[Report of the Medical Officer of Health for West Ham].

Contributors

West Ham (London, England). County Borough.

Publication/Creation

1938.

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COUNTY BOROUGH OF WEST HAM

ANNUAL REPORT

ON THE

HEALTH SERVICES

E. ASHWORTH UNDERWOOD
M.A., B.Sc., M.D., D.P.H.

1937

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COUNTY BOROUGH OF WEST HAM

ANNUAL REPORT

ON THE

HEALTH SERVICES

FOR THE YEAR

1937

BY

E. ASHWORTH UNDERWOOD,

M.A., B.Sc., M.D., D.P.H.,

Medical Officer of Health and School Medical Officer.

LONDON.

Published by the County Borough Council of West Ham.

To be purchased from The Medical Officer of Health,

Public Health Department, West Ham, E.15.

1938.

Price 3s. 0d.

(Paper Edition)

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Printed in Great Britain at The Plaistow Press,
London, E.15.

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COUNTY BOROUGH OF WEST HAM.

ANNUAL REPORT ON THE HEALTH SERVICES, 1937.

Madam Mayor, Ladies and Gentlemen,

I have the honour to submit my annual report on the health of the population of this area for the year 1937, this being my first annual report as Medical Officer of Health and School Medical Officer. As I was in office during only about a quarter of the year under review, I have attempted to give a considered statement of facts relating to the health of the area in this and past years, rather than to make suggestions regarding the future development of the services.

With reference to the health of the inhabitants during the year 1937, I have to draw your attention to the following facts, which are dealt with more fully in the text of the report.

The population of the area—as estimated by the Registrar-General—continues to decline. This decrease is a logical result of modern social tendencies. Associated with this is the question whether the population is replacing itself to anything approaching an adequate degree. In an area such as West Ham, where the extent of migration, inward and outward, is difficult to assess, it is not easy to answer this question. By inference from figures for other areas it would seem, however, that the position in this area must give rise to some disquietude, and in the report I have discussed briefly some of the problems relating to the low natural increase of the population. In these circumstances it is encouraging to note that the birth rate—namely 16.1 per 1,000 of the population—was an increase on the rate for the year 1936, and was indeed the highest birth rate since 1932. The death rate gives grounds for some satisfaction. The general death rate shows a slight increase over the figure for 1936, but it was still lower than the corresponding figures for London and the country as a whole. The infant mortality rate shows a decrease over the figure for the previous year, and the maternal mortality rate can stand favourable comparison with that for other areas.

It is satisfactory to be able to state that the death rate

from all forms of tuberculosis was the lowest on record, and that the death rate from cancer was the lowest since 1931. In the light of the supposed increase in the incidence of cancer in the nation, and of the relative increase in the proportion of older persons in the community, this decline in the cancer death rate is very satisfactory. The death rate from violence was lower than that for the country as a whole, but there was a slight increase in the death rate from heart disease and in that from respiratory diseases.

During the year the foundation stone of the extensions to South Ockendon Colony was laid by the Mayor, Alderman Mrs. Parsons, J.P., in the presence of the Mayor of East Ham and representatives of the West Ham and East Ham Councils, and a Commissioner of the Board of Control. The work in connection with these extensions is now making rapid progress.

With reference to the health of the school child, I have given extensive data from which can be judged the progress effected in this important service. It will be seen that there are gaps in the potentialities of the dental branch, and I have indicated that this matter will receive attention in a later report. Speaking generally it may be said that from the available evidence the health of the school child in West Ham appears to be satisfactory. For example, when the prevailing industrial condition of the area is taken into account, it is satisfactory to note that there is little difference in the state of nutrition of the West Ham children as compared with the nutrition of children in the country as a whole. In the text of the report I have referred to the fact that there is an increase in the proportion of defects in school children which are discovered at special examinations. This does not necessarily mean that there is an increase of such minor defects in school children. It does mean, however, that greater use is being made of the special examination for the purpose of investigating any defects which may be present, and that therefore the routine examination is relatively less productive of results than it was formerly. I have shown that during the last few years there has been a noteworthy decline in the incidence of minor skin diseases in school children, but that unfortunately this decline has been associated with an increase in the incidence of scabies.

In the month of June, the extensions to Fyfield Residential Open Air School were completed, so that the school now has accommodation for 100 boys and 100 girls.

The year under review was notable for the coming into force of several important measures. Those which mainly concern this County Borough are the Shops (Sunday Trading Restrictions) Act 1936, which came into force on May 1st, 1937; the Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, which came into force on the 1st January, 1937; the Housing Act, 1936, which came into force on the 1st January, 1937; the Public Health Act, 1936, which came into force on the 1st January, 1937; and the West Ham Corporation Act, 1937, which came into force on 9th November, 1937.

It is a matter for general regret that I have to mention the deaths of two gentlemen who were most closely associated with the health of the area. My predecessor, Dr. F. Garland Collins, died on the 30th March, and the Council were thereby bereft of the services of an officer who had served them in the capacity of Medical Officer of Health for thirteen years. It would be invidious of me to comment further on an event which is of such recent date. I have also to mention the death on the 18th December, 1937, of Dr. Charles Sanders, who was Medical Officer of Health of the borough for the long period of thirty-seven years. On his retirement in 1924, Dr. Sanders received many testimonials of the esteem and affection, not only of his colleagues, but also of the members of the Council, of his staff, and of the public in general. It may be said that Dr. Sanders was one of the "Grand Old Men" of public health, and his election to the Presidency of the Society of Medical Officers of Health in 1917 was an expression of the high regard in which his colleagues held his ability.

In a famous essay Walter Savage Landor once wrote: "The present, like a note in music, is nothing but as it appertains to what is past and what is to come." In this report I have endeavoured to give comparative statistics for a number of years, and I have explained in another place the difficulties met with in acquiring this information. Copies of reports of the Medical Officer of Health previous to the year 1900 are very scarce, and I have not yet been able to acquire copies for the years 1887 to 1892 inclusive. From the monetary aspect these copies are worth little, but from the standpoint of anyone who is interested in vital statistics they are invaluable. If any reader of this volume should happen to possess copies of these early reports, I should be most grateful if he would communicate with me.

In conclusion, I should like to take this opportunity of expressing my gratitude for the kindly manner in which I was received when I undertook my new responsibilities. This appreciation must be extended to the Chairmen and members of the various committees, and to all the members of staff. The compilation of this report has involved extensive work, and I am especially grateful to those officials who worked with me to this end for their unselfish devotion to the welfare of the department.

I am,

Madam Mayor, Ladies and Gentlemen,

Your obedient Servant,

E. ASHWORTH UNDERWOOD,
Medical Officer of Health and
School Medical Officer.

Municipal Health Offices,
88 Romford Road,
West Ham, E.15.

CONSTITUTION OF COMMITTEES
(November, 1937, to November, 1938).

THE MAYOR (ALDERMAN MRS. E. BOCK, J.P.).

Health Committee.

COUNCILLOR MRS. A. A. BARNES (Chairman).

COUNCILLOR A. G. SCHIRN (Vice-Chairman).

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ALDERMAN J. T. HUSBAND, J.P.
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COUNCILLOR A. C. GENTRY.
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COUNCILLOR MRS. E. E. WYBREW

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REVEREND J. SLOANE*

** Co-opted members.*

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Councillor E. F. Bradley (Vice-Chairman).

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Alderman J. T. Husband, j.p.
Alderman E. J. Reed, j.p.
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Councillor E. J. Fox.
Councillor A. C. Gentry.
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Mrs. F. E. Quinn*
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** Co-opted members.*

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Councillor Mrs. F. A. Wood (Vice-Chairman).

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Alderman H. J. Rumsey.
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Councillor Mrs. A. A. Barnes.
Councillor Mrs. E. C. Cook.
Councillor D. W. Hall.
Councillor Mrs. F. Harris.
Councillor Sidney Lee, m.r.c.s.
Councillor A. B. Macgregor.
Councillor A. J. Walker.
Councillor C. H. W. Ward, j.p.
Councillor E. W. Wordley, j.p.

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Councillor A. B. Macgregor (Vice-Chairman).

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Alderman H. J. Rumsey.
Councillor J. Doherty.
Councillor A. C. Gentry.
Councillor W. A. Gillman.
Councillor Mrs. K. E. James.
Councillor C. F. Lowe.
Councillor A. G. Schirn.
Councillor G. J. Smith.
Councillor P. G. Spears.
Councillor M. J. Sullivan.
Councillor E. W. White, j.p.
Councillor E. W. Wordley, j.p.

The Executive Committee for the care of the Mentally Defective

The Mayor (Chairman).

Alderman Mrs. D. Parsons, j.p. (Vice-Chairman).

Alderman W. T. Bell.
Alderman G. Croot, j.p.
Alderman J. H. Hollins.
Alderman J. T. Husband, j.p.
Alderman J. T. Scoulding, j.p.
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Councillor Mrs. E. J. Gregory.
Councillor D. W. Hall.
Councillor Mrs. J. A. Hollins.
Councillor W. C. Ridgewell, j.p
Councillor C. H. W. Ward, j.p
Councillor F. A. Warner.
Councillor Mrs. F. A. Wood.
Councillor E. W. Wordley, j.p.
Mrs. Cornelius*
Mrs. Luscombe*

** Co-opted members.*

Public Assistance Committee.

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Councillor Mrs. A. E. Harnwell (Vice-Chairman).

Alderman Mrs. D. Parsons, j.p.
Councillor Mrs. A. A. Barnes.
Councillor Mrs. E. C. Cook.
Councillor G. Doherty.
Councillor S. M. Edwards.
Councillor A. G. Gay, j.p.
Councillor Mrs. F. Harris.
Councillor Mrs. J. A. Hollins.
Councillor H. J. Manners.
Councillor F. E. Mansford.
Councillor W. C. Ridgewell, j.p
Councillor Mrs. E. Venton.
Councillor Mrs. E. E. Wybrew

STAFF OF THE HEALTH SERVICES.

(a) MEDICAL AND ADMINISTRATIVE STAFF.

Medical Officer of Health, School Medical Officer and Chief Administrative Tuberculosis Officer:
E. Ashworth Underwood, M.A., B.Sc., M.D., D.P.H.

Deputy Medical Officer of Health:
T. W. Hill, M.D., D.P.H.

Chief Assistant School Medical Officer:
Robert J. Reid, M.B., Ch.B., D.P.H.

Chief Clinical Tuberculosis Officer:
P. A. Galpin, M.D., D.P.H.

Senior Assistant Medical Officer for Maternity and Child Welfare:
Helen Campbell, M.B., Ch.B., D.P.H.

School Medical Service.

Assistant School Medical Officers:
A. Furniss, L.R.C.P., L.R.C.S., L.R.F.P.S. (Glas.), D.P.H., L.D.S.
Jessie H. Fitchett, M.B., Ch.B., D.P.H.
B. M. R. West, M.R.C.S., L.R.C.P.
Jessie Griffin, M.B., Ch.B., D.P.H.
D. L. Pugh, M.R.C.S., L.R.C.P.

School Oculist:
Agnes A. S. Russell, M.B., Ch.B., D.P.H.

School Dental Officers:
J. S. Dick, L.D.S.
Helene M. Gubb, L.D.S.
Dorothy Marsden, L.D.S.
G. C. Baird, L.D.S.
F. Soper, L.D.S.

Consultant Aural Surgeon (Part-time):
F. Stoker, F.R.C.S.

Tuberculosis

Assistant Tuberculosis Officer:
W. R. Kilgour, M.R.C.S., L.R.C.P.

Maternity and Child Welfare.

Assistant Medical Officers:
Charlotte E. Forsyth, M.B., Ch.B., D.P.H.
Muriel Frances Prout, M.D., B.S. (part-time).
Angel V. B. Crawford, B.A., M.B., B.Ch., D.P.H. (part-time)

Consultants:
G. J. Sophian, M.R.C.P., F.R.C.S.
V. J. F. Lack, M.R.C.S., M.B., B.S., F.R.C.S.E., F.R.C.P., F.C.O.G.
A. C. McAllister, M.B., B.S., L.R.C.P., F.R.C.S. (Eng.), F.C.O.G.

Dental Officer:
Evelyn Richardson, L.D.S., R.C.S.

Isolation Hospital, Plaistow.

Medical Superintendent:
Donald MacIntyre, M.C., M.D., D.P.H.

Senior Assistant Medical Officer:
H. D. Palmer, M.B., Ch.B.

Junior Assistant Medical Officer:
W. M. J. Laurie, M.B., Ch.B.

Dagenham and Langdon Hill Sanatoria.

Medical Superintendent:
G. M. Mayberry, L.A.H., L.R.C.P.

Assistant Medical Officer:
Dorothy L. M. Keats, M.R.C.S., L.R.C.P., D.P.H.

Specialist Radiologist (part-time):
L. G. Blair, M.R.C.S., L.R.C.P., D.M.R.E.

Whipps Cross Hospital

Medical Superintendent:
O. R. M. Kelly, M.B., B.S., F.R.C.S.

Deputy Medical Superintendent:
D. G. Sharp, M.R.C.S., L.R.C.P.

Assistant Medical Officers:
W. E. Joseph, M.R.C.S., L.R.C.P. (Senior).
N. H. Skelton-Browne, M.R.C.S., L.R.C.P.
I. Mansfield, L.M.S.S.A.
G. McKinnon, M.B., Ch.B.
C. E. D. H. Goodhart, M.R.C.S., L.R.C.P.
I. E. Zieve, M.A., M.R.C.S., L.R.C.P.
(resigned 30/11/37)

Consultants:
W. J. O'Donovan, M.D., B.S., M.R.C.P., M.R.C.S.
(Skin diseases).
A. Galletly, M.B., Ch.B., F.R.C.S. (Gynaecology).
A. Todd, M.B., B.S., F.R.C.S. (Orthopaedics).
A. Clifford Morson, L.R.C.P., F.R.C.S. (Urology).
A. Ryland, L.R.C.P., F.R.C.S. (Aural conditions).
J. Purdon Martin, M.D., B.Ch., F.R.C.P. (Neurology).
L. Savin, L.R.C.P., F.R.C.S. (Eye diseases).
F. W. Barton, L.M.S.S.A. (Dentist).
T. deLacy Walker, L.M.S.S.A. (Anaesthetics).

Forest Gate Hospital.

Medical Superintendent:
H. R. England, M.B., Ch.B., M.M.S.A.
Senior Assistant Medical Officer: J. M. Gray, M.D., Ch.B.
Junior Assistant Medical Officer: W. F. Whelton, M.B., Ch.B., B.A.O.

Central Home.

Senior Medical Officer:
Ivan B. McCann, M.R.C.S., L.R.C.P.
Assistant Medical Officers:
J. Henderson, M.B., B.S.
R. G. Meyer, M.B., Ch.B. (appointed 5/7/37).

Harold Wood Hospital.

Visiting Medical Officer (part-time):
T. B. Fyans, M.B., Ch.B., B.A.O.

South Ockendon Colony.

Visiting Medical Officer (part-time):
N. MacFarlane, M.B., Ch.B.

District Medical Officers.

T. L. Dolan, L.R.C.P.I. and L.M., L.R.C.S.I. and L.M.
J. P. Robinson, M.B., Ch.B., B.A.O.
J. F. Begley, M.B., B.S., R.U. (part-time).
R. V. Brews, L.R.C.S.I. and L.M., L.R.C.P.I. and L.M. (part-time).
P. G. S. Kennedy, M.A., M.B., B.Chir. (part-time).
J. J. McSharry, L.R.C.P.I., L.R.C.S.I. (part-time).
M. J. Murphy, M.B., Ch.B., B.A.O. (part-time).

Public Vaccinators.

T. L. Dolan, L.R.C.P.I. and L.M., L.R.C.S.I. and L.M.
P. G. S. Kennedy, M.A., M.B., B.Chir.
M. J. Murphy, M.B., Ch.B., B.A.O.
J. Waters, M.B., Ch.B. (resigned October, 1937).
M. Kyndt, M.D. (appointed October, 1937).

Veterinary Officer (for Meat Regulations, 1924):
H. E. Bywater, M.R.C.V.S.
Assistant Veterinary Officer:
J. T. Turney, M.R.C.V.S.

Public Analyst (part-time):
A. E. Parkes, F.I.C., F.C.S.

Chief Sanitary Inspector:
H. G. Clinch.

Chief Clerk (General Public Health):
H. R. COLE.

Chief Clerk (School Medical Service):
F. W. ENGLAND.

(b) GENERAL HEALTH AND SANITATION.

Inspector under Food and Drugs Act and Sampling Officer:
E. F. HUGHES.

Meat inspector:
T. E. HARRIS.

District inspectors:

B. G. BANNINGTON (senior), R. DICKER,
J. F. MULES, J. B. H. JONES,
B. J. DRISCOLL, H. G. BARTRAM,
C. F. RILEY, A. B. HOLLOWAY (resigned 1/5/37),
J. A. DAWSON, L. PINGUEY (appointed 6/7/37),
H. G. AVRIL, MISS B. M. KEOGH,
E. J. CROMWELL, MISS V. M. BUSBY,
H. AULT, MISS A. MAUGHAN.
C. E. JEFFRIES,

Shops inspectors:
E. J. FERRIER, C. J. GENERY.

Vaccination officer:
H. H. KING.

Administrative section—health.

Clerks:

F. H. BARKER (senior), C. R. SANDELL,
J. SABIN, MISS H. O. WILLIAMS,
A. F. CLARKE, MISS M. DOHERTY,
S. A. LEMMON, J. P. QUINN,
D. THOMSON, E. J. WILKINS.
MISS A. E. DURAND,

Supervising nurse under Mental Deficiency Acts:
MISS H. SWIFT.

(c) SCHOOL MEDICAL SERVICE.

School nurses.

Miss D. S. Ayton
Miss A. Bredin
Miss H. E. Bredin
Miss A. Burrows
Miss E. M. Bussell
Miss A. J. Costain
Miss M. A. Costain
Miss I. Cox
Miss M. M. Empson
Miss L. C. Glover
Miss E. D. Harris
Miss E. Holly
Miss C. E. Hutton
Miss E. K. Jack
Miss E. Large
Miss A. K. McCormack
Mrs. M. Mace
Miss I. B. B. Mann
Miss M. H. Rose
Miss A. Sheehan
Miss E. R. Tanner
Miss M. E. Tanner
Miss E. Taylor
Miss M. A. Van Ryssen
Miss D. Wright

Miss F. G. Hobbs (Special enquiry nurse).

Mrs. C. B. Halls (Knox Road and Crosby Road Special Schools).

Mrs. S. Wilderspin (Grange Road Special School).

Nursing Staff, Fyfield Residential Open Air School.

Miss W. M. Barnes, Matron.

Miss M. James, Nurse.

Miss R. Aylott, Matron's Help.

Administrative section.

Clerks.

R. H. Thomas (senior)
Miss P. I. Geaussant
Miss G. A. Blackler
Miss E. W. Wood
T. P. Swatts
R. Huxtable
Miss E. Laker
W. Phillips

Messenger.

R. Denney

(d) MATERNITY AND CHILD WELFARE.

Health visitors.

Miss R. Alefs
Miss A. E. Lunn
Mrs. N. C. Gibbins
Miss M. B. Wallace
Miss A. Connolly
Miss L. M. Martin
Miss E. B. Welch
Miss M. Cross
Miss B. H. Clipstone
Miss M. Mackenzie
Miss D. M. White
Miss C. H. Banks
Miss B. deRochefort
Miss E. Norrie (resigned April, 1937)
Miss R. Harrington
Miss E. A. Edwards
Miss P. Bennett (resigned May, 1937)
Miss P. Carter (appointed May, 1937)
Miss V. Kusel (appointed May, 1937)
Miss R. M. Ody (appointed June, 1937)

Dental nurse:
Miss F. M. Davies.

Dried milk section.

Clerks:	*Assistant clerks*:	*Packers*:
Mrs. E. Gunstone	Miss D. Bentley	Miss V. Cockrell
Miss N. Lavell	Miss P. Benney	Miss I. Thompson
	Miss E. Taylor	Miss M. Milsted
		Miss G. Massey

Investigator: J. W. McCarthy.

(e) TUBERCULOSIS DISPENSARY.

Nurses:	*Clerks*:
Mrs. E. Siggins (sister-in-charge)	J. W. Rowe
Miss E. J. Egerton	Miss L. F. Bush
Miss M. Schwer	Miss G. Williams
Miss E. K. Pottinger	

(f) HOSPITALS.

Isolation Hospital, Plaistow.

Matron: Miss I. Tullock. *Steward*: W. Liddall.

1 assistant matron; 1 sister tutor; 1 night sister; 8 ward sisters; 9 staff nurses; 48 probationers; 5 private nurses; 3 dressmakers; 1 clerk; 3 female cooks; 1 head laundress; 9 laundry maids; 1 laundryman; 46 maids and orderlies; 4 female cleaners; 3 male cleaners; 1 foreman porter; 7 porters; 5 ambulance drivers.

Dagenham Sanatorium.

Matron: Miss M. Duguid. *Steward*: H. Bromley.

1 assistant matron and sister tutor; 1 night sister; 2 day sisters; 1 nurse housekeeper; 5 staff nurses; 2 assistant staff nurses; 15 probationers; 1 steward's clerk; 1 lodge attendant; 6 ward orderlies (female); 1 engineer; 1 engineer's mate; 1 caretaker; 1 handyman; 5 porters; 1 night watchman; 1 gardener; 1 assistant gardener; 1 cook; 1 assistant cook; 1 head laundress; 5 laundry maids; 1 sempstress; 21 maids.

