthorne ..	1,161	1,290	216	216	216
Southfield ..	465	539	98	98	98
Dewsbury Road ..	2,635	2,817	616	616	616
Westfield ..	4,038	3,796	686	686	686
Potternewton ..	3,064	3,547	782	720	720
East End Park (pur- chased for re-housing)	Existing	Existing	192	192	192
Sandford House ..	4,605	5,218	1,068	1,002	1,068
Torre ..	1,963	2,502	524	524	524
Hillidge Road ..	44	66	32	32	32
Gipton ..	20,446	24,202	3,496	3,496	3,496
Quarry Hill ..	2,505	2,147	954	447	951
Belle Isle (1) ..	5,936	6,559	1,090	884	1,042
Halton ..	Existing	Existing	22	22	22
Briarside—Seacroft ..	1,612	1,407	182	180	180
Fairfax Road ..	..	..	40	40	40
Halton Moor ..	5,042	5,399	1,168	570	1,118
Parklands—Seacroft ..	9,649	10,259	1,270	388	1,110
Belle Isle (2) ..	7,465	5,795	609	..	298
Brooklands—Seacroft ..	..	..	930	..	..
Sweet Street ..	..	..	366	..	..
Marsh Lane ..	..	..	471	..	..
TOTALS ..	99,008	108,857	20,867	16,168	18,464
GRAND TOTALS ..	120,444	135,485	† 24,314	† 19,615	21,911

† Includes 4,602 Cottage Flats and 1,797 Flats.

‡ Includes 3,880 Cottage Flats and 447 Tenement Flats completed.

The above figures include Shops and Practitioners' Houses.

Since 1st April, 1928, the Halton Housing Estate comprising 140 Houses has been taken over by the Leeds City Council and is incorporated in the above statements.

HOUSING ACT, 1936.

Table shewing 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, 1938, and the numbers represented or otherwise dealt with, pursuant to the Housing Acts, with the corresponding figures for 1936 and 1937.

	1936.	1937.	1938.
Number of new houses erected during the year ..	4,973	5,635	5,686
(i) By the Local Authority	2,019	2,659	2,567
(ii) By other bodies and persons	2,954	2,976	3,119
1. <i>Inspection of dwelling-houses during the year.</i>			
(1) Total number of dwelling-houses inspected for housing defects under Public Health or Housing Acts and the number of inspections made	14,695	11,532	8,985
(2) Number of dwelling-houses (included under Sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925, and the number of inspections made	122	27	..
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	1,126	..	2,583
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	118	11	26
2. <i>Remedy of Defects during the year without Service of Formal Notices.</i>			
Number of defective dwelling-houses rendered fit in consequence of informal action taken by the Local Authority or their Officers	37	10	23
3. <i>Action under Statutory Powers during the year.</i>			
A.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which notices were served requiring repairs ..	97	..	..
(2) Number of dwelling-houses which were rendered fit after service of Formal Notices :—			
(a) By owners	39	..	..
(b) By Local Authority in default of owners ..	..	..	..
B.—Proceedings under the Public Health Acts.			
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	18,763	14,739	17,863
(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—			
(a) By owners	16,994	13,196	17,831
(b) By Local Authority in default of owners ..	..	..	..
C.—Proceedings under Sections 11 and 12 of the Housing Act, 1936.			
(1) Number of dwelling-houses in respect of which Demolition or Closing Orders were made ..	16	58	4
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	6	35	38

Year: 1900

Name		Age		Sex		Religion		Marital Status		Occupation		Education		Income		Assets		Liabilities		Total	
John Doe		35		Male		Protestant		Married		Farmer		High School		\$1,200		\$500		\$700		\$1,900	
Jane Doe		32		Female		Protestant		Married		Homemaker		High School		\$800		\$300		\$500		\$1,300	
Robert Smith		40		Male		Catholic		Married		Teacher		College		\$1,500		\$600		\$900		\$2,400	
Mary Smith		38		Female		Catholic		Married		Homemaker		College		\$1,000		\$400		\$600		\$1,600	
William Johnson		25		Male		Protestant		Single		Student		College		\$500		\$200		\$300		\$700	
Elizabeth Johnson		22		Female		Protestant		Single		Student		College		\$400		\$150		\$250		\$650	
Thomas Brown		50		Male		Protestant		Married		Retired		High School		\$1,000		\$400		\$600		\$1,600	
Sarah Brown		45		Female		Protestant		Married		Homemaker		High School		\$800		\$300		\$500		\$1,300	
James Wilson		30		Male		Protestant		Married		Farmer		High School		\$1,100		\$450		\$650		\$1,750	
Anna Wilson		28		Female		Protestant		Married		Homemaker		High School		\$900		\$350		\$550		\$1,450	
Charles Davis		42		Male		Protestant		Married		Teacher		College		\$1,300		\$500		\$800		\$2,100	
Margaret Davis		39		Female		Protestant		Married		Homemaker		College		\$1,100		\$400		\$700		\$1,800	
George Miller		20		Male		Protestant		Single		Student		College		\$600		\$250		\$350		\$850	
Lucy Miller		18		Female		Protestant		Single		Student		College		\$500		\$200		\$300		\$700	
Frank Taylor		33		Male		Protestant		Married		Farmer		High School		\$1,000		\$400		\$600		\$1,600	
Helen Taylor		31		Female		Protestant		Married		Homemaker		High School		\$900		\$350		\$550		\$1,450	
Edward White		48		Male		Protestant		Married		Retired		High School		\$1,200		\$450		\$750		\$1,950	
Alice White		46		Female		Protestant		Married		Homemaker		High School		\$1,100		\$400		\$700		\$1,800	
Harold Green		27		Male		Protestant		Married		Farmer		High School		\$1,000		\$400		\$600		\$1,600	
Bertha Green		25		Female		Protestant		Married		Homemaker		High School		\$900		\$350		\$550		\$1,450	
William Black		36		Male		Protestant		Married		Farmer		High School		\$1,100		\$450		\$650		\$1,750	
Sophia Black		34		Female		Protestant		Married		Homemaker		High School		\$1,000		\$400		\$600		\$1,600	
George Black		24		Male		Protestant		Single		Student		College		\$700		\$300		\$400		\$1,000	
Elizabeth Black		22		Female		Protestant		Single		Student		College		\$600		\$250		\$350		\$850	
Frank Black		19		Male		Protestant		Single		Student		College		\$500		\$200		\$300		\$700	
Margaret Black		17		Female		Protestant		Single		Student		College		\$400		\$150		\$250		\$650	

CITY OF LEEDS.

TABLE SHOWING THE PROGRESS OF THE SLUM CLEARANCE WORK UNDER THE FIVE YEARS' PROGRAMME ADOPTED BY THE CITY COUNCIL.

AREA.	Date of Representation.	No. of Houses		Population.	Date of Inquiry.	Date when Order Confirmed.	RESULTS.						No. of houses Demolished.
							Pink.		Pink to Grey.		Excluded †		
		Pink.	Grey.				Houses.	Other Buildings.	Houses.	Other Buildings.	Houses.	Other Buildings.	
West Street	3/9/31	222	6	716	6/10/32	11/3/33	222	—	—	—	—	2	228
Cavalier Street	19/1/33	103	—	381	9/5/33	25/7/33	103	1	—	—	—	—	103
Woodhouse Street	"	83	—	276	"	"	83	3	—	—	—	—	83
Meadow Lane	"	229	1	981	"	2/10/33	209	20	1	—	19	1	210
Newtown	15/2/33	245	4	879	10/10/33	2/3/34	242	6	3	6	—	—	249
Isle Lane	"	229	—	894	"	21/2/34	220	32	3	—	6	—	224
Albion Terrace	"	62	—	203	"	16/2/34	56	6	—	—	6	2	59
Bell's Buildings	"	41	—	150	"	"	41	1	—	—	—	—	41
York Road	24/4/33	603	8	2,301	"	5/3/34	581	28	9	2	13	23	586
Bleazard Fold	19/1/33	7	—	28	"	6/7/34	7	—	—	—	—	—	7
Marsh Lane	7/2/34	1,214	7	4,352	27/6/34	22/12/34	1,174	62	27	10	13	2	1,209
Marlborough Street and Little													
Queen Street	19/4/34	871	4	2,999	24/10/34	18/5/35	813	26	41	22	17	3	826
Camp Field	13/6/34	141	—	532	22/1/35	16/9/35	133	—	—	—	8	—	127
Land Court	"	47	—	139	"	"	39	4	—	1	8	—	39
Water Lane	"	136	—	500	"	"	126	2	—	4	10	2	123
Hunslet Hall Road	"	44	—	113	"	"	44	13	—	1	—	—	43
Cottage Street	"	109	—	368	"	"	107	2	—	1	2	—	107
Cromwell Street	"	622	6	2,133	"	"	582	8	37	6	3	1	573
Sweet Street	21/12/34	1,060	139	4,119	2/5/35	24/9/35	1,049	38	20	12	—	—	1,153
Regent Street	"	268	2	811	"	"	268	8	—	1	—	—	268
South Accommodation Road	11/3/35	322	21	1,288	22/10/35	25/5/36	301	—	13	—	8	—	323
Elberby Lane	"	773	47	2,626	"	"	746	13	10	—	17	—	771
Pontefract Lane	"	86	—	225	"	"	83	—	—	—	3	—	84
Long Close Lane	"	33	—	107	"	"	33	—	—	—	—	—	33
Hampton Street	"	33	—	100	"	"	31	—	—	—	2	—	30
Copley Hill	19/6/35	20	—	64	28/1/36	26/9/36	20	—	—	—	—	—	20
Spence Lane	"	128	—	397	"	"	127	3	1	—	—	—	114
Gelderd Road, Whitehall Road and													
Wortley Lane	"	471	—	1,305	"	"	470	24	—	—	1	1	244
Domestic Street	"	353	5	1,106	"	"	346	7	6	—	1	—	18
Reservoir Street	"	86	—	228	12/5/36	10/11/36	84	6	—	—	2	2	55
Woodhouse	"	392	24	1,162	"	"	369	17	15	—	8	1	278
Meanwood Road	"	352	—	1,045	"	"	329	8	4	—	8	—	317
Canal Wharf	19/7/35	25	—	81	28/1/36	26/9/36	21	—	—	—	—	—	21
Orchella Place	15/10/35	11	—	24	12/5/36	22/8/36	11	—	—	—	—	—	11
Salem Place	"	14	—	47	"	10/11/36	13	—	—	—	—	—	13
Kirkgate	"	26	—	65	"	"	9	—	—	—	—	—	9
Belfort Court	"	23	—	51	"	"	23	—	—	—	16	—	23
Talavera Street	"	18	—	60	"	"	12	—	—	—	6	—	18
Kirk's Yard	"	5	—	17	"	"	4	—	1	—	—	—	5
Grey Walk	"	12	—	36	"	22/8/36	12	—	—	—	—	—	12
Chadwick Court	"	15	—	37	"	10/11/36	15	—	—	—	—	—	15
Maude Street and Barker's Yard	"	11	—	48	"	"	11	—	—	—	—	—	11
Lee's Yard	"	15	—	37	"	"	15	—	—	—	—	—	15
Kirkstall Road (Central)	8/1/36	1,088	237	4,116	3/11/36	23/4/37	1,069	3	19	—	—	—	182
Elberby Lane No. 3 (part)	11/3/35	3	—	9	"	18/9/36	3	—	—	—	—	—	3
Talavera Street No. 2	15/10/35	6	—	19	"	"	6	—	—	—	—	—	6
Gelderd Road No. 1a	19/6/35	1	—	3	"	"	1	—	—	—	—	—	1
Meanwood Road No. 8a	"	5	—	20	"	"	5	—	—	—	—	—	5
Shannon Street	16/2/38	175	1	587	19/7/38	"	175	—	—	—	—	—	175
Burmantofts	"	417	49	1,507	"	"	417	—	—	—	—	—	417
Black Bull Street	11/4/38	93	3	270	13/12/38	4/11/38	417	1	—	—	—	—	417
Hunslet Road	"	35	2	117	"	"	—	—	—	—	—	—	35
Bowman Lane	"	59	—	200	"	"	—	—	—	—	—	—	59
Greenwood Street (Hunslet)	"	103	—	330	"	"	—	—	—	—	—	—	103
Reuben Street	"	277	6	872	"	"	—	—	—	—	—	—	277
Glasshouse Street	14/9/38	663	18	2,057	"	"	—	—	—	—	—	—	663
St. James' Street	"	94	3	262	"	"	—	—	—	—	—	—	94
Canning Street	19/10/38	473	4	1,471	"	"	—	—	—	—	—	—	473
Waterloo Road (Hunslet)	"	190	2	626	"	"	—	—	—	—	—	—	190