Langdon Hill Sanatorium.

Matron: Miss F. M. Noble. *Steward*: H. Bromley.

1 senior sister; 1 staff nurse; 7 probationers; 2 teachers; 1 cook; 7 maids; 1 sempstress; 1 head gardener and caretaker; 1 motor driver and porter; 1 handyman and porter; 2 assistant gardeners; 1 night watchman.

Whipps Cross Hospital.

Matron: Miss E. Downs. *Steward*: B. S. Lawrence.

1 assistant matron; 1 radiographer; 1 assistant radiographer; 1 dispenser; 1 assistant dispenser; 1 tutor sister; 1 assistant tutor sister; 3 massage sisters; 3 night sisters; 1 home sister; 1 assistant home sister; 26 ward sisters; 35 staff nurses; 113 probationers; 7 private nurses; 3 male nurses; 1 masseur; 2 male head attendants; 11 attendants; 10 dressmakers; 2 male cooks; 1 female cook; 1 head laundress; 1 assistant laundress; 32 laundry maids; 4 laundry men; 141 maids and orderlies; 34 part-time orderlies; 2 male cleaners; 1 foreman porter; 38 porters; 9 ambulance drivers; 1 barber; 1 deputy steward; 1 medical superintendent's clerk; 7 male clerks; 2 female clerks.

Forest Gate Hospital.

Matron: Mrs. E. M. Usherwood. *Steward*: E. J. Miles.

1 assistant matron; 1 home sister; 2 night sisters; 7 ward sisters; 5 midwifery sisters; 8 pupils; 109 assistant nurses; 16 male attendants; 5 handicraft instructresses; 2 cooks; 2 assistant cooks; 5 kitchen maids; 3 scullery maids; 1 matron's maid; 1 doctor's maid; 1 assistant steward; 4 steward's clerks; 1 medical superintendent's clerk; 42 cleaners.

Central Home.

Matron: Mrs. M. E. Lambert. *Master*: S. P. Lambert.

1 dispenser; 1 assistant dispenser; 1 assistant master; 2 assistant matrons; 1 superintendent nurse; 1 assistant superintendent nurse; 15 ward sisters; 167 assistant nurses; 1 head female attendant; 1 female charge attendant; 23 female attendants; 1 head male nurse; 2 male charge nurses; 54 male nurses; 1 head male attendant; 14 attendants; 11 dressmakers; 6 male cooks; 5 female cooks; 1 machinist; 1 head laundress; 1 assistant laundress; 34 laundry maids; 1 head laundryman; 6 laundrymen; 12 maids and orderlies; 106 female cleaners; 3 porters; 1 lodge attendant; 2 motor drivers; 1 barber; 6 clerks.

Forest House.

Matron: Mrs. E. Rutherford. *Master*: R. L. Rutherford.

1 master's clerk; 1 head attendant; 1 charge sick attendant; 12 male attendants; 7 female attendants; 3 machinists; 2 cooks; 13 cleaners; 1 barber.

Harold Wood Hospital.

Matron: Miss L. M. Mackie.

6 ward sisters; 3 staff nurses; 36 assistant nurses; 5 male nurses; 2 dressmakers; 1 acting steward; 1 clerk; 2 female cooks; 1 head laundress; 4 laundry maids; 1 laundryman; 24 maids and orderlies; 6 porters; 1 barber.

South Ockendon Colony.

Matron-Superintendent: Miss W. S. Butler.

1 female clerk; 2 female charge nurses; 2 deputy female charge nurses; 9 assistant nurses; 1 head male nurse; 1 deputy head male nurse; 7 male nurses; 1 female cook; 3 housemaids; 2 kitchenmaids; 1 sempstress; 1 assistant sempstress; 3 porters; 1 handyman.

District Nurses (Public Assistance):

Miss E. Gunn Miss E. Hayes

Mortuary keeper: E. Heisterman.

Assistant sampler: F. Johnson.

Disinfectors:

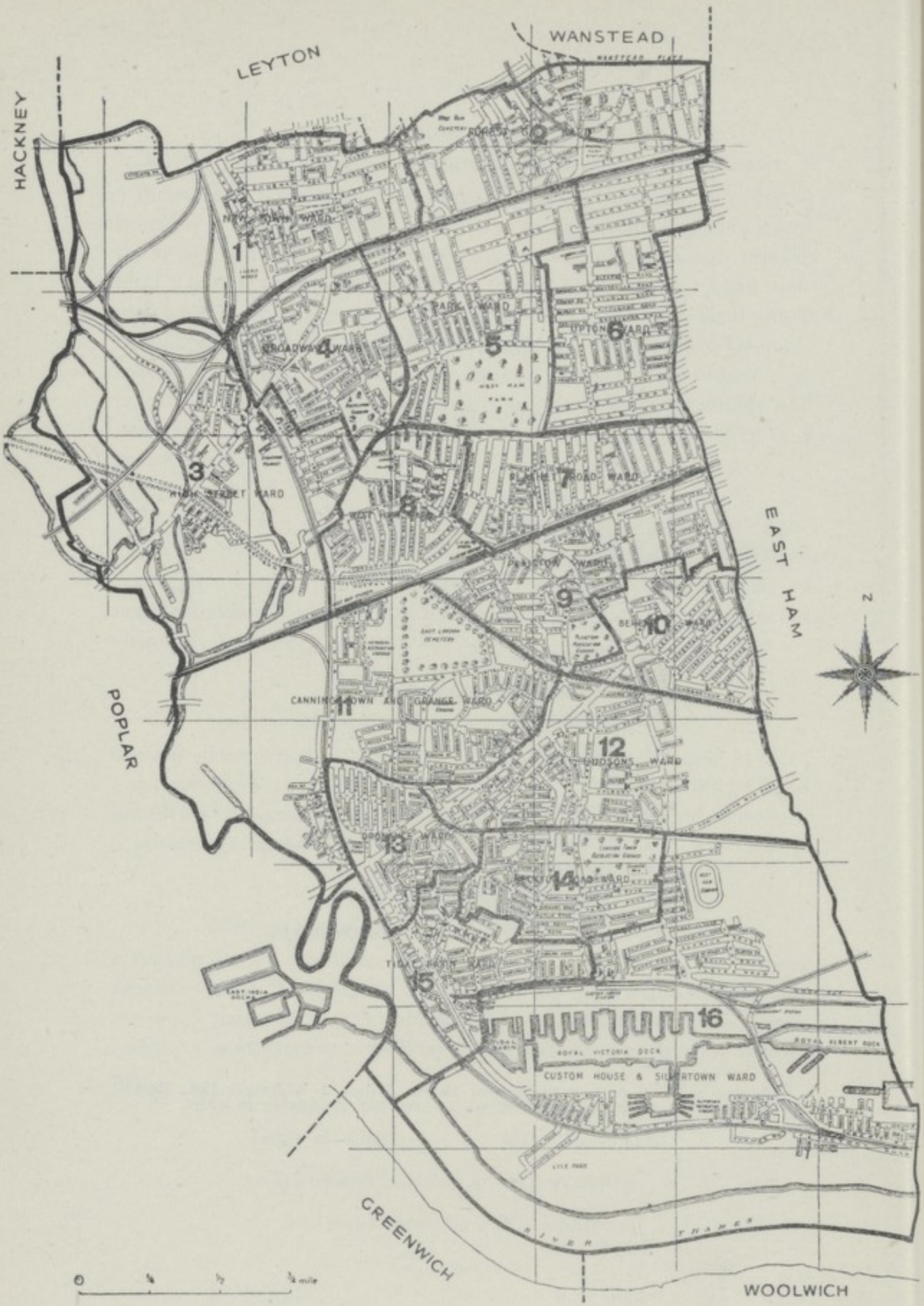
B. Lyons E. Hesselwood
H. Howe F. Nottage

KEY TO THE WARDS SHOWN ON THE MAP.

The map is divided into half mile squares.

1. New Town.
2. Forest Gate.
3. High Street.
4. Broadway.
5. Park.
6. Upton.
7. Plashet Road.
8. West Ham.
9. Plaistow.
10. Bemersyde.
11. Canning Town and Grange.
12. Hudsons.
13. Ordnance.
14. Beckton Road.
15. Tidal Basin.
16. Custom House and Silvertown.

This map is based on a publication of Messrs. Wilson & Whitworth Ltd., Broadway, Stratford, to whom acknowledgments are due for permission to adapt.



WARD MAP OF WEST HAM.

(For key, see overleaf)

SUMMARY.

1937.

Area of borough	4,689 acres
Average height above sea level	25 feet
Census population, 1931 (males 143,714) (females 150,564)	294,278
Population, 1937 (Registrar-General's mid-year estimate)	259,500
Estimated number of houses	50,247
Number of families (1931 Census)	72,994
Number of persons per acre	56
Rateable value	£1,518,245
Sum represented by a penny rate	£5,942

	West Ham		England & Wales	
	1937	average. 1927-1936	1937	average. 1927-1936
Live births	4,148	5,064	610,557*	623,508
Birth-rate (per 1,000 population)	16.1	17.3	14.9*	15.6
Stillbirths	145	165 (1928—1936)	24,806*	26,242 (1928—1936)
Stillbirth rate (per 1,000 total live and still births)	34	32 (1928—1936)	39*	40
Marriage rate (persons married per 1,000 living)	22.3	—	17.4*	16.1
Number of deaths	3,107	3,326	509,571*	485,512
Crude death-rate (per 1,000 population)	12.0	11.4	12.4*	12.1
Adjusted death-rate	13.8	—	—	—
Excess of births over deaths	81	—	—	—
Deaths of infants under one year	259	331	—	39,871
Infantile mortality rate (deaths per 1,000 live births)	62	65	58*	64
Deaths of women in child-birth:				
Puerperal sepsis	2	6.6	—	1,077
Other causes	3	6.6	—	1,579
Total maternal deaths	5	13.2	—	2,656
Maternal death-rate per 1,000 total births	1.15	2.61	3.11*	4.26

Various diseases: cases and deaths during 1937.

	Cases	Case rate per 1,000 population.	Deaths.	Death rate per 1,000 population.
Smallpox	0	0.00	0	0.00
Scarlet fever	1,074	4.14	4	0.02
Diphtheria	503	1.94	18	0.07
Enteric fevers	15	0.06	1	0.00
Measles	—	—	1	0.00
Whooping-cough	—	—	18	0.07
Diarrhoea and enteritis under 2 years (rate per 1,000 live births)	—	—	47	11.22
Pneumonia:				
Acute primary and influenzal	354	1.36	—	—
All forms	—	—	250	0.96
Bronchitis	—	—	160	0.62
Pulmonary tuberculosis ..	301	1.16	203	0.78
Other forms of tuberculosis	72	0.28	24	0.09
Cancer	—	—	367	1.41

* Provisional rates from weekly and quarterly returns.

I. NATURAL AND SOCIAL CONDITIONS GENERAL PROVISION OF SERVICES

NATURAL AND SOCIAL CONDITIONS.

The County Borough of West Ham is a large autonomous area which is situated in latitude 51° 30′ to 51° 33′ N. and longtitude 0° 1′ to 0° 3′ E., outside the eastern boundary of the County of London. The whole of the area, which is approximately 4 miles from north to south and about 2 miles from east to west, lies in the County of Essex, and it is bounded on the north by the Borough of Leyton and the County Borough of East Ham, on the east by the County Borough of East Ham, on the south by the River Thames and on the west by the Metropolitan Boroughs of Poplar and Hackney. The area is generally very flat, varying from less than 5 feet to 45 feet above sea level, about half the area being not more than 10 feet above that level.

The area which constitutes the County Borough of to-day is of great antiquity. The Romans were certainly here at an early date, and numerous Roman remains have been found. In Saxon times the name of "Hamme" came into use, and it is said that Alfred the Great was responsible for the construction of the numerous watercourses which are a notable physical feature of West Ham to-day. From an ecclesiastical point of view this district became important in early times, and the great Abbey of West Ham was founded in the year 1135. The Abbey was surrendered to Henry VIII. in 1538, and few traces of its fabric now remain. The present Parish Church of West Ham was founded in the twelfth century. Until comparatively recent times the area consisted of a number of scattered centres separated by undeveloped land. Of these, the most important were Stratford, Plaistow and Upton. Many industries had been carried on in the area, but with the industrial revolution, and the coming of the railway in 1839, an incredible expansion of these industries occurred. Some idea of the growth of the area in population and wealth may be obtained from the statement that, whereas in 1856 the population was 27,000, in 1886 it was 180,000; and that, whereas the rateable value in 1856 was £80,000, in 1886 it was

£652,000. In these thirty years the number of houses increased from 4,500 to 27,000. This rapid expansion was responsible not only for the present importance of the area, but also for many of its present social difficulties.

The Borough contains along its southern boundary some of the finest docks in the world. These are under the control of the Port of London Authority. The last important dock to be constructed—the King George the Fifth Dock—was opened in 1921.

Some of the many important industries which are found in this area are dealt with in later sections. At present the area is largely industrial, commercial and residential—a considerable proportion of the houses being of a type suitable for the working classes. There is thus ample scope for the enforcement of the statutes which deal with public health and housing.

In recent years many developments have taken place in the lines of communication in the area. The River Lee Backwater Scheme has now been practically completed, and another important artery is the Silvertown Way.

The area was constituted a borough by Royal Charter in 1886, and it was then divided into four wards—viz., Stratford, Forest Gate, Plaistow and Canning Town. In 1899 the borough was divided into twelve wards—viz., New Town; Forest Gate; High Street; Broadway; Park; Upton; West Ham; Plaistow; Hudsons; Canning Town; Tidal Basin; Custom House and Silvertown. In 1921 a re-distribution of the area again took place, and the following sixteen wards were constituted:—New Town; Forest Gate; High Street; Broadway; Park; Upton; Plashet Road; West Ham; Plaistow; Bemersyde; Canning Town and Grange; Hudsons; Ordnance; Beckton Road; Tidal Basin; Custom House and Silvertown. No further re-distribution has taken place, so that the statistics for wards given in other sections of this report are strictly comparable from 1921 to date.

Further particulars of the historical development of this interesting area will be found in the book "Fifty Years a Borough: 1886-1936. The Story of West Ham" published by the County Borough Council in 1936.

Area. The area of the county borough is 4,689 acres. As the area is surrounded by other local authorities, no extension is possible under the present constitution of local government.

POPULATION. The Registrar-General's estimate of the resident population at the middle of the year 1937 was 259,500. The allocation of the population to the different wards and the changes in the size of the population through the years, are more fully discussed in a later section.

The population of West Ham, as enumerated at the 1931 census, was 294,278 persons, of whom 143,714 were males and 150,564 females. The total population of the Administrative County of Essex, including its associated County Boroughs, West Ham, East Ham and Southend-on-Sea, at that Census was 1,755,459 persons. For further particulars of the Census population, see the section on vital statistics.

DWELLING-HOUSES. The total number of dwelling-houses in the borough at the 1931 Census was 48,907, of which 298 were unoccupied. The number of structurally separate dwellings at that date was 49,280. The number of occupied rooms at that date was 253,254, and the average number of persons per room was 1.14. The number of private families in the borough at the 1931 Census was 72,994. The estimated number of dwellings at the end of the year 1937 was 50,247, of which 49,972 were occupied and 275 were unoccupied.

RATEABLE VALUE AND FINANCE. The rateable value of this borough in 1937 was £1,518,245, and the estimated product of a penny rate was £5,942. The corresponding figures for 1936 were £1,510,131 and £5,998 respectively.

A summary of the income and expenditure of those Committees of the Council which administrate the health services is given in Table I. For this statement I am indebted to the Borough Treasurer, Mr. E. J. Johnson, O.B.E.

PRINCIPAL INDUSTRIES. A comprehensive list of the most important industries in the borough is given in the publication "The Story of West Ham" referred to previously. Some idea of the variety of the industries which have developed may be gathered from the fact that the published list—which is not claimed to be complete—includes 146 separate and distinct trades. The importance of the West Ham docks has already been mentioned, and the London and North Eastern Railway works in Stratford employ a large number of hands.

TABLE I.

HEALTH SERVICES OF WEST HAM: FINANCIAL STATEMENT FOR YEAR 1ST APRIL, 1937, TO 31ST MARCH, 1938.

Service.	Total expenditure £	Income (excluding Government Grant) £	Net cost of Service £
(1) General public health:—			
Infectious diseases (excluding hospitals) ..	8,029	—	8,029
Sanitation and general public health	14,094	55	14,039
Food and Drugs (Adulteration) Act	1,451	—	1,451
Diseases of Animals Act ..	1,502	—	1,502
Midwives Acts			
Shops Acts	820	—	820
Ambulances	2,449	295	2,154
(2) Prevention and treatment of tuberculosis	4,877	—	4,877
(3) Maternity and child welfare service	38,276	8,943	29,333
(4) School medical service	20,002	312	19,690
(5) Venereal diseases	2,527	—	2,527
(6) Mental deficiency service ..	31,079	91	30,988
(7) Hospitals and institutions:			
Isolation Hospital	40,859	1,754	39,105
Sanatoria	45,815	151	45,664
Whipps Cross Hospital ..	187,621	562	82,467*
Forest Gate Hospital ..	84,278	7,787	29,744*
Central Home	156,385	428	74,550*
Harold Wood Hospital ..	27,711	5,441	22,270
South Ockendon Colony ..	18,496	4,755	13,741
Totals ..	686,271	30,574	422,951

* Net cost after deducting income from user-agreements.

Other industries which employ a large number of the population include that of cable making, sugar refining, leather cloth making, oil refining, manufacturing of chemicals, with a host of other smaller trades.

UNEMPLOYMENT. The statistics which were compiled for many years with reference to unemployment in the borough included some persons in other areas than West Ham who registered at the two employment exchanges, viz. Canning Town and Stratford. Since 1933, however, special returns have been compiled relating to the number of unemployed persons resident in the County Borough. Table II. gives these figures from 1933-1936. For Tables II. and III., and for the following comments, I have to thank Mr. E. C. Ramsbottom, O.B.E., the Director of Statistics of the Ministry of Labour.

The figures for the years 1933-1936 relate to the total number of unemployed (insured and uninsured) aged 14 and over, who were resident in West Ham and who were also on the register of the employment exchange. The figures for 1937 relate only to persons aged 16 and under 65 years who were insured against unemployment. It should be noted, therefore, that the figures for 1937 are not strictly comparable with figures for previous years.

With reference to the total number of persons insured against unemployment, statistics are compiled annually showing the numbers whose unemployment books are exchanged at the employment exchanges in West Ham, but these figures also include some residents in West Ham whose books are exchanged at employment exchanges in other districts, and include some residents in other areas whose books are exchanged at employment exchanges in West Ham. In order to provide a basis for the calculation of approximate percentage rates of unemployment, estimates have been made by the Department of the total number of insured persons, aged 16-64, resident in West Ham in July of each year since 1933.

Table III. gives the estimated figures for each of the years 1933-1937.

It should be observed, however, that these estimates are necessarily only rough approximations, and that the figures given for 1933 to 1936 (relating to insured persons aged 16-64) are not strictly comparable with the unemployment figures given for those years in Table II., which includes juveniles under 16 years of age and uninsured persons registered as unemployed.

Table II.

Unemployment among persons resident in West Ham 1933-1937.

Date.	Unemployed persons aged, 14 and over, insured and uninsured on the registers of employment exchanges at the dates specified			
	Men aged 18 and over.	Women aged 18 and over.	Juveniles aged 14—17.	Total aged 14 and over.
1933				
23rd January	16,381	2,102	1,294	19,777
24th April	15,132	2,351	1,051	18,534
24th July	13,436	1,848	532	15,816
23rd October	14,071	1,273	415	15,759
1934				
22nd January	14,162	2,055	1,197	17,414
23rd April	12,414	1,615	872	14,901
25th July	11,875	1,665	458	13,998
22nd October	13,001	1,350	437	14,788
1935				
28th January	13,512	2,189	1,011	16,712
15th April	11,521	1,677	377	13,575
22nd July	11,298	1,542	378	13,218
21st October	11,088	1,170	312	12,570
1936				
20th January	11,507	1,917	869	14,293
27th April	9,982	1,645	625	12,252
20th July	8,986	1,209	324	10,519
26th October	8,683	893	238	9,814

Date.	Insured persons, aged 16—64, recorded at employment exchanges as unemployed at the dates specified.		
	Males*	Females*	Total
1937			
25th January	8,877	1,708	10,585
19th April	7,588	1,392	8,980
26th July	7,153	1,407	8,560
18th October	8,324	1,142	9,466

* Separate figures for men and boys, and for women and girls, are not compiled for 1937 as regards persons **resident** in West Ham.

Table III.

Estimated number of insured persons, aged 16-64, resident in West Ham.

Date.	Men aged 18—64.	Women aged 18—64.	Juveniles aged 16—17.	Total aged 16—64.
July 1933	64,800	23.490	10,410	98,700
July 1934	64,930	23,680	9,010	97,620
July 1935	65,290	23,220	8,200	96,710
July 1936	66,140	23,000	10,080	99,220

	Males, aged 16—64.	Females aged 16—64.	Total, aged 16—64.
July 1937	72,530	28,490	101,020

Poor Relief. I am indebted to Mr. E. J. Johnson, the Borough Treasurer, for the following particulars regarding poor relief in 1937. The total number of poor persons who were receiving relief —other than relief of a medical nature—at December 31st, 1937, was 10,943. The amount expended on out-relief during the financial year from 1st April, 1937, to 31st March, 1938, was £191,668, of which £34,147 was granted to persons ordinarily engaged in some regular occupation, and £157,521 to other persons. The institutions which formerly belonged to the West Ham Board of Guardians were transferred to the Council in March, 1930, and of these the Central Home, which is situated in Leyton, is the only one which is now available for indoor relief. The relieving stations are set out later. The relieving officers attend at these stations between the hours of 9 a.m. and 5 p.m.