† Most of the houses shown in "excluded" column were on undertakings given by the Owners or so dealt with by the Ministry on the understanding that the City Council should take further action under Part II. of the Housing Act.

SLUM CLEARANCE
(to December, 1938).

	Number of families re-housed.				Number of families displaced.	
	New houses	Re-lets	Other properties	Total re-housed	Found own accommodation	Total displaced
To December 31st, 1938	5,823	2,432	21	8,276	1,570	9,846

Of the total families displaced 15·95% have found their own accommodation.

" " " 59·14% have been re-housed in new houses.

" " " 24·70% " " " re-lets.

" " " 0·21% " " " other properties

" " " re-housed 70·36% " " " new houses

" " " 29·39% " " " re-lets.

" " " 0·25% " " " other properties.

Health Education and Propaganda. Staff Changes.

HEALTH EDUCATION AND PROPAGANDA.

BY

JAMES SHARPE, M.B., F.R.F.P. and S., D.P.H.

(Deputy Medical Officer of Health).

The Health Committee, as in previous years, delegated its responsibility for the publicity side of its activities to the Leeds Committee for Social Hygiene and Health Publicity. This service was once again freely and generously given by the Chairman and Members of that Committee.

Health Week was held from October 2nd to 8th during which 229 lectures and addresses were given and 76,755 persons were reached. The new booklets issued by the British Social Hygiene Council and the Health and Cleanliness Council were distributed at many of the meetings.

The Committee had pleasure in co-operating with the National Fitness Council in arranging an open meeting in the Albert Hall, Leeds, during Health Week, when the Lord Mayor (Alderman John Badlay, J.P.) took the Chair. Lord Bingley and Miss Prunella Stack were the principal speakers.

While the attendances were below those of previous years, it must be remembered that Health Week was held immediately after the international crisis of September, the effect of which was reflected in the reduced attendances at the meetings.

Once again the Committee were indebted to Mr. George Guest, Director of Education, for his help and co-operation in arranging talks to school children and for the distribution of leaflets and posters through the schools.

The Press.—As was to be anticipated, owing to the crisis already referred to the amount of matter appearing in the local press was

somewhat below that of previous years. Nevertheless the help of the Press so willingly given was greatly appreciated.

National Campaign.—The National Campaign to encourage the wider use of the Health Services, promoted by the Ministry of Health in co-operation with the Central Council for Health Education, was actively pursued during the first three months of the year. During January, February and March the Campaign dealt with Milk in Schools, Prevention of Tuberculosis and Physical Fitness. With the aid of other Corporation Departments and employers of large establishments in the city the following publicity material was distributed: bookmarks, 50,000; folders, 50,000; posters, 250.

The Campaign, was supported by the Government and included an inaugural broadcast address by the Prime Minister, in which he focussed the attention of the public upon the wealth of facilities available through the medium of the local health services.

In Leeds the co-operation of the Baths, Libraries and Education services assisted the Campaign to a successful conclusion.

Wayside Pulpits.—The "wayside pulpits" situate in various parts of the city were again utilised each week throughout the year. The former Empire Marketing Board frames also displayed pictorial posters published by the Central Council for Health Education.

STAFF CHANGES.

David A. Herd, L.R.C.P., L.R.C.S., L.R.F.P.S., appointed Senior Assistant Resident Medical Officer at Killingbeck Sanatorium February, 1938, in place of G. F. Barran, B.A., M.R.C.S., L.R.C.P., M.B., B.Chir., resigned December, 1937.

Eugenie Clare Illingworth, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P., appointed to the additional post of Medical Officer for Maternity and Child Welfare, March, 1938.

Margaret F. Robertson, M.B., Ch.B., appointed Assistant Medical Officer for Maternity and Child Welfare, June, 1938, in place of Margaret S. M. Reid, M.D., D.P.H., resigned on account of marriage, May, 1938.

Mathilde Burke, Health Visitor, promoted Superintendent Health Visitor, June, 1938, in place of Annie H. Beesley, resigned April, 1938.

W. Guthrie, M.B., Ch.B., appointed Assistant Clinical Tuberculosis Officer, November, 1938, in place of A. G. Evans, M.R.C.S., L.R.C.P., Assistant Clinical Tuberculosis Officer, resigned September, 1938.

Elizabeth F. Gore, Lay Superintendent of Midwives, resigned November, 1938.

Appendices.

APPENDIX 1.

MINISTRY OF HEALTH TABLES.

TABLE I.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1938 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 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1928	474,800*	7,978	7,665	16.1	6,419	13.5	545	259	606	79.	6,133	12.9
1929	478,500	7,725	7,426	15.5	8,289	17.3	657	266	722	97	7,898	16.5
1930	478,500	7,905	7,568	15.8	6,235	13.0	544	239	512	68	5,930	12.4
1931	486,400	7,557	7,219	14.8	6,810	14.0	553	249	552	76	6,506	13.4
1932	484,900	7,368	7,004	14.4	6,771	14.0	550	248	617	88	6,469	13.3
1933	485,000	7,070	6,643	13.7	6,851	14.1	538	261	537	81	6,574	13.6
1934	486,250	7,691	7,190	14.8	6,666	13.7	619	244	513	71	6,291	12.9
1935	487,200	7,751	7,211	14.8	6,763	13.9	576	245	463	64	6,432	13.2
1936	489,800	7,845	7,340	15.0	7,003	14.3	620	283	476	65	6,666	13.6
1937	491,860†	7,844	7,279	14.8	6,915	14.1	656	314	491	67	6,573	13.4
1938	494,000	8,159	7,614	15.4	6,592	13.3	597	260	490	64	6,255	12.7

Area of District in acres (land and inland water) } 38,296.5
Total population at all ages at the 1931 Census 482,809

* Population adjusted to allow for change in boundary during the year. The mid-year population after the change is 476,500.
† do. do. do. 491,880.

APPENDIX 2.

TABLE II. CASES OF INFECTIOUS DISEASES NOTIFIED DURING THE CALENDAR YEAR 1938

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED																Total Cases removed to Hospital.
	At all Ages.		At Ages—Years.												45 and under 65 years.		
			Under 1.		1 and under 5 years.		5 and under 15 years.		15 and under 25 years.		25 and under 45 years.		65 and upwards.				
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera (C.) Plague (P.) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	401	547	10	4	101	99	230	285	37	100	21	48	1	10	1	1	544
Erysipelas	134	170	2	2	2	2	5	6	8	10	34	55	57	80	26	15	71
Scarlet Fever.. .. .	813	904	2	1	207	190	429	542	107	116	60	52	8	3	..	..	843
Measles	3,312	3,485	119	153	1,762	1,888	1,386	1,381	30	46	15	12	..	4	..	1	59
German Measles	583	685	22	14	168	172	362	419	22	65	9	14	..	1	..	..	25
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	2	1	..	..	..	..	1	..	1	1	..	..	..	..	..	..	1
Relapsing Fever (R.) Continued Fever (C.)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Pyrexia	..	170	..	..	..	..	..	..	..	53	..	117	..	..	..	..	..
Cerebro-Spinal Meningitis ..	7	5	1	2	1	2	1	1	3	..	1	..	..	..	..	2	9†
Polio-myelitis	4	1	1	..	1	1	1	..	..	..	1	..	..	..	..	..	2
Ophthalmia Neonatorum ..	21	12	21	12	..	..	..	..	..	..	..	..	..	..	..	..	..
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Dysentery	7	7	2	1	2	1	..	2	..	..	2	3	..	..	1	..	..
Other Diseases	145	250	5	6	47	43	61	90	14	59	15	45	2	5	1	2	2
Pulmonary Tuberculosis ..	295	216	1	..	5	5	17	27	52	76	108	84	97	23	15	1	249
Other forms of Tuberculosis	90	86	1	..	22	16	28	29	9	13	23	25	5	1	2	2	174
Pneumonia (Acute Primary)	423	266	25	15	118	79	63	53	31	24	85	45	81	33	20	17	14
" (Acute Influenzal)	23	14	1	..	2	1	1	..	3	1	7	4	6	6	3	2	2
TOTALS	6,261	6,819	213	210	2,438	2,499	2,585	2,835	317	564	382	504	257	166	69	41	1,995
																	1,741

† In addition to the 9 Puerperal Pyrexia removed, 148 cases were notified from and received treatment in other hospitals.

* Includes 80 Pulmonary Tuberculosis admitted to Gateforth Sanatorium which is outside the City.

TABLE II. (continued).