Central Home. The casual wards which were formerly at this institution, and the casuals, are now dealt with by the Joint Committee for the Northern Home Counties, consisting of the Counties of Middlesex, Hertfordshire and Essex, and the County Boroughs of West Ham, East Ham and Southend-on-Sea. The majority of the children who are orphaned or deserted are placed in the Aldersbrook Children's Home. Others are placed in private homes, and the foster-parents are paid for their maintenance.

Table IV.

Central Home: Number of admissions, exclusive of medical cases.

(a) 1937.

Month.	Men	Women	Children 3—16 years.	Infants under 3.	Total.
January	21	9	15	10	55
February	24	7	13	7	51
March	21	7	18	5	51
April	19	6	12	6	43
May	15	4	7	10	36
June	19	9	31	12	71
July	13	9	9	7	38
August	20	11	11	11	53
September	25	7	14	14	60
October	15	10	6	3	34
November	29	9	15	11	64
December	21	2	16	9	48
Total	242	90	167	105	604

(b) 1936.

Month.	Men	Women	Children 3—16 years.	Infants under 3.	Total.
January	25	11	13	10	59
February	29	8	7	5	49
March	24	7	25	3	59
April	28	9	7	5	49
May	16	5	2	4	27
June	18	6	11	9	44
July	12	7	19	9	47
August	30	9	1	7	47
September	30	7	18	2	57
October	37	8	3	5	53
November	33	7	7	4	51
December	23	8	5	7	43
Total	305	92	118	70	585

The Central Home has certified accommodation for 1,807 persons, which includes medical cases. The actual available accommodation on 31st December, 1937, was 1,599, viz.:—790 men, 803 women and 6 children. The number of able-bodied persons in the home on 1st January, 1937, was 673, and the number on 31st December, 1937, was 628.

Table IV. gives further details of admissions to the institution exclusive of medical cases which are dealt with elsewhere.

National Health Insurance. The total number of insured persons in the borough under the National Health Insurance Acts on 1st January, 1938, was 123,569, as compared with 123,681 on 1st January, 1937. The number of doctors, including their assistants, who were on the panel at the end of the year 1937 was 179, and the number of prescriptions which were dispensed during the year was 632,340. The corresponding figures for 1936 were 178 and 626,439.

METEOROLOGY.

There is no meteorological station in the borough, but the area is sufficiently near to the Greenwich Observatory to enable complete reliance to be placed upon the records of this station.

Table V. gives a climatological summary for the year 1937 for the station, and for this information I am indebted to the Director of the Meteorological Office of the Air Ministry.

Data for use with the Table. Greenwich Observatory—latitude 51°, 29 seconds north; maximum temperature relates to the interval 24 hours to 24 hours (G.M.T.); the minimum temperature refers to the similar interval; the rainfall is based on 24 hours period to 9 hours; the earth temperature to a similar period ending at 12 hours; and the other observations relate to the 6 hours period from 15—21 hours.

The site of the rain gauge above sea-level was 1.9 feet. The height above ground of the following instruments was: thermometer, 4 feet; sunshine recorder, 50 feet; rain gauge, 5 feet. The normals used were:—(a) mid-temperature—period 1906—1935; (b) rainfall—period 1881—1915; (c) sunshine—period 1906—1935.

GENERAL PROVISION OF HEALTH SERVICES.

This section of the report deals in detail with certain minor aspects of the health services, and introduces the arrangements which are in force at the present time regarding the major services. A full account of these major services will be found in later sections of this report.

LABORATORY FACILITIES. It has not so far been found practicable to centralize the bacteriological work of the borough, though it is possible that such a scheme, which would undoubtedly have many advantages, will materialize at a later date.

At the Isolation Hospital, Plaistow, routine bacteriological work in connection with patients in the wards is carried out, and facilities are also available for practitioners to have the simpler bacteriological examinations—such as the examination of throat swabs, or the carrying out of agglutination reactions using the commoner organisms—performed here. Details of the results of such examinations are given in the report on the hospital. The examination of sputum for the tubercle bacillus is carried out at the tuberculosis dispensary. More complicated bacteriological methods, such as the examination of milk, are usually carried out by the bacteriologist to Queen Mary's Hospital, Stratford, and the Medical Officer of Health may at times direct that samples, the examination of which involves special technique, should be sent to other laboratories. It is regrettable that the other large hospitals which are controlled by the Council are not yet able to carry out their own bacteriological work, or to have this work done for them at a municipal laboratory. Many of the specimens from these hospitals are sent to the laboratory of the Clinical Research Association. Panel practitioners may, by arrangement between the West Ham Insurance Committee and Queen Mary's Hospital, have reports on any pathological material submitted by them for examination. Particulars of the examinations carried out at certain hospitals owned by the local authority will be found in the appropriate sections.

The Council employs a part-time analyst to carry out the chemical examination of water, milk and other foodstuffs. This officer is also the official analyst under the Fertilisers and Feeding Stuffs Act, 1926. The analyst's report will be found in the section which deals with the supervision of food.

Table V. Climatological Summary, 1937.

1937.	Air Temperature in Degrees Fahrenheit.												Earth Temperature.	
	Means of		Mean of A and B	Difference from Average.	Absolute Extremes.								At 1 foot	At 4 feet
	A Max.	B Min.			Highest Max.	Date.	Lowest Min.	Date.	Lowest Max.	Date.	Highest Min.	Date.		
	(1) °F.	(2) °F.	(3) °F.	(4) °F.	(5) °F.	(6)	(7) °F.	(8)	(9) °F.	(10)	(11) °F.	(12)	(13) °F.	(14) °F.
Jan. ...	46.8	36.3	41.5	*40.1* + 1.4	53	3.6 24	28	29	31	29	48	3	43.2	45.7
Feb. ...	48.6	37.8	43.2	*40.4* + 2.8	57	15	29	12	37	28	49	3	43.0	44.8
Mar. ...	46.9	33.4	40.1	*43.2* — 3.1	61	20	24	10	36	8	44	17	41.0	43.5
April ...	57.5	42.0	49.7	*47.5* + 2.2	65	3	31	1	48	29	50	10	47.3	46.2
May ...	65.1	46.7	55.9	*54.8* + 1.1	82	25.29	39	6	51	9	56	23	52.5	50.1
June ...	71.1	50.2	60.7	*59.7* + 1.0	85	11	43	21	61	19	60	12	57.8	54.8
July ...	73.7	55.3	64.5	*63.5* + 1.0	89	15	49	30	64	4	62	3. 13.	60.3	57.1
Aug. ...	77.1	55.9	66.5	*63.0* + 3.5	92	6	47	16	65	27	63	10	61.6	58.9
Sept. ...	68.0	48.9	58.5	*58.1* + 0.4	83	7	38	21	57	11	61	7	58.5	58.7
Oct. ...	59.1	45.6	52.3	*51.3* + 1.0	69	1. 2.	36	18	52	13	52	3. 28.	54.1	55.7
Nov. ...	47.1	36.1	41.6	*43.5* — 1.9	57	4	24	21	39	21	46	6. 7.	47.4	51.4
Dec. ...	42.3	34.2	38.3	*41.1* — 2.8	53	1. 23	25	20	35	20	45	1	42.4	46.1
Totals ...	703.3	522.4	612.8	*50.5*									609.1	613.0
Year Means or Extremes	58.6	43.5	51.1	+ 0.6	92	6 Aug.	24	10 Mar. 21 Nov.	31	29 Jan.	63	10 Aug.	50.8	51.1

NOTES.—The Symbol S against "length of day" indicates that obstructions of altitudes
the possible record being the period when the
*Precipitation ·01 inch or more when measurement is in inches, ·2 mm. or
If the average refers to a period less than 30 years, the entry in columns 4,

Greenwich Observatory.

Rainfall.					Number of Days.									Bright Sunshine.				
Total		Percentage of Average	Most in a day		Precipitation*	Precipitation, 1mm. or more	Snow and Sleet	Snow lying (morning obs.)	Hail▲ or	Thunder heard	Fog (morning obs.)	Ground frost	Gale force 8 or more.	Total.	Daily Mean	Percentage		Length of Day.
			Amt.	Date.												of Average	of Possible	
(15) in.	(16) mm.	(17) %	(18) in.	(19)	20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29) hr.	(30) hr.	(31) %	(32) %	(33) hr.
3.40	86.4	*43* 201	.52	1	25	17	3	1	0	0	6	14	0	36.5	1.18	*1.23* 96	14	*8.34*
3.94	100.2	*40* 251	.69	7	22	18	1	0	2	0	2	14	0	41.8	1.49	*2.07* 72	15	*9.89*
2.92	74.1	*44* 168	.65	6	18	13	12	1	1	0	1	25	0	91.7	2.96	*3.40* 87	25	*11.8*
2.44	61.9	*37* 167	.47	2	14	12	0	0	0	1	4	6	0	81.9	2.73	*4.60* 59	20	*13.8*
3.41	86.5	*44* 197	.72	20	14	12	0	0	1	2	1	2	0	157.4	5.08	*6.32* 81	33	*15.5*
1.87	47.6	*51* 93	.80	18	11	6	0	0	0	4	0	1	0	171.5	5.72	*6.76* 85	35	*16.5*
.71	18.0	*57* 32	.35	15	9	4	0	0	0	3	0	0	0	117.9	3.80	*6.32* 60	24	*16.1*
1.69	42.9	*56* 77	1.01	30	8	5	0	0	1	4	0	0	0	171.8	5.54	*6.05* 92	38	*14.5*
1.28	32.4	*45* 72	.24	9	14	11	0	0	0	1	2	1	0	144.7	4.82	*5.03* 96	38	*12.6*
2.32	59.0	*64* 92	.61	23	14	8	0	0	1	1	5	7	0	80.9	2.61	*3.21* 81	24	*10.7*
1.37	34.7	*58* 59	.49	1	8	7	0	0	0	0	13	18	0	31.1	1.04	*1.59* 66	12	*8.86*
3.41	86.5	*57* 152	.68	2	19	10	7	0	0	0	7	15	0	13.6	0.44	*0.97* 45	6	*7.86*
28.76	730.2	*596* 122			176	123	23	2	6	16	41	103	0	1140.8	37.41 3.12	*3.97*		*12.21*
28.75			1.01	30 Aug.											3.13	79	26	

greater than 3° reduce the possible record for the month by more than 5 per cent.:
sun's altitude is above 3°.
more when measurement is in millimetres.
33, is underlined.

AMBULANCE FACILITIES. The following ambulances are available for use by the public, with certain reservations:

(a) For general hospital cases (Whipps Cross Hospital) .. 5
(b) For infectious cases (Plaistow Hospital) 2
(c) For accidents and maternity cases 3

Two of the three ambulances provided for accidents are owned by the Public Health Committee. They are housed, driven, supplied with petrol and oil, and maintained by a contractor in the borough. These vehicles made 2,698 journeys during the year, including 8 at the request of the East Ham Council. The number of journeys made from one address to another in the district was 1,310, whilst 1,388 journeys were made from an address in the borough to an address outside, or vice versa. Of the total number of journeys made by the ambulances, no less than 839 were for accidents occurring either at home, at work, or in the street. These ambulances are only used for accidents and non-infectious cases requiring immediate removal to hospital for treatment or operation, and in the latter cases a medical certificate is required. The total number of persons removed by these ambulances was 2,902.

Information regarding the use of these ambulances is brought to the notice of the general public by means of notices which are placed in Council's fire stations, schools, and other public buildings; in addition to this the police are fully aware of the conditions in force, and on a number of occasions they communicate direct with the ambulance stations. The service has been in operation for some considerable time, and the citizens are fully cognisant of the rules and regulations governing the use of the Council's ambulances.

Reciprocal arrangements are in force with the County Borough of East Ham and with the Borough of Barking, for the use of their respective ambulances, on call, in cases of emergency. The journeys made under these arrangements during 1937 are as under:—

In 24 cases the ambulance of the East Ham Authority was requisitioned for the removal of West Ham cases, and on 8 occasions the West Ham ambulance was used for East Ham cases.

In addition to the Public Health Committee's two ambulances, the Highways Committee of the Council has an ambulance stationed at the Silvertown Fire Station in the Silver-

town area, which is available daily between the hours of 7 a.m. and 11 p.m. This vehicle is used mainly for accidents occurring in factories in the Silvertown district, and certain factory owners contribute towards the cost of this service. During the year the number of journeys made by this ambulance was 176. There is also in force a reciprocal arrangement between this Council and the London County Council.

This service as a whole has, during the year, worked very satisfactorily, and is quite adequate for the district. No complaints which would bear investigation were received during the year in connection with this service.

Table VI. gives a summary of the main causes for which the two ambulances owned by the Public Health Committee and used for accidents, etc., were requisitioned.

TABLE VI.

SUMMARY OF MAIN CAUSES FOR WHICH AMBULANCES WERE USED.

Cause or condition	Number of patients removed.
Abdominal disorders	262
Accidents	1,109
Cardiac	34
Eye	6
Ear	30
Fits and nervous	130
Diseases of blood vessels ..	2
Inflamatory	32
Cerebral	18
Haemorrhage	34
Skin	4
Respiratory	205
Rheumatic	20
Maternity	209
Other illnesses	707
Total cases removed	2,902

PROFESSIONAL NURSING IN THE HOME. Reference is made later to those nurses who are employed whole-time by the Public

Assistance Committee, and who work in association with the whole-time district medical officers. No municipal arrangements are made for the nursing of infectious cases in the home. All such cases who require hospital treatment are removed to the Isolation Hospital, Plaistow, or if this hospital is full, to the London Fever Hospital.

Apart from these two nurses the greater part of the home-nursing in the borough is carried out by voluntary associations. The district nurses of the Plaistow Maternity Hospital take a large share of this work in the borough generally. The Forest Gate area is supplied with nurses from the Beachcroft Road, Leytonstone, branch of the Essex County Nursing Association, and the Silvertown area is supplied through the Tate Nurses (Queen's Nurses) Home, Saville Road, Silvertown.

The home nursing of maternity cases is dealt with in a later section.

Clinics and Treatment centres. Full particulars of the available facilities will be found in the following sections: Venereal diseases; tuberculosis; maternity and child welfare; mental deficiency and mental disorders.

Hospitals. Particulars of the Council's institutions will be found in the following sections: Hospitals; infectious diseases; tuberculosis; maternity and child welfare; mental deficiency; school medical service. In this section some consideration will be given to the provision of general hospital beds—municipal and voluntary—and to voluntary hospitals which fulfil special functions.

Smallpox: Dagenham Smallpox Hospital was built in 1899 for the reception of 300 cases of smallpox, but in 1912 it was taken over for the treatment of adult cases of pulmonary tuberculosis, and it is still being used for this purpose. There is accommodation for 128 cases. Any cases of smallpox occurring in this area are removed by arrangements with the London County Council to one of their hospitals.

General voluntary hospitals

(a) *Queen Mary's Hospital, Stratford.* This is a modern hospital with complete facilities for the treatment of medical and surgical cases. There are also children's wards, a dental department, electro-therapeutic, actino-therapeutic, and out-patient departments. The total number of beds is 166.

(b) *St. Mary's Hospital, London Road, Plaistow.* This is a well-equipped hospital for women and children only. There are 71 beds for the treatment of medical and surgical cases, and in addition there is a large out-patient department. Facilities are also available for X-ray examinations, electrical treatment, massage and exercises.

(c) *Albert Dock Hospital, Connaught Road, E.16.* This hospital has accommodation for 53 medical and surgical cases, including 6 beds for the treatment of venereal diseases. It is one of the participating hospitals under the London County Council Scheme for the treatment of venereal diseases, and men only are treated there.

(d) *Children's Hospital, Balaam Street, Plaistow.* This is a small hospital of 36 beds which specialises largely in orthopaedic and nose and throat work. The Borough Council reserve the use of one ward of 16 beds for the use of its own cases, and the Senior Assistant Medical Officer for maternity and child welfare is in charge of this ward. The Council also reserve four beds in the orthopaedic ward. There is a light clinic and an out-patient department. Plans are now being considered for the extension of the hospital and for the provision of a new light clinic.

(e) *Plaistow Maternity Hospital, Howards Road, E.13.* This hospital belongs to the Plaistow Maternity Charity and has accommodation for 60 beds, of which number 48 are used by West Ham patients. Some of the wards are of modern construction. By arrangement with the Public Health Committee and the Committee of the Plaistow Maternity Hospital, the majority of those children born in this hospital, or attended at birth by nurses from this hospital, are visited by nurses from the institution until they reach the age of four years. In addition, the hospital possesses a very extensive district midwifery practice and is incorporated in the Council's scheme under the Midwives Act, 1936.

GENERAL HOSPITAL ACCOMMODATION FOR ADULTS AND CHILDREN. As most of the general hospitals admit patients from areas outside West Ham, it is difficult to estimate the actual number of beds for this purpose which are available for the population of the County Borough. In Table VII. an attempt has been made to give this information.

TABLE VII.

PROVISION OF GENERAL HOSPITAL BEDS FOR WEST HAM RESIDENTS: 1937.

Hospital.	Total number of beds.	Total admissions during 1937.	Total admissions of West Ham residents in 1937.	General hospital beds available for residents.	
				Individual hospitals.	Total
Municipal:					
Whipps Cross	800	—		400	
Central Home	1,000			500	
Forest Gate	659			330	
Harold Wood	160			160	
					1,390
Voluntary:					
Queen Mary's	166	3,528	1,519	71	
St. Mary's	71	1,382	1,006	52	
Albert Dock	47	749	192	12	
Children's (Balaam Street)	36	1,030	742	20	
					155
					1,545

This total gives an allowance of 5.95 general hospital beds available per 1,000 of the population of the county borough. It should be noted that the discrepancy between the numbers of beds in columns 2 and 5 in respect of the municipal hospitals is due to a user agreement with the County of Essex and the County Borough of East Ham. This arrangement is referred to in a later section.

INSTITUTIONAL PROVISION FOR UNMARRIED MOTHERS AND CHILDREN. Arrangements exist whereby the unmarried mother is admitted to Forest Gate Hospital for her confinement, and she is allowed to remain there for twelve months to nurse her child. After this the mother is admitted to the Central Home and the child to the Aldersbrook Children's Home. In addition, practically all the facilities provided under the maternity and child welfare scheme are available equally for married and unmarried mothers, and the many social services in Greater London for the care of the unmarried mother and her child are utilised frequently by patients from this borough.

Local Government Act, 1929. The Council has not yet availed itself fully of the powers which were conferred upon it by the Local Government Act, 1929. In 1931 Whipps Cross Hospital, Forest Gate Hospital, and the Central Home were transferred from the West Ham Board of Guardians, and the two hospitals and the hospital section of the Central Home were placed under the administrative supervision of the Medical Officer of Health. These institutions still remain under the control of the Public Assistance Committee, and although considerable development has taken place in the quality of the treatment, the mechanism of admission to these hospitals is still essentially that of the Poor Law.

Public Assistance domiciliary medical service. In 1930 the Medical Officer of Health was made responsible for the work of the district medical officers, two of whom are whole-time and five part-time officers. The names and surgery addresses of these officers are given below.

District Medical Officer.	Situation of Surgery.
*Dr. T. L. Dolan ..	North West Ham Relief Station, 82 West Ham Lane, Stratford, E.15.
*Dr. J. P. Robinson ..	South West Ham Relief Station, Cumberland Road, Plaistow, E.13.
Dr. P. G. S. Kennedy	113 Balaam Street, Plaistow, E.13.
Dr. J. F. Begley ..	184 Barking Road, Canning Town, E.16.
Dr. R. V. Brews ..	10 High Street, North Woolwich, E.16.
Dr. J. J. McSharry ..	24 Freemasons Road, Custom House, E.16.
Dr. M. J. Murphy ..	60 Leytonstone Road, Stratford, E.15.

Those officers whose names are preceded by an asterisk are whole-time. In the Appendix a full list of the districts of these medical officers is given.

The work of the district medical officers during the year 1937 is shown in Table VIII

TABLE VIII.

WORK OF THE DISTRICT MEDICAL OFFICERS.

Number of:	Men	Women	Children
New cases seen	1,216	2,939	2,851
Total number of cases seen ..	5,337	16,402	6,835
No. referred by Relief Sub-Committee	497	390	312
Attendances at surgery	5,351	15,185	5,436
Sent to institutions:			
Voluntary hospitals	9	15	7
Whipps Cross Hospital ..	112	163	105
Mental hospitals	1	3	—
Otherwise	2	—	3
Central Home	67	92	20
Forest House	—	2	—
Forest Gate Hospital ..	—	5	—
Aldersbrook Homes	—	—	—
Plaistow Hospital	1	2	86
Discharged as no longer in need of treatment	668	1,318	1,504
New cases seen at domiciliary visit	399	1,141	1,159
Fresh cases transferred from:			
(a) institutions	4	5	5
(b) general practitioners ..	1	3	1
Total number of domiciliary visits paid	1,538	5,714	2,656
Visits paid by district nurses	183	5,015	1,930
Deaths	20	61	7
Total number on register as receiving treatment from D.M. Officers on 1/1/38	234	1,009	371

The number of prescriptions made up during the year was 40,435 (7,353 for men, 26,162 for women, 6,920 for children).

MORTUARY ACCOMMODATION. There are two mortuaries in the borough—at Stratford and in Canning Town respectively.

Particulars of the bodies received into the mortuaries are given in Table IX.

Table IX.

Bodies received into mortuaries: 1937.

Month.	Stratford Mortuary.												Canning Town Mortuary.									
	Number received.			Sex.		Age.		Admitted.			Number of post-mortems.	Number of inquests.	Total received.	Sex.		Age.		Admitted.			Number of post-mortems.	Number of inquests.
	Remaining in Queen Mary's Hospital.	Received to mortuary.	Total	Male.	Female.	Under 5.	Over 5.	By Coroner.	By Police.	On sanitary grounds.				Male.	Female.	Under 5.	Over 5.	By Coroner.	By Police.	On sanitary grounds.		
January	1	19	20	13	7	3	17	16	4	—	15	6	1	1	—	—	1	1	—	—	1	—
February	1	15	16	13	3	2	14	15	1	—	11	5	2	2	—	—	2	1	1	—	1	1
March	4	23	27	12	15	3	24	25	2	—	23	6	—	—	—	—	—	—	—	—	—	—
April	—	6	6	3	3	—	6	5	1	—	5	1	1	1	—	—	1	—	1	—	—	1
May	5	23	28	15	13	6	22	24	4	—	21	12	2	2	—	—	2	1	1	—	2	1
June	—	14	14	11	3	3	11	12	2	—	11	7	3	3	—	—	3	—	1	2	1	1
July	3	7	10	7	3	1	9	6	4	—	4	7	1	—	1	—	1	—	—	1	—	—
August	2	12	14	8	6	1	13	10	4	—	11	5	5	3	2	—	5	1	—	4	1	—
September ...	3	10	13	8	5	1	12	8	5	—	7	6	—	—	—	—	—	—	—	—	—	—
October	1	15	16	12	4	2	14	7	9	—	10	10	—	—	—	—	—	—	—	—	—	—
November	1	20	21	15	6	4	17	14	7	—	17	6	2	1	1	—	2	1	—	1	1	—
December	2	17	19	10	9	3	16	14	5	—	16	4	2	—	2	1	1	1	—	1	1	—
Total	23	181	204	127	77	29	175	156	48	—	151	75	19	13	6	1	18	6	4	9	8	4

Supply of Insulin. The Council in December, 1935, made provisions for the supply of insulin, free of charge, to persons who, owing to lack of means, were unable to obtain this facility otherwise. The economic circumstances of each family are investigated before assistance is given.

No applications were received for assistance during the year under review, but there were, at the end of 1937, five persons receiving help under this scheme. The ages of these persons were 58, 55, 15, 12 and 10 years respectively. The total cost to the Corporation for the supply of insulin varied from 10s. 8d. to £11 10s. 7d. per patient. The total cost for the five patients was £21 17s. 6d.

Vaccination Acts. The following is a summary of the work carried out during the year 1937:

Number of cases in birth lists received during 1937	5,300
Number of certificates of vaccination received ..	1,215
Number of certificates of postponement owing to:—	
Health of child	335
Condition of house	—
Prevalence of infectious disease	—
Number of certificates under section 2 of the Vaccination Act, 1898, and number of statutory declarations under section 1 of the Vaccination Act, 1907	3,021
Number of certificates of insusceptibility or of having had smallpox	9
Number of cases:—	
Parents removed out of district	841
Otherwise not found	283
Number of entries in lists sent to public vaccinators ..	1,396

Shops Acts, 1912-1936. There are now in force seven Acts of Parliament and four sets of Regulations relating to shops and employment in shops, together with various Closing Orders and Half-holiday Orders made under the principle Act of 1912. Three of these seven Acts came into force during the year 1937:—

The Shops Act, 1936, which provides for the application of the Acts of 1912 to 1934 to premises and places where the business of lending books or periodicals is carried on for the purpose of gain; The Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, which provides, with certain exceptions, for the compulsory closing of retail meat dealers' shops and stalls on Sunday; and the Shops (Sunday Trading Restriction) Act, 1936, which restricts the opening of shops and trading on Sunday. The Shops Act, 1936, and the Retail Meat Dealers' Shops (Sunday Closing) Act, 1936, came into operation on the 1st January, 1937, the Shops (Sunday Trading Restriction) Act, 1936, came into operation on the 1st May, 1937.

The total number of visits made by the shops inspectors during the year was 8,049, and 1,814 infringements were detected. The majority of these were minor irregularities in respect of which 1,497 verbal cautions were given. In cases of a more persistent nature, 254 written warnings were issued, and in 50 cases it was found necessary to institute legal proceedings.

The general provisions of the Shops Acts are dealt with by two shops inspectors appointed for this work, and the sanitary inspectors administer those matters for which the sanitary authority are responsible, namely ventilation, temperature, and the provision and maintenance of suitable and sufficient sanitary accommodation. Further particulars of this work are given elsewhere.

An analysis of visits paid to shops by the shops inspectors during 1937 is shown in Table X.

Swimming bath water. Report by Mr. J. D. Sutton, Superintendent Engineer of the Municipal Baths.

Filter plants are now operating in each bathing establishment which contains a swimming pool. The first plant was installed at the Balaam Street baths and consists of four 8 feet filters with pumps in duplicate. In this system the water is aerated before and after filtration; the first operation is effected by gravity, the second by the venturi tube. Sterilisation is by chlorine injected into the water stream, just before its re-entry into the pool. The filters are capable of dealing with 45,000 gallons per hour. The plant at Silvertown baths is housed in the basement, there being no other available space.

Table X.

Principle Trade.	No. of visits.	Infringements.										Refused to Serve.	Action Taken.		
		Notices not displayed.						Open after hours.			Y.P's. working after Hours		Warnings.		Summonses.
		H-H	K.	E or F	H or J	Sunday Act, 1936 Form 1	Sunday Act, 1936 Form 7	Weekly H-H	Evening Closing	Sunday Closing			Verbal	Letter	
Bakers	351	36	8	18	20	—	4	26	12	6	5	34	116	14	3
Boots and shoes ...	190	18	4	8	9	—	—	5	19	—	9	15	66	6	—
Builders' merchants ...	85	8	—	1	3	—	—	—	5	4	—	5	18	2	1
Butchers	452	51	5	19	23	—	—	33	52	7	14	46	192	10	2
Caterers	225	8	3	7	9	—	—	—	—	—	—	—	24	3	—
Carpets, rugs and linos	68	2	—	2	6	—	—	—	2	—	—	4	12	—	—
Chemists and druggists	193	6	1	3	4	—	—	—	2	—	—	5	14	2	—
China and glass ...	78	1	—	5	6	—	—	—	2	—	—	6	14	—	—
Cinemas	66	3	—	2	2	—	—	—	—	—	—	—	7	—	—
Clothiers	188	12	3	11	11	—	—	5	16	—	7	8	63	2	—
Confectionery and tobacco	878	12	5	19	20	—	19	—	75	—	13	114	126	28	9
Corn merchants ...	96	2	5	5	6	—	—	2	4	—	—	5	21	3	—
Cycle dealers	139	3	—	4	7	1	—	—	2	1	2	5	16	4	—
Domestic stores ...	146	2	2	2	3	—	—	3	4	5	2	10	19	1	3
Drapers, milleners and mantle dealers ...	628	17	4	20	19	—	—	7	35	15	5	40	91	31	—
Fishmongers	214	4	3	5	8	—	—	—	10	—	2	7	29	3	—
Florists...	103	2	4	3	3	—	—	—	4	—	—	6	16	—	—
Fruit and greengrocery	541	2	2	10	13	11	2	—	65	—	5	87	85	23	2
Furniture	155	2	—	6	4	—	—	3	16	1	2	4	32	2	—
Grocers and general ...	849	13	9	24	23	33	7	40	65	3	5	109	118	61	24

TABLE X. (CONTD.)

Principle Trade.	No. of visits.	Infringements.										Refused to Serve.	Action Taken.		
		Notices not displayed						Open after hours.			Y.P's. working after Hours		Warnings.		Summonses.
						Sunday Act, 1936									
		H-H	K.	E or F	H or J	Form 1	Form 7	Weekly H-H	Evening Closing	Sunday Closing			Verbal	Letter	
Hairdressers and barbers	366	6	4	16	12	—	—	7	16	—	2	6	52	11	—
Hosiers and hatters ...	108	—	2	1	1	—	—	4	5	—	1	7	10	1	3
Ironmongers	67	—	—	1	—	—	—	—	2	—	—	2	3	—	—
Leather and harness	67	—	—	—	—	—	—	3	2	—	—	3	5	—	—
Libraries	62	2	2	—	—	—	—	4	16	1	—	10	14	10	—
Live stock	33	—	—	—	—	—	—	—	—	—	—	1	—	—	—
Mixed	629	11	3	20	19	10	8	7	63	13	6	61	140	19	1
Newsagents and stationers	149	3	2	9	8	12	4	9	8	5	—	21	65	5	—
Opticians	45	—	—	1	1	—	—	—	—	—	—	—	2	—	—
Photos and pictures ...	57	—	—	1	1	—	—	—	2	—	—	—	4	—	—
Public houses	174	7	3	—	—	—	—	—	—	—	—	—	8	2	—
Tailors	160	5	—	3	3	—	—	6	12	—	2	9	28	3	—
Toys and fancy goods	137	2	3	2	3	—	—	3	16	1	1	5	28	2	1
Undertakers and masons	19	1	—	—	—	—	—	—	—	—	—	—	1	—	—
Watches, jewellers and pawn brokers ...	123	—	—	—	—	—	—	2	4	—	—	5	6	—	—
Wireless and music ...	208	13	1	8	8	—	—	13	13	1	2	15	52	6	1
Totals	8,049	254	78	236	255	67	44	183	549	63	85	655	1,497	254	50

H-H (Half-Holiday) K (Seats for females) E or F (Hours worked by Young Persons) H or J (Abstract of Act 1934)

For results of Police Court Proceedings see Section VIII. (Sanitary Circumstances).

These filters are rectangular in shape, and possess the disadvantage of having square corners where it has been generally supposed the filtering media can lie undisturbed and thus become foul. However, after three years' continuous use the whole of the filtering media was removed from the beds, and it was found to be perfectly clean and free from staleness. This is a proof of the efficiency of the modern method of filter washing.

This plant is capable of treating 27,000 gallons of water per hour, which has proved sufficient to maintain the water in the pool in a satisfactory condition. The sterilisation plant in this particular case has failed and is beyond repair, so Chloros and Voxsan are added periodically to the water to maintain a free chlorine content of .3 to .5 parts per million.

Four filters have been installed at the Romford Road establishment, and for the general work are so arranged that the water from the major pool is treated in two filters, while the water from the minor and model pools passes through the remaining two filters. Both sets are operated by separate pumps and a stand-by set is available for either service. Chlorine and ammonia are available, forming the chloramine treatment for sterilisation. Two pumps operate this service; each is capable of delivering 60,000 gallons per hour. Pipe lines and valves are so arranged that the whole of the plant can be connected to any single pool. Daily tests are taken of the water in each pool, and an endeavour is made to have .3 to .5 parts per million free chlorine available with a pH value of 7.

Samples of water have been taken for bacteriological examination. They were found to be satisfactory. For this purpose water was taken from the pool during ordinary bathing periods.

Having in mind the value of a high chlorine content in bath water and also of the irritating effect which this has upon bathers, I have for years made a rule of maintaining a free chlorine content in the bath water at the figure previously given, but in addition to that I have added lime direct to the bath on every Sunday morning immediately the pools have been closed to the public. Sufficient lime had been added to bring the free chlorine content up to well over one part per mlilion. Early on Monday morning the pumps start to circulate the water, and by the time the public are admitted the excess chlorine has gone. By this method I am convinced that the water in the pool is rendered safe and free from harmful bacteria.

LEGISLATION IN FORCE. During the year the following general acts came into force: The Public Health Act, 1936; the Housing Act, 1936; the West Ham Corporation Act, 1937; Shops (Sunday Trading Restriction) Act, 1936; Shops Act, 1936; Retail Meat Dealers Shops (Sunday Closing) Act, 1936. The West Ham Corporation Act was an important measure which became operative on 9th November, 1937.

A list of the local acts and regulations which are in force is contained in the Appendix.

CREMATION. There is no crematorium in the borough, the nearest being at the City of London Cemetery, Manor Park. It has not so far been possible to obtain particulars of the number of West Ham residents cremated at this and other crematoria.

DISINFECTION. The Council's disinfection station is situated at the Isolation Hospital, Plaistow. The plant consists of two large steam disinfectors, three motor vans, and the staff consists of five men. The plant deals not only with hospital articles which require disinfection, but also with infected articles belonging to the general public and to Harold Wood Hospital.

During the year 1937 the total number of articles disinfected was 42,583. Of these, 22,943 were articles belonging to the hospital. Table XI. sets out the type of article disinfected for members of the general public.

TABLE XI.

DISINFECTION OF BEDDING AND CLOTHING, 1937.

Type of article.	Number of articles disinfected.
Beds and mattresses ..	3,606
Pillows and bolsters ..	6,659
Blankets	3,461
Sheets	1,234
Quilts	1,917
Clothing and other articles	2,763
Total	19,640

The number of miles covered by the disinfecting vans during the year was 25,224; this gives an average of 23.3 miles per day for each van.

Disinfection of premises and rooms is also carried out by the Public Health Department. There are four disinfectors whose main duty is to disinfect premises and rooms after the removal to hospital, or death, of a patient suffering from an infectious disease, or by request of relatives in the case of non-infectious disease. During the year 1937 the number of premises disinfected was 2,072, and the number of rooms was 2,596. Further details of this work are given in Table XII.

TABLE XII.

DISINFECTION OF PREMISES AND ROOMS: 1937.

	West Ham (North)		West Ham (South)		Whole borough	
	Number of premises.	Number of rooms.	Number of premises.	Number of rooms.	Number of premises.	Number of rooms.
Scarlet fever	420	475	624	691	1,044	1,166
Diphtheria	193	248	375	443	568	691
Tuberculosis	138	173	134	158	272	331
Vermin	43	79	15	28	58	107
Cancer	10	18	5	5	15	23
Cerebro-spinal fever	3	3	5	5	8	8
Acute polio-myelitis	6	6	5	5	11	11
Enteric fever	10	12	8	8	18	20
Erysipelas	4	5	2	2	6	7
Chicken-pox	1	1	1	1	2	2
Pneumonia	1	1	—	—	1	1
Scabies	—	—	16	26	16	26
Dysentery	—	—	1	1	1	1
Hospitals	7	34	13	56	20	90
Schools	5	25	6	56	11	81
Ambulance	—	—	1	1	1	1
Request	12	20	8	10	20	30
Total	853	1,000	1,219	1,496	2,072	2,596

Disinfestation. A few cases of infestation by beetles, crickets, and ants were brought to the notice of the inspectors who advised use of a preparation of equal parts of sodium fluoride and flour, or one of the proprietary insecticides. With regard to bug infestation, this is dealt with in two ways. In the case of newly let houses the responsibility of cleansing and freeing the premises from these pests is placed on the owner, who is required to remove all detachable woodwork, strip all walls, apply a blow-lamp to all surfaces, and spray with a suitable insecticide or wood naptha. Tenants are advised to wage constant rather than spasmodic warfare and to observe strict cleanliness. The use of soap and water and a suitable insecticide is usually found to be effective. Where the trouble is found to be caused by a dirty tenant a notice is served upon him requiring him to carry out the necessary cleansing. Hydrocyanic acid gas has not so far been sponsored by this authority.

Rats. Under the provision of the Rats and Mice (Dectruction) Act, 1919, the clearing of premises of rats and mice rests with the occupier as well as the owner. Every effort is made, however, by the department to assist occupiers in the attempt to exterminate these pests.

National Rat Week was observed during the week ended 6th November, 1937. During the week approximately two hundred large posters were obtained and placarded on the Council's various hoardings throughout the district. A supply of the Ministry of Agriculture's bulletin is constantly available, and is issued throughout the year. In addition to this all industrialists were supplied with a reprint, together with a letter from the Medical Officer of Health inviting their co-operation.

It should be noted that in West Ham rat infestation is not treated as a seasonal matter. During the year, of the 312 drainage systems which were placed under test, the majority were examined in an effort to trace the source of ingress of rats. In all cases where drains were found to be defective, action was taken and the necessary repairs or reconstruction enforced. From time to time occupiers are advised regarding rats and informed as to the best methods and baits to use.

Extension of local powers. The West Ham Corporation Act came into force on the 9th November, 1937. It contains several

clauses which are of importance in connection with the health of the community. These sections may be briefly summarised as follows:—

(a) Registration of the premises of hairdressers and barbers, with power to make bye-laws for the good conduct of these trades.

(b) Powers in connection with the cutting off and sealing of disused drains.

(c) Powers for the removal of aged, infirm, or physically incapacitated persons from insanitary premises.

(d) Registration of hawkers of meat, fish, fruit, vegetables, and of the premises used for their storage, with power to refuse or revoke.

(e) Registration of premises used for the manufacture of preserved meat, fish, and similar conditions, with power to refuse or revoke.

(f) Prohibition of sale of articles to children at school premises.

(g) Fencing of vacant land in certain circumstances.

(h) Power to search vehicles conveying meat and other articles of food, with power of inspection and seizure of meat in transit.

These clauses are being gradually enforced and are already having good effect.

II. VITAL STATISTICS.

VITAL STATISTICS.

In this section, and in the following section which deals with infectious diseases, I have endeavoured to give accurate data extending over a period of years, in most cases to 1876. I have undertaken this rather formidable task because of the extreme scarcity of sources of information for the years previous to 1896. It seemed advisable to place the data on record before the sources disappeared entirely as a result of the passing of time. For some of the earlier years—1887 to 1890—it has been necessary to reconstruct certain data from monthly sources, and for that reason some of these figures may have to be altered slightly in the future. As the data are given for quinquennial periods the corresponding rates should not be materially affected.

It is very essential that the figures given in a report dealing with a certain administrative area should be identical with the corresponding figures given by the Registrar-General. This desideratum is not always easy to fulfil. The Registrar-General did not publish statistics for administrative areas until the year 1911, so that the data for previous years given in this report are of local origin. It should be said that, apart from inaccuracies which were common to all vital statistics at these early periods, including those published officially, there is no reason to doubt that the data given are substantially correct. In the following two sections—that is, vital statistics and infectious diseases—for the years 1911 onwards, all the data given for individual years are those published officially by the Registrar-General, and for that reason they may be found to differ slightly from the figures given in previous annual reports. For the main statistics of births and deaths it has been found convenient to print the data in two tables, one giving the local figures to 1910, and the other the official figures after that date.

A further note should be made regarding the sources for the years previous to 1911. The local figures which were published annually from the year 1876 to the year 1885 were very meagre,

but there was a sudden extension of the scope of the data in 1886 and the years immediately following. This was the period during which the embryo of local statistics was developing those anatomical features which would later distinguish it as a member of a species, capable of adaptation without alteration of its fundamental character. Many of the detailed original records have fortunately been preserved, and missing data have been completed from these sources as far as the available time permitted. To the best of my knowledge no figures were ever published for the war years, and the tables included in this report probably incorporate the first official record of these figures.

It is advisable that separate rates for each period should be given for males and females separately, and for the purpose of calculating these rates, I have—by a method briefly referred to later—divided the estimated population for each year into males and females respectively. It is logical to have some standard wherewith to compare local figures, and for this purpose possibly the best standard is the corresponding rates for England and Wales. Unfortunately the vital statistics by sexes for the country as a whole for quinquennial periods have practically never been published officially. For the sake of completeness I have thought it worth while to calculate all these quinquennial rates for England and Wales for males, females and persons respectively. It should therefore be mentioned that these figures are not taken directly from any official source, and that I am responsible for any errors which may have crept into the calculations.*

As all the rates given in these tables are crude rates, they cannot be used to give a complete expression of the changing incidence of deaths from a particular disease throughout the years. This is due to the altering age constitution of the population, local or national. The process of standardization of the rates is beyond the scope of this report. Corresponding rates for the same periods can, however, be used to indicate the relative mortality from the particular disease locally and for the country as a whole *for that period*.

The data which I have given here will be examined in more detail in later reports, in which I hope to fill some of the gaps in the present tables.

*Each quinquennial rate for England and Wales was computed from the summed deaths (or cases) and populations for the five years in the period. The rates are in all cases given correct to the third decimal place, so that accurate rates per million can be obtained by shifting the decimal point.

POPULATION.

The population of West Ham as enumerated at the 1931 census was 294,278 persons, of whom 143,714 were males and 150,564 females. The Registrar-General's estimate of the resident population at the middle of the year was 259,500.

The census population of the area of the present county borough is given in Table I. for each of the census years since 1801. The table, which also gives the intercensal changes of the population, will be referred to later. The marks of interrogation which appear in connection with the figures for the first four decennial census enumerations are reprinted direct from the Registrar-General's official census reports for these years. They probably indicate some difficulty in allocating the residence of certain persons to the area which now constitutes the county borough.

The estimated mid-year population of the area for each year since 1876 is given in Table II(a). The populations for the year 1911 and later years are those which are printed officially in the annual reports of the Registrar-General. For the years before 1911—that is, before the populations for administrative areas were given in official reports—the figures are obtained from local sources, although it is probable that most of these estimates were approved by the Registrar-General. As there is for certain diseases an appreciable difference in the mortality of males and females respectively, I have included in this table my estimate of the numbers of males and females respectively in the population at each of these years. These estimates have been made from the population for each year by the application of the mean of two factors derived respectively from the sex distribution of the population in the two adjacent census years. These sex estimates of the population at each year will be used in future for the calculation of rates by sexes.