NOTIFIABLE DISEASE.	TOTAL CASES NOTIFIED IN EACH LOCALITY, (e.g., Parish or Ward) of the District.																											
	Mill Hill and South.	Westfield.	Blenheim.	Central.	Woodhouse.	North.	Far Headingley.	Hyde Park.	Kirkstall.	Burmantofts.	Harehills.	Potternewton.	Roundhay.	Cross Gates and Templenewsum.	Richmond Hill.	Osmondthorpe.	East Hunslet.	Hunslet Carr and Middleton.	West Hunslet.	Beeston.	Holbeck (South).	Holbeck (North).	Armley and New Wortley.	Upper Armley.	Bramley.	Farnley and Wortley.	City	
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Diphtheria (including Membranous Group) ..	47	39	47	52	30	29	34	30	70	60	26	24	36	33	27	62	40	37	37	33	24	29	44	17	21	20	948	
Erysipelas ..	7	8	14	10	5	13	9	5	13	19	12	19	18	7	6	12	9	16	12	18	11	5	14	19	6	17	304	
Scarlet Fever..	39	41	66	55	69	111	63	36	64	61	108	61	78	95	36	59	58	125	46	65	42	33	73	68	68	97	1,717	
Measles ..	135	87	173	274	210	297	202	73	214	430	467	302	435	348	186	430	315	380	267	275	141	192	245	163	359	197	6,797	
German Measles ..	4	15	47	41	68	85	48	23	34	37	101	35	74	158	49	90	29	73	45	73	24	11	15	34	23	32	1,268	
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Enteric Fever ..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	
Relapsing fever (R) Continued fever (C) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	
Puerperal Pyrexia ..	2	2	101	..	1	1	1	..	..	35	1	2	1	..	..	..	2	..	..	1	..	1	..	..	18	1	..	170
Cerebro-Spinal Meningitis ..	..	..	1	..	1	..	..	..	1	4	..	..	1	2	..	..	..	..	..	..	1	..	..	..	1	..	12	
Poliomyelitis ..	..	..	2	..	..	..	..	1	1	..	..	1	..	..	..	1	..	2	..	..	..	..	..	..	3	1	5	
Ophthalmia Neonatorum ..	..	..	10	4	2	1	1	..	1	4	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	33	
Encephalitis Lethargica ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Malaria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Dysentery ..	1	..	..	1	..	2	1	..	..	4	..	1	..	..	..	..	..	..	..	..	..	4	..	..	..	..	1	
Other Diseases ..	30	8	19	21	9	7	16	12	26	34	14	11	19	28	22	17	12	16	15	13	6	3	10	9	8	10	395	
Pulmonary Tuberculosis ..	12	21	28	29	15	15	9	15	27	31	29	16	26	25	17	23	26	28	26	10	10	12	13	12	25	11	511	
Other Forms of Tuberculosis ..	4	3	3	4	5	13	6	8	11	7	7	2	14	12	4	6	8	14	4	8	6	3	5	3	9	7	176	
Pneumonia (Acute primary) ..	13	26	23	35	21	26	12	8	24	29	41	20	38	33	22	48	42	27	18	26	19	26	33	24	28	27	689	
Do. (Acute Influenzal) ..	1	5	..	..	1	1	..	..	5	2	4	..	2	2	1	3	..	..	3	2	1	1	1	1	..	2	37	
TOTALS ..	297	255	534	526	437	601	402	211	492	757	810	494	743	744	371	751	541	718	473	524	290	316	453	367	552	421	13,080	

APPENDIX 3.

CAUSES OF, AND AGES AT DEATH DURING THE CALENDAR YEAR 1938.

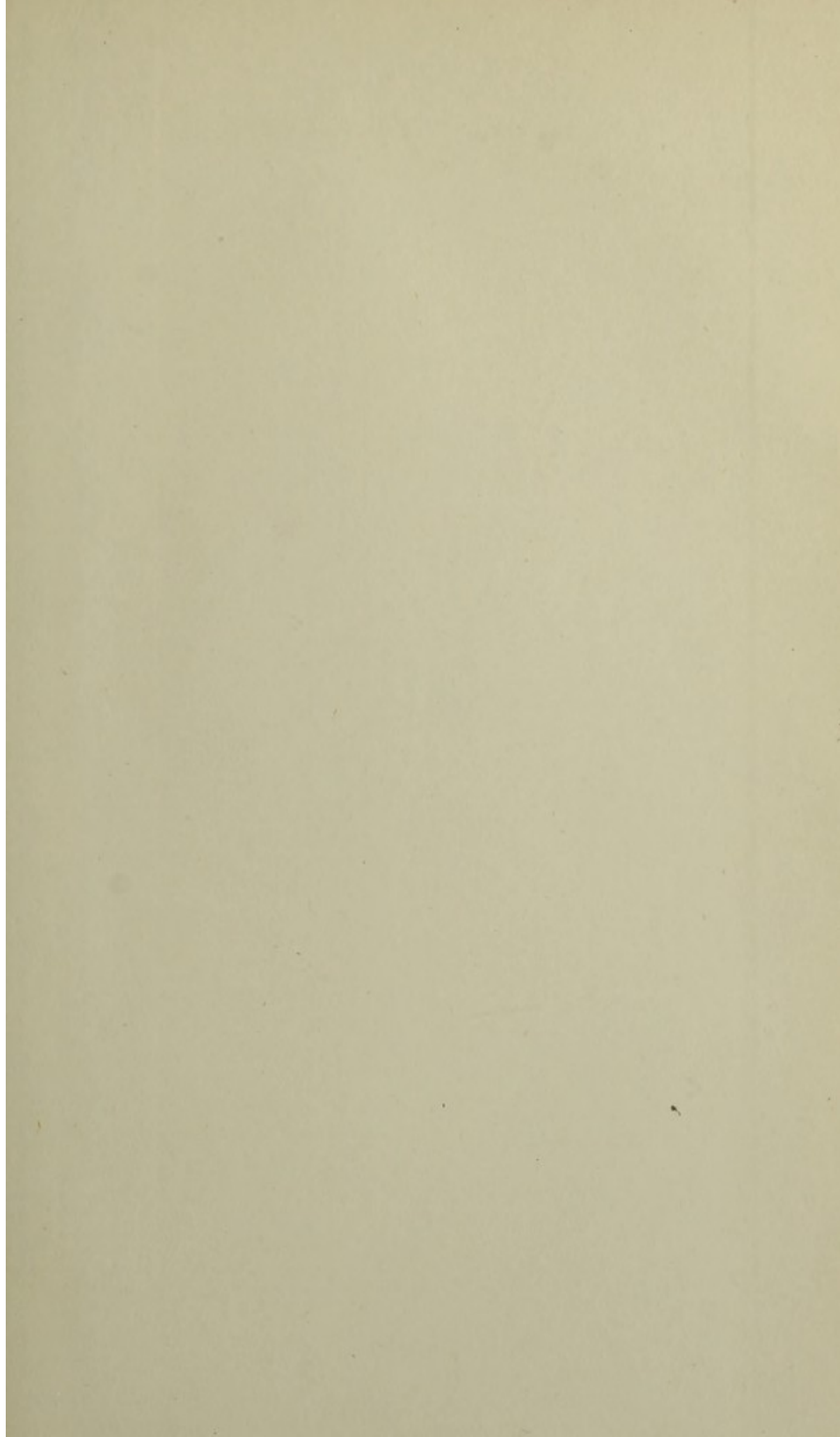
REGISTRAR GENERAL'S FIGURES.