With the exception of the years 1916—1919 inclusive, the populations shown in Table II(a) have been used in the calculation of the rates in the tables in this and the following section. In the calculation of death rates from all causes and from individual causes of death for the years 1916—1919 inclusive, special adjusted populations given by the Registrar-General were used. These populations, together with my estimate of their distribution by sexes, are shown in Table II(b).

Table I.

Census populations and intercensal changes.

Census year	Area of West Ham County Borough					England and Wales	
	Census population			Intercensal increase (+) or decrease (−) (persons)		Census population (persons)	Intercensal increase (+) per cent. (adjusted)
	Males	Females	Persons	Actual	Per cent.		
1801	? 2,941	? 3,544	? 6,485	—	—	8,892,536	—
1811	? 3,703	? 4,433	? 8,136	+ 1,651	+ 25.46	10,164,256	14.00
1821	? 4,472	? 5,281	? 9,753	+ 1,617	+ 19.87	12,000,236	18.06
1831	? 5,436	? 6,144	? 11,580	+ 1,833	+ 18.79	13,896,797	15.80
1841	6,087	6,651	12,738	+ 1,158	+ 10.00	15,914,148	14.27
1851	9,253	9,564	18,817	+ 6,079	+ 47.72	17,927,609	12.65
1861	19,404	18,927	38,331	+ 19,514	+ 103.70	20,066,224	11.90
1871	31,384	31,535	62,919	+ 24,588	+ 64.15	22,712,266	13.21
1881	65,410	63,543	128,953	+ 66,034	+ 104.95	25,974,439	14.36
1891	102,341	102,562	204,903	+ 75,950	+ 58.90	29,002,525	11.65
1901	133,498	133,860	267,358	+ 62,455	+ 30.48	32,527,843	12.17
1911	142,738	146,292	289,030	+ 21,672	+ 8.11	36,070,492	10.89
1921	146,201	154,659	300,860	+ 11,830	+ 4.09	37,886,699	4.93
1931	143,714	150,564	294,278	− 6,582	− 2.19	39,952,377	5.52

Table II(a). West Ham.

Estimated mid-year populations.

Year	Males	Females	Persons	Year	Males	Females	Persons
1876	53,961	55,298	109,259	1911	141,875	147,726	289,601
1877	55,583	56,958	112,541	1912	143,001	148,899	291,900
1878	56,868	58,276	115,144	1913	144,139	150,084	294,223
1879	59,636	61,111	120,747	1914	144,263	150,213	294,476
1880	61,415	62,935	124,350	1915	144,224	150,172	294,396
1881	64,303	64,650	128,953	1916*	153,492	159,823	313,315
1882	67,769	68,779	136,548	1917*	148,503	154,627	303,130
1883	71,538	72,605	144,143	1918*	144,286	150,237	294,523
1884	75,307	76,430	151,737	1919*	146,957	153,018	299,975
1885	79,077	80,257	159,334	1920	148,145	154,255	302,400
1886	82,850	84,086	166,936	1921	149,185	157,815	307,000
1887	86,616	87,907	174,523	1922	151,115	159,085	310,200
1888	90,385	91,733	182,118	1923	153,161	161,239	314,400
1889	94,154	95,559	189,713	1924	154,622	162,778	317,400
1890	97,924	99,384	197,308	1925	155,158	163,342	318,500
1891	101,982	104,481	206,463	1926	153,891	162,009	315,900
1892	105,636	107,067	212,703	1927	153,648	161,752	315,400
1893	108,735	110,208	218,943	1928	149,507	157,393	306,900
1894	111,834	113,349	225,183	1929	149,848	157,752	307,600
1895	114,933	116,490	231,423	1930	146,779	154,521	301,300
1896	118,032	119,631	237,663	1931	144,897	151,803	296,700
1897	121,131	122,773	243,904	1932	141,283	148,017	289,300
1898	124,231	125,914	250,145	1933	138,157	144,743	282,900
1899	127,330	129,056	256,386	1934	134,861	141,289	276,150
1900	130,430	132,197	262,627	1935	132,199	138,501	270,700
1901	133,516	135,352	268,868	1936	129,806	135,994	265,800
1902	134,116	135,960	270,076	1937	126,730	132,770	259,500
1903	135,196	137,054	272,250				
1904	136,276	138,148	274,424				
1905	137,355	139,243	276,598				
1906	138,435	140,337	278,772				
1907	139,514	141,432	280,946				
1908	140,594	142,527	283,121				
1909	141,674	143,622	285,296				
1910	142,754	144,717	287,471				

* For special populations for death rates see Table IIb.

Table II(b).

Adjusted populations for death rates: 1916—1919.

Year	Males	Females	Persons
1916	141,075	146,894	287,969
1917	133,220	138,714	271,934
1918	128,774	134,084	262,858
1919	141,074	146,892	287,966

Ward population. The enumerated population, classified by sex, in each of the sixteen wards at the 1931 census, together with my estimate of the number of persons in each ward at the middle of 1937, and the actual number of persons at the 1931 census are set out in Table III.

TABLE III.

WEST HAM. WARD POPULATION—1931 CENSUS AND MID-1937.*

Municipal Ward	Acres	Census population				Estimated ward population 1937
		1921 Persons	1931			
			Males	Females	Persons	
Beckton Road ...	146	19,916	10,016	9,676	19,692	17,474
Bemersyde ...	149	14,681	6,555	6,931	13,486	11,487
Broadway ...	171	15,257	7,024	7,481	14,505	12,489
Canning Town and Grange ...	495	23,960	13,347	13,583	26,930	24,514
Custom House and Silvertown	901	21,367	10,416	10,096	20,512	18,176
Forest Gate ...	258	19,445	8,641	10,056	18,697	16,520
High Street ...	529	18,141	8,910	8,662	17,572	15,420
Hudsons ...	319	20,195	9,958	10,493	20,451	18,174
New Town ...	402	18,584	8,509	8,991	17,500	15,348
Ordnance ...	109	19,995	9,509	9,784	19,293	16,970
Park	285	15,537	7,207	8,365	15,572	13,527
Plaistow	205	21,232	9,645	10,222	19,867	17,607
Plashet Road ...	151	15,713	6,963	7,649	14,612	12,585
Tidal Basin ...	181	21,679	11,463	11,221	22,684	20,481
Upton	241	17,660	7,661	9,197	16,858	14,740
West Ham ...	147	17,498	7,890	8,157	16,047	13,988
Whole borough ...	4,689	300,860	143,714	150,564	294,278	259,500

* Reprinted in part from Census of England and Wales 1931 by permission of the Controller, H.M. Stationery Office.

Table IV.

West Ham. Population at ages, grouped by sex and marital condition. 1931 Census.

Age last birthday (years)	Persons	Males					Females				
		Total	Single	Married	Widowed	Divorced	Total	Single	Married	Widowed	Divorced
0– 4	24,892	12,624	12,624	—	—	—	12,268	12,268	—	—	—
5– 9	28,827	14,617	14,617	—	—	—	14,210	14,210	—	—	—
10–14	27,555	13,918	13,918	—	—	—	13,637	13,637	—	—	—
15–19	29,925	14,962	14,926	35	—	1	14,963	14,708	253	2	—
20–24	28,822	14,337	12,308	2,011	18	—	14,485	10,722	3,747	16	—
25–29	24,982	12,415	5,747	6,609	50	9	12,567	4,820	7,665	73	9
30–34	21,279	10,073	1,950	8,008	103	12	11,206	2,328	8,630	228	20
35–39	18,396	8,537	1,040	7,345	132	20	9,859	1,537	7,870	424	28
40–44	17,306	8,101	775	7,126	187	13	9,205	1,166	7,303	712	24
45–49	16,814	7,940	755	6,883	294	8	8,874	906	6,972	977	19
50–54	15,316	7,313	651	6,203	441	18	8,003	730	6,038	1,224	11
55–59	13,213	6,541	512	5,451	569	9	6,672	568	4,674	1,421	9
60–64	10,424	5,092	367	3,998	720	7	5,332	393	3,236	1,698	5
65–69	7,337	3,435	205	2,441	787	2	3,902	278	1,893	1,728	3
70–74	4,844	2,151	102	1,341	703	5	2,693	200	903	1,589	1
75–79	2,782	1,133	51	575	506	1	1,649	123	374	1,152	—
80–84	1,141	408	12	169	227	—	733	49	83	600	1
85–89	333	97	5	32	60	—	236	20	10	206	—
90–94	80	19	—	5	14	—	61	9	2	50	—
95 and over	10	1	—	1	—	—	9	—	—	9	—
All ages	294,278	143,714	80,565	58,233	4,811	105	150,564	78,672	59,653	12,109	130

* See footnote to Table III.

Age, sex and marital condition. The only basis for any estimate of the number of persons in the population classified in this manner is the census figures. These figures, as enumerated at the 1931 census, are given in Tables IV. and V.

TABLE V.

WEST HAM. AGES (INDIVIDUAL YEARS) UNDER 21. 1931 CENSUS*

Age last birthday (years)	Males		Females	
	No.	Per cent. of males at all ages	No.	Per cent. of females at all ages
0	2,618	1.82	2,381	1.58
1	2,441	1.70	2,573	1.71
2	2,474	1.72	2,448	1.63
3	2,454	1.71	2,405	1.60
4	2,637	1.83	2,461	1.63
5	2,739	1.91	2,691	1.79
6	2,711	1.89	2,718	1.81
7	2,928	2.04	2,846	1.89
8	3,092	2.15	2,923	1.94
9	3,147	2.19	3,032	2.01
10	3,290	2.29	3,153	2.09
11	3,410	2.37	3,359	2.23
12	2,337	1.63	2,199	1.46
13	2,257	1.57	2,207	1.47
14	2,624	1.83	2,719	1.81
15	2,837	1.97	2,769	1.84
16	3,006	2.09	2,994	1.99
17	3,162	2.20	3,008	2.00
18	3,076	2.14	3,141	2.09
19	2,881	2.00	3,051	2.03
20	2,875	2.00	2,966	1.97
0-21	58,996	41.05	58,044	38.55

* Based on the figures in the Census of England and Wales, 1931. See footnote to Table III.

The average age of males in West Ham at the 1931 census was 29.3 years, and the average age of females was 30.5 years. The corresponding figures for the administrative County of Essex (including the associated county boroughs) were: males, 31.1 years; females, 32.7 years. The number of males per 1,000 females in West Ham was 1,048. The age distribution per 1,000 of each sex in West Ham and in the larger area, as given by the Registrar-General from the figures for the 1931 census, is set out in Table VI.

TABLE VI.

AGE DISTRIBUTION OF MALES AND FEMALES. 1931 CENSUS*

Area	Age distribution per 1,000 of each sex.							
	Males				Females			
	0-4	5-19	20-39	40-	0-4	5-19	20-39	40-
West Ham County Borough	88	303	315	294	81	284	320	315
Essex Administrative County (with associated county boroughs)	83	270	319	328	75	246	325	354

* See footnote to Table III.

Size of population. It will be seen from Tables I. and II. that the population of the area increased slowly but continuously from 1801 to 1831. Between 1831 and 1841 there was a decline in the rate of growth, but in the next decade began the period of very rapid expansion which lasted for over thirty years. The population still continued to increase rapidly, but the rate of growth showed a progressive decrease. The peak year of population growth was reached in 1925, when the estimated population was 318,500. Since that year there has been a steady decline in the resident population. The effect of migration in producing this decline will be briefly discussed in a later section. At present the population of the area is declining by about 6,000 persons per year.

MARRIAGES.

Owing to the fact that the registration areas are not coterminous with the area of the county borough, data regarding the number of marriages solemnised in the county borough area are not available until the year 1936. In that year the number of marriages which took place in the county borough area was 2,857, which gives a marriage rate of 21.5 per 1,000 of the population, as compared with a rate of 21.5 for the administrative county of London, and a rate of 17.4 for the whole of England and Wales. The marriage rate for West Ham for 1937 was 22.3 per 1,000 of the population.

BIRTHS.

The births registered during the year 1937 in West Ham numbered 5,305, of which 2,696 were of male children, and 2,609 of females. The inward and outward transfers are shown in Table VII. (supplied by the Registrar-General), and the actual births

TABLE VII.

BIRTH TRANSFERS, 1937.

	Live births registered (excluding re-registrations)	Inward transfers	Outward transfers	Live births allocated to borough (1937)
Total live births (legitimate and illegitimate):				
Males	2,696	205	761	2,140
Females	2,609	177	738	2,048
Total	5,305	382	1,499	4,188
Illegitimate live births:				
Males	82	10	31	61
Females	76	5	28	53
Total	158	15	59	114

allocated to the borough consisted of 2,140 males and 2,048 females, making a total of 4,188. Compared with 1936 this represents a decrease of 9 males and an increase of 14 females, or a total increase of 5 births.

The birth-rate for 1937 was 16.1 per 1,000 of the population, as compared with a rate of 15.7 for the previous year.

TABLE VIII.

WEST HAM. BIRTH-RATES IN WARDS, 1937.

Municipal Ward	Nett live births		Illegitimate births		Birth rate per 1,000 ward population	Increase (+) or decrease (−) compared with 1936 rate
	Male.	Female.	Male.	Female		
Beckton Road	136	128	5	4	15.1	− 1.1
Bemersyde ..	69	78	—	—	12.8	− 2.0
Broadway ..	96	81	2	1	14.2	+ 1.1
Canning Town and Grange	163	174	4	3	13.7	− 0.2
Custom House & Silvertown	146	136	3	4	15.5	− 1.6
Forest Gate	125	121	3	4	14.9	+ 1.0
High Street	117	129	3	3	16.0	+ 2.5
Hudsons ..	175	141	4	2	17.4	+ 3.0
New Town ..	139	117	3	2	16.7	+ 1.1
Ordnance ..	137	119	3	3	15.1	+ 0.5
Park	151	126	2	5	20.5	+ 0.5
Plaistow ..	152	169	—	3	18.2	+ 1.3
Plashet Road	137	129	2	3	21.1	+ 3.1
Tidal Basin	172	168	5	3	16.6	− 1.0
Upton	138	126	4	7	17.9	+ 1.7
West Ham ..	90	103	1	—	13.8	− 3.0
Unallocated	—	—	17	6	—	—
Whole borough	2,143	2,045	61	53	16.1	+ 0.4

The births in the different wards of the borough are given in Table VIII., together with the estimated birth-rate for each ward and certain particulars regarding illegitimacy. The estimated populations on which these rates are calculated are given in Table III. It will be seen from this table that, generally speaking, there were no marked variations in the birth-rates in the different wards. The lowest rate, 12.8, was in Bemersyde ward, this rate representing a decrease on the 1936 figure. The highest rate, 21.1, occurred in the Plashet Road ward; it represented the highest increase shown by any ward over the 1936 figures. The data in column 7 show that the wards which were most responsible for the increase in the total birth-rate in West Ham for 1937 over that for 1936 were Plashet Road, Hudsons, and High Street. These increases were counterbalanced by certain decreases, notably the marked fall in the birth-rate in West Ham ward.

Secular changes in the birth rate. The birth rate for each year since 1876 is set out in Tables IXa and IXb. (The figures given in Table IXb are those published for the area by the Registrar-General.) The birth rate for the country as a whole began to decrease in the year 1877, and since then the decline has been progressive. The situation is reflected in the experience of West Ham. The highest birth rate—43.3 per 1,000 of the population—occurred in the years 1882 and 1884. Since then the downward trend of the rates has continued, until it is now less than half what it was at the beginning of the century. Rates for quinquennial periods—given in Table X.—show clearly the extent of the decline. The lowest birth rate so far recorded for the area was 15.5 in 1935. The slight increase during the last two years is welcome, but not sufficiently large to be regarded with satisfaction. It may be that the increase is due to an increase in the number of marriages, but the data regarding marriages in the county borough area are meagre. On the other hand the increase in the birth rate must also be viewed in the light of the fact that the population is gradually growing "older," and that therefore, if fertility remained constant, a further decline in the birth rate would be expected. Data for further years will be required before any tentative conclusions can be reached.

Table IX(a).

West Ham. Births and birth rates (1876—1910).

Year	West Ham. Live births			Birth rate per 1,000 population		
	Males	Females	Total	West Ham	London	England and Wales
1876	—	—	3,894	35.6	35.9	36.3
1877	—	—	4,149	36.9	35.6	36.0
1878	—	—	4,491	39.0	35.5	35.6
1879	—	—	4,862	40.3	35.5	34.7
1880	—	—	5,164	41.5	35.3	34.2
1881	—	—	5,488	42.6	34.7	33.9
1882	—	—	5,907	43.3	34.2	33.8
1883	—	—	6,014	41.7	34.0	33.5
1884	—	—	6,563	43.3	33.7	33.6
1885	—	—	6,547	41.1	32.6	32.9
1886	—	—	7,075	42.4	32.4	32.8
1887	—	—	6,865	39.3	31.6	31.9
1888	—	—	6,867	37.7	30.7	31.2
1889	—	—	6,947	36.6	30.4	31.1
1890	—	—	7,063	35.8	30.7	30.2
1891	—	—	7,911	38.3	31.9	31.4
1892	—	—	8,013	37.7	30.9	30.4
1893	—	—	8,026	36.7	30.9	30.7
1894	—	—	8,089	35.9	30.2	29.6
1895	—	—	8,591	37.1	30.6	30.3
1896	—	—	8,519	35.8	30.2	29.6
1897	—	—	8,761	35.9	30.1	29.6
1898	—	—	8,750	35.0	29.5	29.3
1899	4,475	4,304	8,779	34.2	29.3	29.1
1900	4,566	4,319	8,885	33.8	29.2	28.7
1901	4,721	4,713	9,434	35.1	29.0	28.5
1902	4,970	4,583	9,553	35.4	28.5	28.5
1903	4,901	4,577	9,478	34.8	28.5	28.5
1904	4,735	4,541	9,276	33.8	27.9	28.0
1905	4,635	4,383	9,018	32.6	27.0	27.3
1906	4,699	4,494	9,193	33.0	26.8	27.2
1907	4,464	4,295	8,759	31.2	25.8	26.5
1908	4,651	4,563	9,214	32.5	25.3	26.7
1909	4,515	4,215	8,730	30.6	24.4	25.8
1910	4,428	4,218	8,646	30.1	25.7	25.1

Table IX(b).

West Ham. Births and birth rates (1911—1937).

Year	Legitimate		Illegitimate		Total live births	Birth rate per 1,000 population		
	Males	Females	Males	Females		West Ham	London	England & Wales
1911	4,274	4,212	120	109	8,715	30·1	24·7	24·4
1912	4,307	4,223	121	105	8,756	30·0	24·7	23·8
1913	4,522	4,278	122	118	9,040	30·7	24·5	23·9
1914	4,488	4,172	112	108	8,880	30·2	24·3	23·8
1915	4,218	3,952	98	112	8,380	28·5	22·6	22·0
1916	4,197	3,950	109	120	8,376	26·7	21·5	20·9
1917	3,234	3,173	114	107	6,628	21·9	17·9	17·8
1918	2,952	2,795	139	116	6,002	20·4	16·0	17·7
1919	3,568	3,262	130	118	7,078	23·6	18·2	18·5
1920	4,805	4,647	149	122	9,723	32·2	26·9	25·5
1921	4,094	3,903	116	129	8,242	26·8	22·1	22·4
1922	4,004	3,769	93	93	7,959	25·7	20·9	20·4
1923	3,898	3,680	120	105	7,803	24·8	20·1	19·7
1924	3,540	3,461	102	99	7,202	22·7	18·6	18·8
1925	3,505	3,343	94	75	7,017	22·0	17·9	18·3
1926	3,393	3,154	86	77	6,710	21·2	17·1	17·8
1927	2,993	2,840	75	83	5,991	19·0	16·1	16·7
1928	2,939	2,802	87	85	5,913	19·3	16·2	16·7
1929	2,820	2,773	74	99	5,766	18·7	15·8	16·3
1930	2,834	2,638	63	71	5,606	18·6	15·8	16·3
1931	2,631	2,512	64	59	5,266	17·7	15·0	15·8
1932	2,490	2,346	68	76	4,980	17·2	14·3	15·3
1933	2,178	2,111	65	52	4,406	15·6	13·2	14·4
1934	2,187	2,038	49	59	4,333	15·7	13.4	14·8
1935	2.045	2,043	51	61	4,200	15·5	13·3	14·7
1936	2,098	2,000	51	34	4,183	15·7	13·6	14·8
1937	2,079	1,995	61	53	4,188	16·1	13·3	14·9

TABLE X.

QUINQUENNIAL BIRTH RATES.

Period	Total live births			Rates per 1,000 living	
	Males	Females	Persons	West Ham	England and Wales
1876-1880	—	—	22,560	38.8	35.3
1881-1885	—	—	30,519	42.3	33.5
1886-1890	—	—	34,817	38.2	31.4
1891-1895	—	—	40,630	37.1	30.5
1896-1900	—	—	43,694	34.9	29.3
1901-1905	23,962	22,797	46,759	34.3	28.2
1906-1910	22,757	21,785	44,542	31.5	26.3
1911-1915	22,382	21,389	43,771	29.9	23.6
1916-1920	19,397	18,410	37,807	25.0	20.1
1921-1925	19,566	18,657	38,223	24.4	19.9
1926-1930	15,364	14,622	29,986	19.4	16.7
1931-1935	11,828	11,357	23,185	16.4	15.0

Birth rates in quarters. The quarterly birth rates for the last ten years are shown in Table XI. Examination of this table shows that for any individual year the lowest birth rate generally occurs in the fourth quarter—a feature which is not confined to West Ham. The gradual manner in which the birth rate is falling does not permit of any definite generalization, but there is some indication that the decline has perhaps been most marked in the first quarter of the year.

Illegitimate births. Of the 4,188 births registered, 114—61 males and 53 females—were illegitimate. This is equal to a percentage of 2.7 of the nett births registered, and to a rate of 0.44 per 1,000 of the population. Corresponding figures for previous years are given in Table XII., from which it will be seen that during the last fourteen years there has been no change in the proportion of registered births which are illegitimate. When compared with the figures for other areas, this proportion must be regarded as low.

Table XI.

Birth rates in quarters.

Year	I.	II.	III.	IV.	Whole year
1928	20.3	19.4	19.1	18.7	19.3
1929	20.2	18.8	20.0	16.7	18.7
1930	20.0	18.9	18.8	16.9	18.6
1931	17.6	19.0	17.7	16.3	17.7
1932	17.4	17.9	17.0	16.5	17.2
1933	16.9	16.8	15.2	13.5	15.6
1934	16.0	16.5	15.4	15.1	15.7
1935	15.3	15.3	15.9	15.8	15.5
1936	16.6	16.3	15.9	14.4	15.7
1937	16.0	18.0	16.5	14.3	16.1

Table XII.

Illegitimate births.

Year	Illegitimate births	Per cent. of nett births registered	Rate per 1,000 estimated population
1924	201	2.8	0.63
1925	169	2.4	0.53
1926	163	2.4	0.52
1927	158	2.6	0.50
1928	172	2.9	0.56
1929	173	3.0	0.56
1930	134	2.4	0.45
1931	123	2.3	0.41
1932	144	2.9	0.50
1933	117	2.7	0.41
1934	108	2.5	0.39
1935	112	2.7	0.41
1936	85	2.0	0.32
1937	114	2.7	0.44

In Table VIII. the illegitimate births are allocated by sex to the different wards of the borough. Owing to certain registration difficulties it has not been possible to allocate in this way all the births accepted by the Registrar-General as illegitimate, and those which have not been so allocated are shown.

Stillbirths. The number of stillbirths registered during the year 1937 was 223, of which 123 were males and 100 females. The inward and outward transfers are shown in Table XIII. (supplied by the Registrar-General), and the actual stillbirths allocated to the borough consisted of 80 males and 65 females, making a total of 145. Compared with 1936, this represents a decrease of one male and four female stillbirths.

TABLE XIII.

STILLBIRTH TRANSFERS, 1937.

	Still births registered.	Inward transfers.	Outward transfers.	Still births allocated to borough (1937)
Total stillbirths (legitimate and illegitimate):				
Males	123	7	50	80
Females	100	2	37	65
Total	223	9	87	145
Illegitimate stillbirths:				
Males	2	—	—	2
Females	5	—	1	4
Total	7	—	1	6

The stillbirth rate per total (live and still) births for 1937 was 33.5, as compared with a rate of 34.6 for the previous year. The rate for 1937 may also be expressed as 0.56 per 1,000 of the population at all ages. Of the 145 stillbirths allocated to the borough, 6—or 4.1 per cent.—were illegitimate. Further details regarding the notification and investigation of stillbirths are given in the section dealing with maternity and child welfare.

Comparative figures for the stillbirth rate over a series of years are given in Table XIV. From this table it will be seen that, during the ten years for which information regarding stillbirths is available for West Ham and the country generally, there has been no significant change in the proportion of stillbirths to total births. As the numbers concerned are relatively small, yearly fluctuations are to be expected. It should be noted, however, that there is a slight relative decrease in the number of stillbirths which are illegitimate. Rates or proportions for this feature are apt to be misleading, and they are therefore not given. If the figures do indicate a real decrease in illegitimate stillbirths, they may reflect the increased attention which has been given in recent years to the needs of the unmarried mother.

TABLE XIV. STILL BIRTHS.

Year	Legitimate		Illegitimate		Total still births	Rate per 1,000 population			Rate per 1,000 total births		
	Males	Females	Males	Females		West Ham	London	England and Wales	West Ham	London	England and Wales
1927	—	—	—	—	—	—	—	0.64*	—	—	38*
1928	97	77	6	7	187	0.61	0.54	0.70	31	32	40
1929	97	88	8	2	195	0.63	0.53	0.68	33	32	40
1930	107	71	8	4	190	0.63	0.56	0.69	33	34	41
1931	107	74	5	1	187	0.63	0.50	0.67	34	32	41
1932	82	63	1	3	149	0.52	0.46	0.66	29	31	41
1933	84	68	4	9	165	0.58	0.45	0.62	36	33	41
1934	78	57	4	1	140	0.51	0.44	0.62	31	31	40
1935	58	60	5	2	125	0.46	0.44	0.63	29	32	41
1936	79	69	2	—	150	0.56	0.45	0.61	35	32	40
1937	78	61	2	4	145	0.56	0.54	0.60	33	33	39

* Rates based on figures for half-year only.

Comparative birth rates. The average of the birth rates for the twenty great towns shown in Table XXXIX. is 15.2. The rate for West Ham is considerably above this figure. Six of the other nineteen towns had a rate higher than that of West Ham.

DEATHS FROM ALL CAUSES.

The gross number of deaths registered in the borough during the year 1937 was 1,745. The number of inward transfers —i.e. the deaths of West Ham residents registered elsewhere— was 1,551, and the number of outward transfers—i.e. deaths of non-residents registered in West Ham—was 189. The nett deaths allocated to the borough are therefore 3,107, which gives a crude death rate of 12.0 per 1,000 of the population. Of these 3,107 deaths, 1,629 were of males and 1,478 of females respectively. The death rates from all causes by sex are therefore 12.9 and 11.1 respectively per 1,000 of each sex living.

TABLE XV.

DEATHS AND INFANT MORTALITY IN WARDS.

Municipal ward.	Nett deaths		Death rate per 1,000 population (both sexes)	Deaths under one year		Infant mortality rate per 1,000 live births (both sexes
	Males	Females		Male	Female	
Beckton Road	111	103	12.25	10	9	72
Bemersyde ..	68	70	12.01	5	4	61
Broadway ..	94	75	13.53	4	3	40
Canning Town and Grange	148	100	10.12	20	9	86
Custom House & Silvertown	106	93	10.95	10	4	50
Forest Gate	106	120	13.68	7	6	53
High Street	91	76	10.83.	7	8	61
Hudsons ..	136	103	13.15	6	5	35
New Town ..	101	89	12.38	6	4	39
Ordnance ..	92	72	9.66	16	9	98
Park	88	101	13.97	9	5	51
Plaistow ..	105	109	12.15	11	13	75
Plashet Road	62	79	11.20	7	6	49
Tidal Basin	129	85	10.45	14	6	59
Upton	89	123	14.38	14	10	91
West Ham ..	103	80	13.08	6	6	62
Whole borough	1,629	1,478	11.97	152	107	62

Deaths in wards. The number of deaths and the death rates from all causes in the wards of the borough are given in Table XV. The table also shows the allocation of infant deaths by sex to the different wards. The ward with the highest general death rate was Upton (14.4), while the lowest rate was given by Ordnance ward (9.7). The difference between the highest and the lowest rates (4.7) was somewhat greater than the corresponding difference for the year 1936 (3.9).

Deaths in quarters. The quarterly death rates from all causes are shown in Table XVI. The annual death rate has not varied much in this period, but more variation is shown in the quarterly rates. In the last ten years the highest rate has always occurred in the first quarter and the lowest in the third; in certain years the rate for the first quarter has been double that for the third quarter of the same year.

TABLE XVI.

DEATH RATE IN QUARTERS.

Year.	I.	II.	III.	IV.	Whole year.
1928	13.4	10.4	9.2	10.6	10.9
1929	21.7	10.0	8.1	11.4	12.8
1930	13.2	10.3	9.0	11.0	10.8
1931	16.1	9.6	8.3	11.8	11.4
1932	15.4	10.4	9.1	11.0	11.5
1933	17.3	10.2	8.4	11.4	11.8
1934	16.2	11.3	8.5	10.8	11.7
1935	12.2	11.0	9.0	11.0	10.8
1936	14.3	10.5	9.6	12.2	11.6
1937	15.9	11.4	8.8	12.5	12.0

Deaths at ages. The actual number of deaths which took place at different periods of life are set out for each year since 1921 in Table XVII. In Table XVIII. the number of deaths in each age group is expressed as a percentage of the total number of deaths in that year. Consideration of this latter table brings out certain features which are perhaps seen here more clearly than in many other areas. The most interesting change is a decrease in the proportion of deaths which occur at the threshold of life,

Table XVII.

West Ham. Deaths in age groups.

Year	Age groups (years)									All ages
	0—	1—	2—	5—	15—	25—	45—	65—	75—	
1921	615	203	82	167	212	460	883	605	485	3,712
1922	641	385	283	165	164	478	865	604	539	4,124
1923	466	110	92	114	189	437	860	575	488	3,331
1924	564	224	198	120	174	404	882	554	532	3,652
1925	463	129	118	111	181	429	841	591	565	3,428
1926	418	134	108	109	169	408	880	609	570	3,405
1927	404	116	114	99	167	411	905	674	591	3,481
1928	380	113	128	129	164	397	806	620	603	3,340
1929	427	138	147	118	214	388	1000	765	729	3,926
1930	353	98	87	102	180	382	855	630	576	3,263
1931	330	70	55	80	157	374	937	722	659	3,384
1932	358	112	84	99	166	325	877	669	623	3,313
1933	284	60	84	105	170	378	903	659	694	3,337
1934	284	104	92	106	171	286	837	694	645	3,219
1935	191	46	51	68	136	318	776	658	670	2,914
1936	294	59	54	62	116	296	803	709	693	3,086
1937	259	39	47	58	129	273	823	736	743	3,107

say before the age of 15 years, and a marked increase in the proportion of deaths which take place in old age. Both changes reflect the results of improvements in public health measures and probably also the workings of other factors which are more difficult to assess. The child welfare movement has certainly done much to lessen the toll of child deaths, and the general advance of medical services has contributed largely to the postponement of death. From Table XVIII. it will be seen that in sixteen years the proportion of deaths which occurred below the age of one year was halved, but in the same period there was a substantial increase in

Table XVIII.

West Ham. Percentage of total deaths in age groups.

Year	Age groups (years)								
	0—	1—	2—	5—	15—	25—	45—	65—	75—
1921	16.57	5.47	2.21	4.50	5.71	12.39	23.79	16.30	13.07
1922	15.54	9.34	6.86	4.00	3.98	11.59	20.97	14.65	13.07
1923	13.99	3.30	2.76	3.42	5.67	13.12	25.82	17.26	14.65
1924	15.44	6.13	5.42	3.29	4.76	11.06	24.15	15.17	14.57
1925	13.51	3.76	3.44	3.24	5.28	12.51	24.53	17.24	16.48
1926	12.28	3.94	3.17	3.20	4.96	11.98	25.84	17.89	16.74
1927	11.61	3.33	3.27	2.84	4.80	11.81	26.00	19.36	16.98
1928	11.38	3.38	3.83	3.86	4.91	11.89	24.13	18.56	18.05
1929	10.88	3.52	3.74	3.01	5.45	9.88	25.47	19.49	18.57
1930	10.82	3.00	2.67	3.13	5.52	11.71	26.20	19.31	17.65
1931	9.75	2.07	1.63	2.36	4.64	11.05	27.69	21.34	19.47
1932	10.81	3.38	2.54	2.99	5.01	9.81	26.47	20.19	18.80
1933	8.51	1.80	2.52	3.15	5.09	11.33	27.06	19.75	20.80
1934	8.82	3.23	2.86	3.29	5.31	8.88	26.00	21.56	20.04
1935	6.55	1.58	1.75	2.33	4.67	10.91	26.63	22.58	22.99
1936	9.53	1.91	1.75	2.01	3.76	9.59	26.02	22.97	22.46
1937	8.34	1.26	1.51	1.87	4.15	87.9	26.49	23.69	23.91

the proportion of deaths between the ages of 65 and 75 years, and that after the age of 75 years the proportion was nearly doubled. The table also reflects indirectly the fact that the population is gradually becoming older, and that relatively there are more persons who must succumb at the later ages.

Secular changes in the death rate. The death rates of both sexes for the years 1876—1910 are given in Table XIX(a), and in Table XIX(b) full details of deaths and death rates by sexes are set out for 1911 and subsequent years. The highest death rate in the records is that for 1885, viz. 22.0 per 1,000 living, and the

Table XIX(a).

Deaths and death rates from all causes.

Year	West Ham deaths			Crude death rate per 1,000 population						
				West Ham			London	England and Wales		
	Males	Females	Persons	Males	Females	Persons	Persons	Males	Females	Persons
1876	—	—	1,682	—	—	**15.4**	21.9	22.3	19.6	20.9
1877	—	—	1,817	—	—	**16.1**	21.5	21.7	18.9	20.3
1878	—	—	2,147	—	—	**18.6**	23.1	22.9	20.3	21.6
1879	—	—	2,113	—	—	**17.5**	22.6	22.0	19.6	20.7
1880	—	—	2,371	—	—	**19.1**	21.7	21.8	19.3	20.5
1881	—	—	2,409	—	—	**18.7**	21.2	20.0	17.8	18.9
1882	—	—	2,586	—	—	**18.9**	21.3	20.7	18.5	19.6
1883	—	—	2,693	—	—	**18.7**	20.5	20.8	18.5	19.6
1884	—	—	3,057	—	—	**20.1**	20.4	20.8	18.5	19.7
1885	—	—	3,503	—	—	**22.0**	19.7	20.3	18.2	19.2
1886	—	—	3,151	—	—	**18.9**	19.9	20.6	18.5	19.5
1887	—	—	3,286	—	—	**18.8**	19.5	20.2	18.1	19.1
1888	—	—	2,848	—	—	**15.6**	18.4	19.2	17.0	18.1
1889	—	—	2,883	—	—	**15.2**	17.5	19.3	17.2	18.2
1890	—	—	3,977	—	—	**20.2**	21.0	20.8	18.3	19.5
1891	—	—	3,952	—	—	**19.1**	21.1	21.5	19.0	20.2
1892	—	—	4,019	—	—	**18.9**	20.3	20.0	18.0	19.0
1893	—	—	4,565	—	—	**20.9**	20.8	20.3	18.1	19.2
1894	—	—	4,026	—	—	**17.9**	17.4	17.6	15.6	16.6
1895	—	—	4,656	—	—	**20.1**	19.5	19.7	17.7	18.7
1896	—	—	4,395	—	—	**18.5**	18.2	18.1	16.1	17.1
1897	—	—	4,486	—	—	**18.4**	17.8	18.6	16.2	17.4
1898	—	—	4,594	—	—	**18.4**	18.3	18.6	16.5	17.5
1899	—	—	5,213	—	—	**20.3**	19.4	19.4	17.2	18.2
1900	—	—	5,156	—	—	**19.6**	18.7	19.5	17.1	18.2
1901	2,571	2,339	4,910	19.3	17.3	**18.3**	17.2	18.1	15.8	16.9
1902	2,560	2,298	4,858	19.1	16.9	**18.0**	17.0	17.4	15.2	16.3
1903	2,387	2.007	4,394	17.7	14.6	**16.1**	15.2	16.5	14.4	15.5
1904	2,542	2,294	4,836	18.7	16.6	**17.6**	16.2	17.4	15.3	16.3
1905	2,392	2,182	4,574	17.4	15.7	**16.5**	15.1	16.3	14.4	15.3
1906	2,427	2,183	4,610	17.5	15.6	**16.5**	15.4	16.5	14.5	15.5
1907	2,286	2,126	4,412	16.4	15.0	**15.7**	14.7	16.0	14.2	15.1
1908	2,281	2,083	4,364	16.2	14.6	**15.4**	14.0	15.8	13.9	14.8
1909	2,285	2,150	4,435	16.1	15.0	**15.5**	14.2	15.5	13.8	14.6
1910	1,983	1,790	3,773	13.9	12.4	**13.1**	13.9	14.4	12.7	13.5

Table XIX(b).

Deaths from all causes (1911—1937).

Year	West Ham deaths			Crude death rate per 1,000 population						
				West Ham			London	England and Wales		
	Males	Females	Persons	Males	Females	Persons	Persons	Males	Females	Persons
1911	2,389	2,180	4,569	16.7	14.9	**15.8**	15.2	15.6	13.7	14.6
1912	2.244	1,952	4,196	15.6	13.2	**14.4**	13.8	14.2	12.6	13.4
1913	2,293	1,981	4,274	15.8	13.3	**14.5**	14.3	14.8	12.9	13.8
1914	2,343	2,090	4,433	16.2	14.0	**15.1**	14.6	14.9	13.1	14.0
1915	2,529	2,218	4,747	17.5	14.8	**16.1**	16.8	17.7	14.0	15.7
1916	2,299	1,939	4,238	16.3	13.2	**14.7**	14.7	16.7	12.5	14.3
1917	2,317	1,912	4,229	17.4	13.8	**15.6**	15.7	17.1	12.1	14.2
1918	2,762	2,705	5,467	21.4	20.2	**20.8**	19.2	20.1	15.2	17.3
1919	2,034	1,810	3,844	14.4	12.3	**13.3**	13.6	15.7	12.6	14.0
1920	2,093	1,795	3,888	14.1	11.6	**12.9**	12.8	13.5	11.5	12.4
1921	2,020	1,692	3,712	13.5	10.7	**12.1**	12.5	13.0	11.3	12.1
1922	2,155	1,969	4,124	14.3	12.4	**13.3**	13.5	13.6	12.0	12.8
1923	1,803	1,528	3,331	11.8	9.5	**10.6**	11.4	12.4	10.9	11.6
1924	1,913	1,739	3,652	12.4	10.7	**11.5**	12.2	13.0	11.5	12.2
1925	1,799	1,629	3,428	11.6	10.0	**10.8**	11.9	12.9	11.4	12.2
1926	1,796	1,609	3,405	11.7	9.9	**10.8**	11.6	12.4	10.9	11.6
1927	1,805	1,676	3,481	11.7	10.4	**11.0**	12.1	13.1	11.6	12.3
1928	1,797	1,543	3,340	12.0	9.8	**10.9**	12.1	12.5	10.9	11.7
1929	2,074	1,852	3,926	13.8	11.7	**12.8**	14.2	14.2	12.7	13.4
1930	1,745	1,518	3,263	11.9	9.8	**10.8**	11.6	12.3	10.7	11.4
1931	1,794	1,590	3,384	12.4	10.5	**11.4**	12.4	13.0	11.6	12.3
1932	1,772	1,541	3,313	12.5	10.4	**11.5**	12.3	12.7	11.4	12.0
1933	1,843	1,494	3,337	13.3	10.3	**11.8**	12.5	12.9	11.7	12.3
1934	1,710	1,509	3,219	12.7	10.7	**11.7**	12.2	12.5	11.1	11.8
1935	1,551	1,363	2,914	11.7	9.8	**10.8**	11.4	12.5	11.1	11.7
1936	1,664	1,422	3,086	12.8	10.5	**11.6**	12.3	12.9	11.4	12.1
1937	1,629	1,478	3,107	12.9	11.1	**12.0**	12.3	13.2	11.7	12.4

lowest rate—10.6—occurred in 1923. Since the war years there has been no marked fluctuation. It should be noted that the rate for 1918 was very little below the highest death rate recorded in the period of this investigation. This high rate was due to the influenza epidemic. The death rates for males have been consistently higher than the corresponding rates for females. These tables show that the death rates compare very favourably with those for London and for the country as a whole.

The downward movement of the death rate through the years is shown more clearly in Table XX., which gives the rates in quinquennial periods. In connection with this table and the tables giving the death rates for individual years, it should be noted that there is considerable doubt whether the true death rate at the early part of the period under review was really as low as the rates given here would seem to indicate. For example, it is probable that the low rate of 15.4 in 1876 was due to the fact that the system of transferring deaths to the place in which the patient was ordinarily resident had not then reached the necessary degree of efficiency.

Apart from the first quinquennial period shown in Table XX., it is seen that the general death rate for persons exhibits through the next twenty-five years a downward tendency. For the period 1881—1905 this trend was gradual. Then there was a slight but sudden drop, and the death rate was maintained at the new level until the early years after the war. Thereafter there was another marked fall, and from that date the general death rate has tended to become more or less established on its new low plane. The differential death rates for males and females respectively, so far as can be judged from the records at present at my disposal, exhibit corresponding tendencies. These features are also shown, though to a less marked extent, in the death rate of England and Wales as a whole.

Adjusted death rates. Since 1934 the Registrar-General has supplied to each authority an area comparability factor (A.C.F.) which compensates for local variations in the age constitution of the population. The use of this factor enables the local crude death rate from all causes to be compared directly with the adjusted death rates for other areas or with the crude rate for the country as a whole. For the year 1934 this factor was 1.15, and there has been no change in succeeding years. The adjusted death rates for the years 1934—37 inclusive are therefore 13.4, 12.4, 13.3, and 13.8 respectively. As judged on this basis the death rates for West Ham are not quite so favourable as those for the country as a whole.

Table XX.

Quinquennial death rates.