CAUSES OF DEATH.	Sex.	All Ages.	0-	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-
All Causes	M.	3,237	279	42	41	40	96	142	162	373	624	820	618
	F.	3,016	211	21	40	60	76	124	154	283	523	733	791
1. Typhoid and Paratyphoid Fevers	M.	..	..	..	..	..	..	..	..	..	..	..	..
	F.	..	..	..	..	..	..	..	..	..	..	..	..
2. Measles	M.	11	5	4	2	..	..	..	..	..	..	..	..
	F.	7	1	3	1	1	..	..	..	..	..	1	..
3. Scarlet Fever	M.	5	..	..	2	1	1	..	1	..	..	..	..
	F.	3	..	1	..	2	..	..	..	..	..	..	..
4. Whooping Cough	M.	5	1	3	1	..	..	..	..	..	..	..	..
	F.	8	5	1	2	..	..	..	..	..	..	..	..
5. Diphtheria	M.	14	3	1	6	3	1	..	..	..	..	..	..
	F.	19	..	..	9	10	..	..	..	..	..	..	..
6. Influenza	M.	8	..	..	..	..	..	1	1	1	2	2	1
	F.	21	..	..	1	2	..	2	1	5	2	7	1
7. Encephalitis Lethargica	M.	5	..	..	..	..	..	..	2	1	2	..	..
	F.	3	..	..	..	..	1	..	1	..	..	1	..
8. Cerebro-spinal Fever	M.	12	5	1	..	1	4	1	..	..	..	..	..
	F.	6	3	2	1	..	..	..	..	..	..	..	..
9. Tuberculosis of respiratory system	M.	204	1	1	2	1	29	34	34	51	38	11	2
	F.	135	1	..	..	1	38	42	20	17	10	5	1
10. Other Tuberculous Diseases	M.	32	1	5	6	7	3	5	2	2	..	1	..
	F.	28	4	2	4	6	3	2	3	1	2	1	..
11. Syphilis	M.	10	..	..	..	..	..	..	1	5	3	..	1
	F.	9	1	..	..	..	..	1	..	3	4	..	..
12. General Paralysis of the insane—tabes dorsalis	M.	18	..	..	..	..	1	..	3	4	9	1	..
	F.	10	..	..	..	..	..	..	2	4	3	1	..
13. Cancer, malignant disease	M.	436	..	1	..	2	2	10	23	57	117	149	75
	F.	455	..	..	1	1	..	5	30	75	152	123	68
14. Diabetes	M.	24	..	..	..	..	1	1	..	..	7	8	7
	F.	57	..	..	..	..	1	1	3	1	11	22	18
15. Cerebral Hæmorrhage, &c.	M.	149	..	..	..	..	..	..	2	15	40	55	37
	F.	207	..	..	..	..	..	1	1	16	38	79	72
16. Heart Disease	M.	824	..	..	..	2	9	17	20	73	189	280	234
	F.	750	..	..	2	3	4	21	29	50	120	217	304
17. Aneurysm	M.	17	..	..	..	2	2	2	3	1	4	3	..
	F.	8	..	..	..	..	..	1	1	2	2	1	1
18. Other circulatory diseases	M.	280	..	..	..	..	1	..	1	11	31	106	130
	F.	320	..	..	..	..	..	..	3	11	43	97	166
19. Bronchitis	M.	106	6	..	1	1	..	3	4	19	35	15	22
	F.	82	5	..	1	1	1	3	1	4	10	26	30
20. Pneumonia (all forms)	M.	213	36	15	6	2	5	11	17	31	44	35	11
	F.	124	27	7	8	3	4	8	2	13	19	18	15
21. Other respiratory diseases	M.	34	1	1	3	..	2	..	3	7	10	2	5
	F.	19	..	1	1	..	..	..	7	1	2	4	3
22. Peptic Ulcer	M.	44	..	..	..	..	..	1	5	12	10	14	2
	F.	7	..	..	..	..	..	..	1	2	..	1	3
23. Diarrhœa, &c.	M.	61	48	5	..	..	1	1	..	1	3	2	..
	F.	45	31	2	1	..	1	1	1	2	1	1	4
24. Appendicitis	M.	17	..	..	..	1	1	6	1	5	2	1	..
	F.	17	..	..	1	4	1	..	3	..	3	4	1
25. Cirrhosis of Liver	M.	13	..	..	..	..	..	..	3	3	3	4	..
	F.	5	..	..	..	..	..	..	1	1	1	2	..
26. Other diseases of Liver, &c.	M.	10	1	..	..	..	1	..	..	..	1	4	3
	F.	37	..	..	1	..	..	3	1	2	8	16	6
27. Other digestive diseases	M.	50	3	..	3	..	1	5	2	9	6	18	3
	F.	39	5	..	1	1	..	1	5	3	9	10	4
28. Acute and Chronic Nephritis	M.	70	1	..	..	..	2	6	6	13	19	15	8
	F.	83	..	..	..	..	3	5	8	17	20	20	10
29. Puerperal Sepsis	F.	3	..	..	..	..	1	2	..	..	..	..	..
30. Other puerperal causes	F.	11	..	..	..	..	1	8	2	..	..	..	..
31. Congenital debility	M.	135	132	..	1	1	..	1	..	..	..	..	..
Malformation, and premature birth, etc.	F.	115	113	..	1	1	..	..	..	..	..	..	..
32. Senility	M.	18	..	..	..	..	..	..	..	..	..	5	13
	F.	43	..	..	..	..	..	..	..	..	1	8	34
33. Suicide	M.	42	..	..	..	..	2	7	4	11	6	9	3
	F.	22	..	..	..	..	1	1	6	6	6	2	..
34. Other Violence	M.	128	10	2	4	7	18	12	12	12	12	24	15
	F.	90	5	..	1	8	3	2	3	7	8	21	32
35. Other defined diseases	M.	239	25	3	4	9	9	18	12	29	31	55	44
	F.	227	10	2	3	16	13	14	19	40	48	44	18
36. Causes ill-defined or unknown	M.	3	..	..	..	..	..	..	..	..	..	1	2
	F.	1	..	..	..	..	..	..	..	..	..	1	..