Period	No. of deaths (West Ham)			Crude death rate per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1877-1880	—	—	8,448	—	—	17.9	22.1	19.5	20.8
1881-1885	—	—	14,248	—	—	19.8	20.5	18.3	19.4
1886-1890	—	—	16,145	—	—	17.7	20.0	17.8	18.9
1891-1895	—	—	21,218	—	—	19.4	19.8	17.7	18.7
1896-1900	—	—	23,844	—	—	19.1	18.8	16.6	17.7
1901-1905	12,452	11,120	23,572	18.4	16.2	17.3	17.1	15.0	16.0
1906-1910	11,262	10,332	21,594	16.0	14.5	15.3	15.6	13.8	14.7
1911-1915	11,798	10,421	22.219	16.4	13.9	15.2	15.4	13.3	14.3
1916-1920	11,505	10,161	21,666	16.6	14.1	15.3	16.5	12.8	14.4
1921-1925	9,690	8,557	18,247	12.7	10.6	11.6	12.9	11.4	12.1
1926-1930	9,217	8,198	17,415	12.2	10.3	11.3	12.9	11.4	12.1
1931-1935	8,670	7,497	16,167	12.5	10.3	11.4	12.7	11.4	12.0

Causes of death. The causes of death at all ages and at different periods of life are given in Table XXI., as supplied by the Registrar-General. The chief causes of death in order of importance were as follows (the figures in brackets indicate the percentage of all deaths during the year):—Heart diseases, 787 (25.3); cancer or other malignant disease, 387 (12.5); pneumonia, 250 (8.0); tuberculosis of respiratory system, 203 (6.5); cerebral haemorrhage, 183 (5.9); bronchitis, 146 (4.7); arterial diseases, 118 (3.8).

The statistics of these diseases are discussed in greater detail later in this section.

TABLE XXI.

CAUSES OF DEATH AT AGES. 1937.

(As supplied by the Registrar-General)

Causes of death	Sex	All ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
1. Typhoid and para-typhoid fevers ...	M.	1	...	...	...	...	1	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...
2. Measles	M.	1	...	...	1	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...
3. Scarlet fever	M.	1	...	...	...	1	...	...	...	...	...	...	...
	F.	3	...	1	1	1	...	...	...	...	...	...	...
4. Whooping cough ...	M.	5	2	2	...	1	...	...	...	...	...	...	...
	F.	13	3	4	6	...	...	...	...	...	...	...	...
5. Diphtheria	M.	6	...	...	2	4	...	...	...	...	...	...	...
	F.	12	1	1	3	6	1	...	...	...	...	...	...
6. Influenza	M.	49	3	...	1	...	...	...	3	15	15	8	4
	F.	44	...	...	...	...	...	4	2	2	10	15	11
7. Encephalitis lethargica	M.	2	...	...	...	...	...	1	1	...	...	...	...
	F.	4	...	...	...	...	...	...	...	2	2	...	...
8. Cerebro-spinal fever	M.	5	3	...	...	1	...	1	...	...	...	...	...
	F.	3	...	...	1	...	1	...	...	...	1	...	...
9. Tuberculosis of respiratory system	M.	127	...	...	1	1	27	22	17	28	25	6	...
	F.	76	4	...	...	1	27	19	7	9	7	2	...
10. Other tuberculous diseases	M.	11	...	5	2	...	1	...	2	...	1	...	...
	F.	13	...	1	1	1	4	...	2	1	1	2	...
11. Syphilis	M.	2	...	...	...	...	...	...	1	...	1	...	...
	F.	2	...	...	...	...	...	...	...	1	1	...	...
12. General paralysis of the insane, tabes dorsalis	M.	4	...	...	...	...	...	...	...	1	2	1	...
	F.	2	...	...	...	...	...	...	...	1	...	1	...
13. Cancer, malignant disease	M.	181	1	...	...	1	3	10	4	25	49	54	34
	F.	186	...	...	...	1	...	5	6	27	59	66	22
14. Diabetes	M.	7	...	...	...	1	1	...	...	...	2	1	2
	F.	22	1	...	...	...	...	...	...	...	5	9	7
15. Cerebral haemorrhage, etc.	M.	87	...	...	...	...	...	1	1	6	17	35	27
	F.	96	...	...	...	...	1	...	...	7	16	36	36
16. Heart disease	M.	384	...	...	...	4	7	7	13	23	62	144	124
	F.	403	...	...	...	2	5	9	14	29	59	115	170
17. Aneurysm	M.	7	...	...	...	...	...	1	...	1	3	1	1
	F.	2	...	...	...	...	...	...	...	...	...	2	...
18. Other circulatory diseases	M.	47	...	...	...	...	...	...	...	2	4	19	22
	F.	62	...	...	...	...	...	...	...	2	17	19	24
19. Bronchitis	M.	84	8	...	...	...	...	3	2	9	20	18	24
	F.	76	4	...	...	...	...	...	...	...	8	18	46
20. Pneumonia (all forms)	M.	146	33	10	5	1	2	9	5	22	29	15	15
	F.	104	18	10	5	2	2	3	5	9	14	22	14
21. Other respiratory diseases	M.	23	...	...	...	...	2	...	1	...	5	9	6
	F.	11	...	...	...	...	1	1	1	1	1	2	4
22. Peptic ulcer	M.	26	...	...	...	...	...	2	4	8	5	4	3
	F.	5	...	...	...	...	...	...	...	1	2	1	1
23. Diarrhoea, etc. ...	M.	34	28	3	1	...	1	...	...	...	...	...	1
	F	19	16	...	1	...	1	...	...	...	1	...	...
24. Appendicitis	M.	13	...	...	...	4	2	...	1	3	1	2	...
	F.	5	...	...	1	...	...	1	2	...	...	1	...
25. Cirrhosis of liver ...	M.	6	...	...	...	...	...	...	1	3	1	1	...
	F.	3	...	...	...	...	...	...	...	2	...	1	...
26. Other diseases of liver, etc.	M.	3	...	...	...	...	...	...	...	...	1	2	...
	F.	11	...	...	...	...	...	1	...	1	2	3	4
27. Other digestive diseases	M.	26	4	1	1	2	1	2	4	2	4	2	3
	F.	21	1	...	...	4	...	1	2	2	6	4	1
28. Acute and chronic nephritis	M.	51	...	...	...	...	2	1	2	7	5	18	16
	F.	50	...	...	...	...	3	2	3	5	8	20	9
29. Puerperal sepsis ...	F.	2	...	...	...	...	...	2	...	...	...	...	...
30. Other puerperal causes	F.	3	...	...	...	...	...	2	1	...	...	...	...
31. Congenital debility, premature birth, malformation, etc.	M.	59	58	...	...	...	1	...	...	...	...	...	...
	F.	53	50	...	1	1	...	1	...	...	...	...	...
32. Senility	M.	26	...	...	...	...	...	...	...	...	...	3	23
	F.	38	...	...	...	...	...	...	...	...	1	3	34
33. Suicide	M.	20	...	...	...	...	1	...	4	5	5	5	...
	F.	7	...	...	...	...	1	1	...	1	3	1	...
34. Other violence ...	M.	59	3	...	2	3	9	6	5	10	11	3	7
	F.	32	1	1	3	3	3	...	1	2	5	3	10
35. Other defined diseases	M.	126	9	...	4	6	12	8	13	8	17	23	26
	F.	95	8	...	4	6	6	8	9	15	11	16	12
36. Causes ill defined, or unknown	M.	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...
All causes	M.	1629	152	21	20	30	73	74	84	178	285	374	338
	F.	1478	107	18	27	28	56	60	55	120	240	362	405

Deaths in public institutions. Table XXII. shows particulars of the deaths which took place in the public institutions in the County Borough area during 1937.

TABLE XXII.

DEATHS IN PUBLIC INSTITUTIONS. 1937.

	Under one year	One year and upwards
Deaths in Council's Institutions.		
Whipps Cross Hospital	44	587
Central Home	—	407
Harold Wood Hospital	—	33
Dagenham Sanatorium	—	56
West Ham Mental Hospital	—	73
Plaistow Fever Hospital	11	37
Forest Gate Hospital	11	24
Deaths in other institutions.		
Queen Mary's Hospital for the East End	14	52
St. Mary's Hospital, Plaistow	14	21
Plaistow Maternity Hospital	14	4
Royal Albert Dock Hospital	—	10
Children's Hospital, Balaam Street ..	29	2
Other places, e.g. docks, etc.	—	11
Residents dying in outside institutions	40	271
Totals	177	1,588
Non-residents dying in West Ham institutions	48	143
Nett West Ham deaths occurring in institutions	129	1,445

The above figures show that 50.66 per cent. of the deaths of West Ham residents took place in public institutions.

NATURAL INCREASE OF THE POPULATION.

The natural increase of the population for any year is the excess of births over deaths, and is normally expressed as an increase per 1,000 of the estimated mid-year population of that

year. This figure is important, since it shows to what extent a population is growing by natural means. It does not give any indication of the extent to which the population is growing by immigration or declining by emigration.

Table XXIII. gives the mean annual birth rates and death rates for each five year period since the creation of the borough. The table also gives the mean annual natural increase of the population per 1,000 living for each period. Examination of this table will show that, while the disquieting features which are so evident in the figures for the country as a whole are not so marked in the case of West Ham, there are nevertheless several factors which are shown up in their true light when they are examined over periods of several years. The fall in the death rate from all causes is highly praiseworthy, but the maximum extent of this decline—as judged by the difference between the highest and the lowest quinquennial rates—has been in the region of only 42 per cent. The corresponding decline in the birth rate has been 56 per cent. It is obvious that, although the population of West Ham is continuing to grow slightly apart from the influence of immigation, the time is not far distant when the slight natural

TABLE XXIII.

NATURAL INCREASE OF POPULATION.

Period	Mean annual birth rate per 1,000 living	Mean annual death rate per 1,000 living	Natural increase per 1,000 living	
			West Ham	England and Wales
1887-1890	37·3	17·5	19.8	12.5
1891-1895	37·1	19·4	17·7	11.8
1896-1900	34·9	19·1	15·9	11.6
1901-1905	34·3	17·3	17.0	12.1
1906-1910	31·5	15·3	16.2	11.6
1911-1915	29·9	15·2	14·7	9·3
1916-1920	25.0	14·3	10.7	5·7
1921-1925	24.4	11.6	12.7	7·7
1926-1930	19.4	11.3	8.1	4.6
1931-1935	16.4	11.4	5.0	3.0
1936	15·7	12.1	4.1	2.2
1937	16.1	12.4	4.2	—

increase will be transformed to a decrease. Even at the present time the rate of growth is greater than that for the country as a whole, but this comparison hardly serves as a compliment to the capacity for increase of the population of the borough.

INFANT MORTALITY.

The infant mortality of the area is summarised by sexes in Table XXIV. This table shows that the highest mortality in infants under one year of age was reached in the quinquennial period 1896-1900, when the rate was 182 per 1,000 live births. The rate for the country as a whole was also very high during this period. The fact that the rates for the preceding quinquennial periods were lower than this is possibly due to the fact that infants who were almost one year old at death were registered as having been " 1 year old," and that hence a number of infants who died were classified in the next highest age group. A substantial decline occurred in the war years, and since 1920 the decline has been maintained and on the whole accelerated. It is worthy of note that in all but the most recent years of the post-war period the quinquennial rates for West Ham have been lower than those for England and Wales. The mortality rates for male infants has been consistently higher than the corresponding rates for female infants.

The infant mortality rate for the year 1937 was 62 per 1,000 live births. The highest rate in the records—though, as explained above, not necessarily the highest true rate—was 201 in 1899. The lowest rate so far recorded was 45 in 1935.

The infant mortality rates, according to the legitimacy or illegitimacy of the infant, are set out in Table XXV. It is seen from this table that in West Ham in recent years the rate for illegitimate infants is approximately double that for legitimate infants. Apart from the immediate post-war years there has not been any considerable change in this ratio. The experience of the County of London approaches very closely to that of West Ham. The same feature was seen in the country as a whole, but in recent years there has been a tendency for the rate for illegitimate infants to approximate to that for legitimate infants. These figures are sufficient to suggest that the illegitimate child does run a substantially greater risk of death in infancy. Too much importance should not be attached to comparisons between

Table XXIV.

Infant mortality.

Period	West Ham						England and Wales Rate per 1,000 live births		
	Deaths under one year			Rate per 1,000 live births					
	Males	Females	Infants	Males	Females	Infants	Males	Females	Infants
1877-1880	—	—	2,744	—	—	147	159*	130*	145*
1881-1885	—	—	4,621	—	—	151	152	125	139
1886-1890	—	—	4,737	—	—	136	159	131	145
1891-1895	—	—	6,378	—	—	157	165	135	151
1896-1900	—	—	7,935	—	—	182	170	141	156
1901-1905	—	—	7,426	—	—	159	151	124	138
1906-1910	—	—	5,652	—	—	127	129	105	117
1911-1915	2,754	2.242	4,996	123	105	114	121	97	110
1916-1920	2,036	1,524	3,560	105	83	94	101	79	90
1921-1925	1,573	1,176	2,749	80	63	72	86	66	76
1926-1930	1,138	844	1,982	74	58	66	77	59	68
1931-1935	845	602	1,447	71	53	62	70	54	62
1921	358	257	615	85	64	75	93	72	83
1922	358	283	641	87	73	81	87	66	77
1923	272	194	466	68	51	60	78	60	69
1924	319	245	564	88	69	78	85	65	75
1925	266	197	463	74	58	66	84	66	75
1926	236	182	418	68	56	62	79	61	70
1927	235	169	404	77	58	67	79	60	70
1928	207	173	380	68	60	64	74	56	65
1929	256	171	427	88	60	74	83	65	74
1930	204	149	353	70	55	63	68	51	60
1931	194	136	330	72	53	63	75	57	66
1932	215	143	358	84	59	72	73	56	65
1933	164	120	284	73	55	64	72	55	64
1934	172	112	284	77	53	66	65	51	59
1935	100	91	191	48	43	45	64	50	57
1936	164	130	294	76	64	70	66	50	59
1937	152	107	259	71	52	62	65	50	58

* Based on the period, 1876—1880.

local illegitimate rates, such as those for West Ham or London, and those for the country as a whole, since the local rates are calculated on a very much smaller number of births and deaths.

Infants' deaths at ages. The actual numbers of deaths of infants at different periods of the first year of life are set out for a series of years in Tables XXVI. and XXVII. These tables will be subjected to more detailed analysis later. Meanwhile, it may be said that the table which deals with all infants shows that the decrease in the infant mortality rate which has occurred since 1921

TABLE XXV.

INFANT MORTALITY BY LEGITIMACY.

Year	Rate per 1,000 live births								
	West Ham			London			England and Wales		
	Legitimate	Illegitimate	Total	Legitimate	Illegitimate	Total	Legitimate	Illegitimate	Total
1911	—	—	141	125	244	130	125	245	130
1912	—	—	103	87	209	91	91	181	95
1913	—	—	107	100	238	106	104	213	108
1914	—	—	107	98	260	104	100	207	105
1915	—	—	112	106	261	112	105	203	110
1916	—	—	100	83	231	89	87	183	91
1917	—	—	107	94	275	104	90	201	96
1918	109	239	115	97	260	108	91	186	97
1919	81	230	86	77	233	85	84	173	89
1920	70	159	74	71	197	76	76	156	80
1921	72	155	75	76	199	81	79	158	83
1922	79	140	81	71	163	75	74	139	77
1923	58	120	60	58	139	61	67	132	69
1924	77	124	78	66	144	69	73	133	75
1925	65	118	66	65	148	68	72	136	75
1926	61	117	62	60	150	64	68	130	70
1927	67	70	67	56	132	59	67	120	70
1928	62	145	64	63	145	67	63	115	65
1929	72	133	74	68	133	71	72	126	74
1930	62	97	63	56	114	59	58	105	60
1931	61	138	63	62	121	65	64	111	66
1932	70	125	72	63	137	67	63	112	65
1933	64	85	64	56	127	60	62	107	64
1934	65	102	66	64	130	67	57	95	59
1935	44	89	45	55	114	58	56	90	57
1936	68	188	70	63	114	66	57	88	59
1937	60	114	62	57	119	60	56	88	58

has been due largely to a decline in the rate of mortality over the first month of age. There is really no significant difference between the rates for deaths in the first month—the neo-natal period. It has been recognised for some time that a further reduction in the infant mortality rate will probably only be affected satisfactorily by an attack on the mortality at this early period. More detailed

Table XXVI.

West Ham. Infant mortality—all infants.

Year	Deaths at ages								Deaths per 1,000 live births		Legitimate deaths
	Under 1 day	1—7 days	1—4 weeks	4 weeks to 3 m'ths	3—6 m'ths	6—9 m'ths	9—12 m'ths	Total under 1 year	Under 4 weeks	Total under 1 year	
1921	89	73	89	104	118	78	64	615	30	75	577
1922	68	52	93	111	98	95	124	641	27	81	615
1923	86	68	55	81	91	48	37	466	27	60	439
1924	55	67	64	100	96	83	99	564	26	78	539
1925	51	57	65	90	85	62	53	463	25	66	443
1926	51	60	54	64	63	64	62	418	25	62	399
1927	44	54	51	49	71	72	63	404	25	67	393
1928	57	47	46	65	69	47	49	380	25	64	355
1929	43	48	43	71	92	75	55	427	23	74	404
1930	46	50	32	68	55	63	39	353	23	63	340
1931	51	38	27	71	65	42	36	330	22	63	313
1932	42	53	54	59	64	45	41	358	30	72	340
1933	47	42	25	43	46	45	36	284	26	64	274
1934	36	33	40	40	50	40	45	284	25	66	273
1935	34	36	19	30	36	21	15	191	21	45	181
1936	34	32	48	44	48	52	36	294	27	70	278
1937	36	32	23	57	51	34	26	259	22	62	246

consideration of the question cannot be given in this report, but it may be said that many of the deaths at this early age do not fall within the category of "preventable diseases," and that methods of attack must be concerned with the welfare of the infant before birth and of the pregnant mother. The data for illegitimate infants are so scanty that conclusions cannot be readily drawn from them.

Table XXVII.

West Ham. Infant mortality: illegitimate infants.

Year	Deaths at ages								Deaths per 1,000 live births	
	Under 1 day	1—7 days	1—4 weeks	4 weeks to 3 m'ths.	3—6 m'ths.	6—9 m'ths.	9—12 m'ths.	Total under 1 year	Under 4 weeks	Total under 1 year
1921	9	1	5	6	12	1	4	38	61	155
1922	5	2	2	7	5	3	2	26	48	140
1923	8	3	1	6	4	3	2	27	53	120
1924	2	4	3	4	3	7	2	25	45	124
1925	6	3	1	5	2	1	2	20	59	118
1926	6	2	—	4	2	2	3	19	49	117
1927	2	4	1	—	2	1	1	11	44	70
1928	6	4	2	4	4	3	2	25	70	145
1929	5	2	2	6	5	2	1	23	52	133
1930	2	—	—	3	4	2	2	13	15	97
1931	6	1	1	5	2	1	1	17	65	138
1932	4	4	1	4	3	1	1	18	63	125
1933	3	4	—	—	1	—	2	10	60	85
1934	2	2	3	—	1	1	2	11	65	102
1935	2	—	2	1	2	3	—	10	36	89
1936	4	2	1	1	4	2	2	16	82	188
1937	1	2	2	3	4	—	1	13	44	114

Table XXVIII.

West Ham, 1937. Causes of deaths in infancy and childhood.

Cause of death	Sex	Under one month					Under one year			
		Under one day	1—7 days	1 and under 2 weeks	2 and under 3 weeks	3 and under 4 weeks	Total under one month	1 and under 3 months	3 and under 6 months	6 and under 12 months
Smallpox	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Chickenpox	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Measles	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Scarlet fever	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Whooping cough	M.	...	...	...	...	...	...	...	1	1
	F.	...	...	...	...	...	...	...	...	3
Diphtheria	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	1
Influenza	M.	...	...	...	...	...	...	...	...	3
	F.	...	...	...	...	...	...	...	...	...
Erysipelas	M.	...	...	...	...	...	...	...	1	...
	F.	...	...	...	...	...	...	1	...	...
Meningitis (tuberc.)	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Tabes mesenterica and tuberc. peritonitis	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Respiratory tuberculosis	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	2	2
Other tuberculous diseases	M.	...	...	..	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Meningitis (non-tuberculous)	M.	...	...	...	...	...	...	...	1	2
	F.	...	...	...	1	...	1	...	...	...
Nervous diseases (other)	M.	...	...	...	...	...	...	1	...	...
	F.	...	...	...	...	...	...	...	...	...
Diarrhoea and enteritis	M.	...	...	...	2	...	2	7	11	8
	F.	...	...	...	...	...	...	4	3	9
Gastritis	M.	...	...	...	...	...	...	1	...	...
	F.	...	...	...	...	...	...	...	...	1
Hernia and intestinal obstruction	M.	...	...	...	...	...	...	1	1	1
	F.	...	...	...	1	...	1	...	...	1
Icterus	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Umbilical diseases	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Bronchitis	M.	...	...	...	...	2	2	4	2	...
	F.	...	...	...	...	...	...	1	3	...
Pneumonia (all forms)	M.	...	1	1	...	1	3	7	7	16
	F.	...	...	...	...	...	...	8	5	5
Other respiratory diseases	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Rickets	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	1
Syphilis	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	..	...	...
Convulsions	M.	1	...	...	...	...	1	3	1	1
	F.	...	...	...	...	...	...	...	1	1
Congenital malformations	M.	2	4	...	1	...	7	1	1	...
	F.	2	...	2	...	...	4	4	2	2
Prematurity	M.	10	8	4	2	...	24	5	...	...
	F.	10	13	2	1	1	27	2	...	1
Injury at birth	M.	...	...	...	...	...	...	2	...	...
	F.	...	...	..	...	...	...	...	...	...
Atelectasis	M.	3	3	...	...	...	6	1	...	...
	F.	4	2	...	...	...	6	...	...	...
Atrophy, debility and marasmus	M.	1	...	...	1	...	2	3	6	...
	F.	...	...	...	...	1	1	...	1	...
Found dead in bed (overlaying)	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Suffocation	M.	1	...	...	...	...	1	...	...	...
	F.	...	...	...	...	...	...	...	...	...
Violence (other forms)	M.	1	1	...	...	...	2	...	...	...
	F.	1	...	...	...	...	1	...	...	...
Other defined diseases	M.	...	...	...	...	...	...	...	2	...
	F.	...	...	...	...	...	...	1	...	1
Ill-defined	M.	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...
All causes	M.	19	17	5	6	3	50	36	34	32
	F.	17	15	4	3	2	41	21	17	28

TABLE XXVIII. (continued)

WEST HAM, 1937. CAUSES OF DEATHS IN INFANCY AND CHILDHOOD.