APPENDIX 4.

INFANT MORTALITY. CALENDAR YEAR 1938. NETT DEATHS FROM STATED CAUSES
AT VARIOUS AGES UNDER 1 YEAR OF AGE.

CAUSES OF DEATH.	Under 1 day.	1-7 days.	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	..	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	1	2	3	6
Scarlet fever	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	2	1	1	2	6
Diphtheria	..	..	..	..	..	..	..	1	1	1	3
Influenza	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	1	1	..	..	..	..	1
Tuberculous Meningitis	..	..	..	..	..	..	..	1	2	1	4
Abdominal Tuberculosis	..	..	..	..	..	..	..	..	..	1	1
Other Tuberculous Diseases	..	..	..	..	..	..	1	..	..	..	1
Meningitis (not Tuberculous)	..	..	..	..	..	..	..	..	1	1	2
Convulsions	..	4	..	1	..	5	2	1	1	..	9
Bronchitis	..	..	..	..	..	..	3	3	1	..	7
Pneumonia (all forms)	..	1	3	3	4	11	8	12	12	16	59
Other diseases of respiratory organs	1	..	..	..	..	1	1	..	..	..	2
Diarrhoea	..	..	4	5	3	12	22	31	17	5	87
Enteritis	..	..	..	..	..	..	1	..	..	..	1
Gastritis	..	..	..	..	..	..	1	..	..	..	1
Syphilis	..	..	..	..	..	..	1	..	..	..	1
Rickets	..	..	..	..	..	..	..	..	..	..	..
Suffocation, including overlying	6	4	..	1	..	11	3	3	1	..	18
Injury at birth	12	9	1	..	..	22	..	..	..	..	22
Atelectasis	11	3	..	1	..	15	..	..	..	..	15
Congenital Malformations	5	10	8	1	1	25	12	1	5	1	44
Premature birth	55	40	17	9	5	126	9	1	..	..	136
Atrophy, Debility and Marasmus	2	1	2	3	..	8	2	2	..	..	12
Other Causes	2	4	5	3	1	15	9	10	11	8	53
Totals	94	76	40	27	15	252	76	68	55	39	490



APPENDIX A.

THE FOLLOWING TABLES SHOW THE RESULTS OF THE ANALYSES OF THE
 SAMPLES OF THE LIME STONE OF THE

No. of Sample	Analysis of Sample		Analysis of Sample		Analysis of Sample	
	CaO	MgO	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	Total
1	54.2	1.5	0.5	0.1	0.1	56.4
2	53.8	1.6	0.6	0.2	0.2	56.4
3	54.5	1.4	0.4	0.1	0.1	56.5
4	53.9	1.5	0.5	0.1	0.1	56.1
5	54.1	1.5	0.5	0.1	0.1	56.3
6	54.3	1.5	0.5	0.1	0.1	56.5
7	54.4	1.5	0.5	0.1	0.1	56.6
8	54.2	1.5	0.5	0.1	0.1	56.4
9	54.1	1.5	0.5	0.1	0.1	56.3
10	54.0	1.5	0.5	0.1	0.1	56.2
11	54.1	1.5	0.5	0.1	0.1	56.3
12	54.2	1.5	0.5	0.1	0.1	56.4
13	54.3	1.5	0.5	0.1	0.1	56.5
14	54.4	1.5	0.5	0.1	0.1	56.6
15	54.5	1.5	0.5	0.1	0.1	56.7
16	54.6	1.5	0.5	0.1	0.1	56.8
17	54.7	1.5	0.5	0.1	0.1	56.9
18	54.8	1.5	0.5	0.1	0.1	57.0
19	54.9	1.5	0.5	0.1	0.1	57.1
20	55.0	1.5	0.5	0.1	0.1	57.2
21	55.1	1.5	0.5	0.1	0.1	57.3
22	55.2	1.5	0.5	0.1	0.1	57.4
23	55.3	1.5	0.5	0.1	0.1	57.5
24	55.4	1.5	0.5	0.1	0.1	57.6
25	55.5	1.5	0.5	0.1	0.1	57.7
26	55.6	1.5	0.5	0.1	0.1	57.8
27	55.7	1.5	0.5	0.1	0.1	57.9
28	55.8	1.5	0.5	0.1	0.1	58.0
29	55.9	1.5	0.5	0.1	0.1	58.1
30	56.0	1.5	0.5	0.1	0.1	58.2
31	56.1	1.5	0.5	0.1	0.1	58.3
32	56.2	1.5	0.5	0.1	0.1	58.4
33	56.3	1.5	0.5	0.1	0.1	58.5
34	56.4	1.5	0.5	0.1	0.1	58.6
35	56.5	1.5	0.5	0.1	0.1	58.7
36	56.6	1.5	0.5	0.1	0.1	58.8
37	56.7	1.5	0.5	0.1	0.1	58.9
38	56.8	1.5	0.5	0.1	0.1	59.0
39	56.9	1.5	0.5	0.1	0.1	59.1
40	57.0	1.5	0.5	0.1	0.1	59.2
41	57.1	1.5	0.5	0.1	0.1	59.3
42	57.2	1.5	0.5	0.1	0.1	59.4
43	57.3	1.5	0.5	0.1	0.1	59.5
44	57.4	1.5	0.5	0.1	0.1	59.6
45	57.5	1.5	0.5	0.1	0.1	59.7
46	57.6	1.5	0.5	0.1	0.1	59.8
47	57.7	1.5	0.5	0.1	0.1	59.9
48	57.8	1.5	0.5	0.1	0.1	60.0
49	57.9	1.5	0.5	0.1	0.1	60.1
50	58.0	1.5	0.5	0.1	0.1	60.2
51	58.1	1.5	0.5	0.1	0.1	60.3
52	58.2	1.5	0.5	0.1	0.1	60.4
53	58.3	1.5	0.5	0.1	0.1	60.5
54	58.4	1.5	0.5	0.1	0.1	60.6
55	58.5	1.5	0.5	0.1	0.1	60.7
56	58.6	1.5	0.5	0.1	0.1	60.8
57	58.7	1.5	0.5	0.1	0.1	60.9
58	58.8	1.5	0.5	0.1	0.1	61.0
59	58.9	1.5	0.5	0.1	0.1	61.1
60	59.0	1.5	0.5	0.1	0.1	61.2
61	59.1	1.5	0.5	0.1	0.1	61.3
62	59.2	1.5	0.5	0.1	0.1	61.4
63	59.3	1.5	0.5	0.1	0.1	61.5
64	59.4	1.5	0.5	0.1	0.1	61.6
65	59.5	1.5	0.5	0.1	0.1	61.7
66	59.6	1.5	0.5	0.1	0.1	61.8
67	59.7	1.5	0.5	0.1	0.1	61.9
68	59.8	1.5	0.5	0.1	0.1	62.0
69	59.9	1.5	0.5	0.1	0.1	62.1
70	60.0	1.5	0.5	0.1	0.1	62.2
71	60.1	1.5	0.5	0.1	0.1	62.3
72	60.2	1.5	0.5	0.1	0.1	62.4
73	60.3	1.5	0.5	0.1	0.1	62.5
74	60.4	1.5	0.5	0.1	0.1	62.6
75	60.5	1.5	0.5	0.1	0.1	62.7
76	60.6	1.5	0.5	0.1	0.1	62.8
77	60.7	1.5	0.5	0.1	0.1	62.9
78	60.8	1.5	0.5	0.1	0.1	63.0
79	60.9	1.5	0.5	0.1	0.1	63.1
80	61.0	1.5	0.5	0.1	0.1	63.2
81	61.1	1.5	0.5	0.1	0.1	63.3
82	61.2	1.5	0.5	0.1	0.1	63.4
83	61.3	1.5	0.5	0.1	0.1	63.5
84	61.4	1.5	0.5	0.1	0.1	63.6
85	61.5	1.5	0.5	0.1	0.1	63.7
86	61.6	1.5	0.5	0.1	0.1	63.8
87	61.7	1.5	0.5	0.1	0.1	63.9
88	61.8	1.5	0.5	0.1	0.1	64.0
89	61.9	1.5	0.5	0.1	0.1	64.1
90	62.0	1.5	0.5	0.1	0.1	64.2
91	62.1	1.5	0.5	0.1	0.1	64.3
92	62.2	1.5	0.5	0.1	0.1	64.4
93	62.3	1.5	0.5	0.1	0.1	64.5
94	62.4	1.5	0.5	0.1	0.1	64.6
95	62.5	1.5	0.5	0.1	0.1	64.7
96	62.6	1.5	0.5	0.1	0.1	64.8
97	62.7	1.5	0.5	0.1	0.1	64.9
98	62.8	1.5	0.5	0.1	0.1	65.0
99	62.9	1.5	0.5	0.1	0.1	65.1
100	63.0	1.5	0.5	0.1	0.1	65.2