Cause of death	Sex	Total under 1 year	One year and under five years					Total under five years
			1 and under 2 years	2 and under 3 years	3 and under 4 years	4 and under 5 years	Total 1—5 years	
Smallpox	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Chickenpox	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Measles	M.	...	...	...	1	...	1	1
	F.	...	...	...	...	...	...	...
Scarlet fever	M.	...	...	...	...	...	...	...
	F.	...	1	1	...	...	2	2
Whooping cough	M.	2	2	...	...	...	2	4
	F.	3	4	2	4	...	10	13
Diphtheria	M.	...	...	2	...	...	2	2
	F.	1	1	2	1	...	4	5
Influenza	M.	3	...	1	...	...	1	4
	F.	...	...	...	...	...	...	...
Erysipelas	M.	1	...	...	...	...	...	1
	F.	1	...	...	...	...	...	1
Meningitis (tuberc.)	M.	...	4	...	...	2	6	6
	F.	...	1	...	...	1	2	2
Tabes mesenterica and tuberc. peritonitis	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Respiratory tuberculosis	M.	...	...	...	1	...	1	1
	F.	4	...	...	...	...	...	4
Other tuberculous diseases	M.	...	1	...	...	...	1	1
	F.	...	...	...	...	...	...	...
Meningitis (non-tuberculous)	M.	3	...	1	1	...	2	5
	F.	1	...	1	1	...	2	3
Nervous diseases (other)	M.	1	...	...	...	...	...	1
	F.	...	...	...	...	...	...	...
Diarrhoea and enteritis	M.	28	3	...	1	...	4	32
	F.	16	...	1	...	...	1	17
Gastritis	M.	1	...	...	...	...	...	1
	F.	1	...	...	...	...	...	1
Hernia and intestinal obstruction	M.	3	...	...	...	...	...	3
	F.	2	...	...	...	...	...	2
Icterus	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Umbilical diseases	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Bronchitis	M.	8	...	...	...	...	...	8
	F.	4	...	...	...	...	...	4
Pneumonia (all forms)	M	33	10	1	2	2	15	48
	F.	18	10	3	...	2	15	33
Other respiratory diseases	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Rickets	M.	...	...	...	...	...	...	...
	F.	1	...	...	...	...	...	1
Syphilis	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Convulsions	M.	6	...	...	...	...	...	6
	F.	2	...	...	...	...	...	2
Congenital malformations	M.	9	...	...	...	...	...	9
	F.	12	...	1	...	...	1	13
Prematurity	M.	29	...	...	...	...	...	29
	F.	30	...	...	...	...	...	30
Injury at birth	M.	2	...	...	...	...	...	2
	F.	...	...	...	...	...	...	...
Atelectasis	M.	7	...	...	...	...	...	7
	F.	6	...	...	...	...	...	6
Atrophy, debility and marasmus	M.	11	...	...	...	...	...	11
	F.	2	...	...	...	...	...	2
Found dead in bed (overlaying)	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
Suffocation	M.	1	...	1	...	...	1	2
	F.	...	...	...	...	1	1	1
Violence (other forms)	M.	2	...	...	...	1	1	3
	F.	1	1	1	1	...	3	4
Other defined diseases	M.	2	1	1	...	2	4	6
	F.	2	...	2	2	...	4	6
Ill-defined	M.	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...
All causes	M.	152	21	7	6	7	41	193
	F.	107	18	14	9	4	45	152

Details of the causes of the deaths of infants and of young children are given in Table XXVIII. This table brings out the fact that, of the 259 deaths under one year, no fewer than 154, or 59.5 per cent., were due to three causes. These three causes—diarrhoea and enteritis, pneumonia, and prematurity—are a potent cause of death at the beginning of life. Prematurity caused 59 deaths, pneumonia 51, and enteritis 44. The mortality in the two zymotic groups was relatively much greater in male than in female infants, but in the case of prematurity there was no difference in mortality between the sexes. With reference to age, the greatest number of deaths from pneumonia occurred between 1 and 3 months and between 6 and 12 months. The mortality under one month was low. The mortality from enteritis was most noticeable after the first month of age. The majority of the deaths from prematurity occurred under one month of age, and nearly 79 per cent. of these neo-natal deaths occurred during the first week of life.

Reference to another section will show that there has been a considerable decrease in the mortality from infectious diseases among young infants, and that this decrease has been most striking in the case of diarrhoeal diseases. It is possible that we are reaching the lower limit of mortality from this condition. Nevertheless, it is striking that a considerable reduction in the death rate from diarrhoeal diseases and from pneumonia would effect a very marked improvement in the infant mortality rate. These remarks apply equally to the country as a whole.

Consideration of the congenital group of conditions—namely, congenital malformations, prematurity, injury at birth, and atelectasis—will show that this group contributed 95 deaths, or 36.7 per cent. towards the total. Further reduction in the mortality from this group lies in the realm of ante-natal care.

Of the 86 deaths between the ages of one and five years it is notable that pneumonia contributed 30, or 34.9 per cent. towards the total. Of the other diseases which contributed relatively largely, whooping-cough, tuberculous meningitis, and diphtheria were the most important.

MATERNAL MORTALITY.

The number of women who died in childbirth in 1937 was 5. Two of these deaths were due to sepsis, and three to other conditions associated with childbirth. The maternal mortality rate for all causes was 1.15 per 1,000 births. This is the lowest rate in my records.

Detailed figures for the maternal mortality of the area are set out in Table XXIX. It will be seen from this table that, although the trend of the rate has generally been downward since 1896, the decline has not been continuous, and within the last twenty years there has even been a slight rise. The true significance of these facts is brought out by comparing the West Ham rates with the rates for the country as a whole. Throughout the whole of the period since 1896 the maternal mortality rate for West Ham has been considerably below the corresponding rate for England and Wales, and in the period since 1921 especially the latter rate has been almost double that for the borough. Even more important is the fact that the death rate from puerperal sepsis has nearly always been considerably below the sepsis rate for the country as a whole. In view of the fact that where figures for an individual authority are being considered, one additional death may give a substantial increase in the rate, this consistently low mortality is very satisfactory. Recent years have rightly seen much increase in propaganda directed towards the reduction of maternal mortality, and it is not unknown for a certain area to have no maternal deaths in one year. Yet for the country as a whole there is probably an irreducible minimum, below which the maternal mortality rate cannot be expected to remain consistently. In an area of any size, therefore, a rate which remains persistently below that for the standard area of the country as a whole must be a better indication of the excellence of the results than evidence provided by isolated low rates in a series of years.

The notifications of puerperal fever and puerperal pyrexia, and the case rates for these conditions, are given in Table XXX. The latter condition was made notifiable in 1927. It is satisfactory to note that the percentage of puerperal fever patients who are treated in hospital has been rising steadily in the last 40 years.

Table XXIX.

Maternal mortality.

Period	West Ham No. of deaths			Mortality per 1,000 births.*				
				West Ham			England and Wales.	
	Puerp. sepsis.	Other puerp.	All causes	Puerp. sepsis.	Other puerp.	All causes	Puerp. sepsis.	All causes
1896-1900	37	111	148	0.85	2.54	3.39	2.12	4.69
1901-1905	54	92	146	1.15	1.97	3.12	1.95	4.27
1906-1910	32	64	96	0.72	1.44	2.16	1.56	3.74
1911-1915	36	60	96	0.82	1.37	2.19	1.42	4.03
1916-1920	42	44	86	1.11	1.16	2.27	1.51	4.12
1921-1925	34	56	90	0.89	1.47	2.35	1.40	3.90
1926-1930	41	34	75	1.37	1.13	2.50	1.73	4.27
1931-1935	31	31	62	1.34	1.34	2.68	1.69	4.13
1921	4	12	16	0.49	1.46	1.94	1.38	3.92
1922	6	12	18	0.75	1.51	2.26	1.39	3.81
1923	11	13	24	1.41	1.67	3.08	1.30	3.82
1924	5	7	12	0.69	0.97	1.67	1.39	3.90
1925	8	12	20	1.14	1.71	2.85	1.56	4.08
1926	9	4	13	1.34	0.60	1.94	1.60	4.12
1927	9	9	18	1.50	1.50	3.00	1.57	4.11
1928	6	7	13	0.98	1.15	2.13	1.72	4.25
1929	8	7	15	1.34	1.17	2.52	1.73	4.16
1930	9	7	16	1.55	1.21	2.76	1.84	4.22
1931	7	9	16	1.28	1.65	2 93	1.59	3.95
1932	9	6	15	1.75	1.17	2.92	1.55	4.04
1933	5	3	8	1.09	0.66	1.75	1.75	4.32
1934	4	5	9	0.89	1.12	2.01	1.95	4.41
1935	6	8	14	1.39	1.85	3.24	1.61	3.94
1936	3	5	8	0.69	1.15	1.85	1.34	3.65
1937	2	3	5	0.46	0.69	1.15	0.94	3.13

* The rates are given per 1,000 live births up to and including 1927. From 1928 onwards they are per 1,000 total (i.e. live and still) births.

Table XXX.

Notifications of puerperal fever and puerperal pyrexia

Period	Puerperal fever				Puerperal pyrexia			
	Cases		Removed to hospital		Cases		Removed to hospital	
	No.	Rate *	No.	Per cent.	No.	Rate *	No.	Per cent.
1896-1900	67	1.53	3	4.48	—	—	—	—
1901-1905	83	1.78	9	10.84	—	—	—	—
1906-1910	65	1.46	19	29.23	—	—	—	—
1911-1915	59	1.35	36	61.02	—	—	—	—
1916-1920	61	1.61	24	39.34	—	—	—	—
1921-1925	61	1.60	41	67.21	—	—	—	—
1926-1930	101	3.31	65	64.36	296	12.41	166	56.08
1931-1935	61	2.55	51	83.61	230	9.60	141	61.30
1921	8	0.97	5	62.50	—	—	—	—
1922	12	1.51	3	25.00	—	—	—	—
1923	16	2.05	14	87.50	—	—	—	—
1924	15	2.08	13	86.67	—	—	—	—
1925	10	1.43	6	60.00	—	—	—	—
1926	20	2.98	13	65.00	—	—	—	—
1927	17	2.84	16	94.12	70	11.68	36	51.43
1928	27	4.43	17	62.96	94	15.41	46	48.94
1929	17	2.85	10	58.82	64	10.74	43	67.19
1930	20	3.45	9	45.00	68	11.73	41	60.29
1931	14	2.57	11	78.57	63	11.55	37	58.73
1932	14	2.73	11	78.57	47	9.16	28	59.57
1933	15	3.28	13	86.67	26	5.69	20	76.92
1934	10	2.24	8	80.00	46	10.28	29	63.04
1935	8	1.85	8	100.00	48	11.10	27	56.25
1936	17	3.92	15	88.24	44	10.15	33	75.00
1937	4	0.92	4	100.00	75	17.31	55	73.33

* The rates are given per 1,000 live births up to and including 1927. From 1928 onwards they are per 1,000 total (i.e. live and still) births.

DEATHS FROM RESPIRATORY DISEASES.

This group of diseases covers diseases of the nasal passages, diseases of the larynx, bronchitis, all forms of pneumonia, pleurisy (including empyema), asthma, congestion and emphysema of the lungs. For practically the whole of the period covered by the table it refers to those diseases at present included in Nos. 104 to 114 inclusive of the International List—or their equivalent.

During the year 1937 the number of deaths from this group of diseases was 444, of which 253 were of males and 191 of females. This number was a considerable increase on the figure for the previous year, and was the highest since 1933. The rate per 1,000 living was 1.71, which was the highest rate since 1931.

Of all the respiratory deaths registered, 410, or 92.3 per cent., were allocated to the bronchitis and pneumonia group. Pneumonia constituted the highest single cause of mortality in this group. Of the 250 deaths from pneumonia, 146 (58.4 per cent.) were of males, and 104 (41.6 per cent.) of females. In infants the excess male mortality was very great; under the age of one year 33 male infants died from pneumonia compared with 18 female infants at a similar age. Broncho-pneumonia was responsible for a much larger number of deaths than lobar pneumonia, the deaths from the former condition being 117 males and 90 females, and for the latter condition 22 males and 9 females. Even when allowance is made for the high frequency of broncho-pneumonia in children by excluding deaths of persons under the age of 25 years, it is found that of the pneumonia deaths which could be classified definitely to one or other of these two types, broncho-pneumonia constituted 123 (69 males and 54 females) of the 150 deaths, and lobar pneumonia only 27 deaths (19 males and 8 females).

Bronchitis caused the death of 160 persons (84 males and 76 females). Of these the type of bronchitis was not clearly defined in 60 cases. Of the remaining 100 persons, acute bronchitis was responsible for the deaths of 73 (37 males and 36 females), and chronic bronchitis for the deaths of 27 (19 males and 8 females). In infancy acute bronchitis caused 4 deaths, and bronchitis of an ill-defined type 8 deaths. Of the remaining bronchitis deaths, 94.6 per cent. were over the age of 55 years.

Of the 46 deaths which were allocated to other causes, 20 fell within the group of congestive diseases such as hypostatic

Table XXXI.

Deaths from respiratory diseases (excluding phthisis).

Period	West Ham No. of deaths			Crude death-rates per 1,000 living						
				West Ham			London (both sexes)	England and Wales		
	Males	Females	Persons	Males	Females	Persons		Males	Females	Persons
1876-1880	—	—	1,911	—	—	**3.28**	4.679	4.333	3.599	3.956
1881-1885	—	—	2,642	—	—	**3.67**	4.242	4.084	3.367	3.716
1886-1890	—	—	3,451	—	—	**3.79**	4.166	4.136	3.422	3.768
1891-1895	—	—	4,707	—	—	**4.30**	4.381	4.059	3.408	3.723
1896-1900	—	—	4,756	—	—	**3.80**	3.449	3.424	2.793	3.098
1901-1905	—	—	4,553	—	—	**3.34**	3.072	3.051	2.509	2.771
1906-1910	—	—	4,272	—	—	**3.02**	2.813	2.789	2.314	2.544
1911-1915	2,482	2,217	4,699	3.46	2.97	**3.21**	2.822	2.743	2.186	2.452
1916-1920	2,803	2,253	5,056	4.05	3.13	**3.58**	2.878	3.179	2.145	2.603
1921-1925	2,249	1,953	4,202	2.95	2.43	**2.68**	2.258	2.295	1.831	2.053
1926-1930	1,698	1,466	3,164	2.25	1.85	**2.05**	1.883	1.952	1.499	1.716
1931-1935	1,254	982	2,236	1.81	1.36	**1.58**	1.467	1.536	1.181	1.351
1921	447	338	785	3.00	2.14	**2.56**	2.233	2.212	1.722	1.956
1922	612	544	1,156	4.05	3.42	**3.73**	2.739	2.572	2.065	2.307
1923	371	293	664	2.42	1.82	**2.11**	1.930	2.102	1.653	1.867
1924	458	429	887	2.96	2.64	**2.79**	2.285	2.359	1.924	2.132
1925	361	349	710	2.33	2.14	**2.23**	2.103	2.234	1.788	2.001
1926	331	316	647	2.15	1.95	**2.05**	1.895	1.961	1.530	1.736
1927	389	345	734	2.53	2.13	**2.33**	1.995	2.164	1.720	1.933
1928	300	233	533	2.01	1.48	**1.74**	1.680	1.744	1.289	1.507
1929	444	379	823	2.96	2.40	**2.68**	2.491	2.358	1.871	2.104
1930	234	193	427	1.59	1.25	**1.42**	1.351	1.539	1.088	1.304
1931	333	263	596	2.30	1.73	**2.01**	1.761	1.795	1.422	1.601
1932	264	194	458	1.87	1.31	**1.58**	1.450	1.521	1.218	1.363
1933	246	202	448	1.78	1.40	**1.58**	1.455	1.564	1.237	1.394
1934	242	193	435	1.79	1.37	**1.58**	1.508	1.441	1.051	1.238
1935	169	130	299	1.28	0.94	**1.10**	1.150	1.364	0.977	1.163
1936	195	173	368	1.50	1.27	**1.38**	1.426	1.457	1.026	1.233
1937	253	191	444	2.00	1.44	**1.71**	1.460	1.500	1.064	1.273

pneumonia. All except two of these persons were over the age of 55 years. Two deaths—both of males—were allocated to the asthma group.

The mortality from the respiratory group of diseases since 1876 is given in Table XXXI. From this table it is seen that the local death rate from these conditions has been steadily falling during these 60 years. The quinquennial period 1916-1920 was an exception to this general statement, but the high death rate in this period was due to the influenza epidemics of 1918 and 1919, and was reflected in similar high rates elsewhere. This statement holds even though deaths certified as due to "influenza" are not included in this group of respiratory diseases. Rates for individual years are liable to show considerable fluctuation owing to variations in climatic and other conditions, but it is seen that generally the downward trend was maintained until a year ago.

The differential rates show that the respiratory mortality has been consistently higher in males than in females in West Ham. This feature is also shown very definitely in the differential rates for the country as a whole. The excess mortality of males is generally considerable, and is especially marked towards the later decades of life, when the increased exposure of males to adverse weather conditions is liable to be followed by a fatal issue.

Comparison of the respiratory death rates of this area with those for the country as a whole is throughout the period of sixty odd years unfavourable. This excessive mortality from respiratory conditions is to be expected in a large industrial area, where the inhabitants are constantly subjected to the adverse influence of smoke, fog, and other atmospheric impurities. It can, however, be easily shown that the excess of the local rates over the national rates has decreased considerably within recent years, and it is perhaps justifiable to assert that this decrease is associated with national and local measures which have been taken in this period to free the atmosphere of its impurities.

Some support for this theory is obtained from an examination of the respiratory death rates for the Administrative County of London. These rates show even better than do the local rates the progressive downward trend, so that the rate for the last quinquennial period given was only about a third of the rate for the period 1876-1880. The interesting point is that, at almost every quinquennial period, the London rates are approximately

the mean of the local rates and the rates for the country as a whole. The larger population upon which the London rates are based would probably tend to reduce the high peaks shown by the local rates in certain years. Despite this smoothing, it would seem that the London rates do reflect the fact that, while much of the county area is of an industrial type similar to West Ham, other large areas are residential and commercial in nature. In these latter parts the adverse environmental factors which serve to raise the respiratory death rates in the industrial sections are operative to a much smaller degree. The study of respiratory death rates opens up a field of investigation which is of great importance in the assessment of the effect of invironmental factors.

Reference should also be made to the notes on pneumonia, influenza, and bronchitis in the section on infectious diseases.

DEATHS FROM CIRCULATORY DISEASES.

(*a*) *Diseases of the heart.*

This group of diseases covers pericarditis, acute and chronic endocarditis—including all forms of valvular disease, myocarditis, disease of coronary arteries, disordered action of the heart, dilatation, and heart disease—ill-defined and not allocated to some other primary condition. The group now refers to those diseases included in headings 90 to 95 inclusive of the International List. There have been during the course of the last fifty years considerable changes in the method of allocating deaths due to heart diseases. It is impracticable to give full details here, but it may be said that in computing the number of deaths due to these conditions I have attempted to take these changes into consideration as much as possible.

During the year 1937 the number of deaths from heart disease was 787, of which 384 were of males and 403 of females. This number was a decrease of 35 persons compared with the figure for the previous year, which incidentally showed the highest number of deaths so far allocated to these conditions. The rate per 1,000 of the population was 3.03 as compared with a rate of 3.09 for the previous year.

Of the total of 787 heart disease deaths registered, 558 were due to myocarditis or other diseases of the myocardium, and 124 to chronic endocarditis or valvular disease.

The myocardial group constituted 70.9 per cent. of all deaths due to heart disease. The sex distribution was fairly equal, 264 deaths occurring in males and 294 in females. No less than 167 of the total myocardial deaths were allocated to the group which covers myocarditis of an ill-defined nature (93.c.).

The greater part of the myocardial group was constituted by 299 deaths from myocardial degeneration (93.b.3). Of these deaths, 134 were of males and 165 of females. Of all myocardial deaths 433, or 77.6 per cent. occurred in persons over the age of 65 years.

Of the 124 deaths from chronic endocarditis, or valvular disease, 60 occurred in males and 64 in females.

A large proportion—99 deaths—of these were allocated definitely to one or other of the valves of the heart. Of these 99 cases 26—20 males and 6 females—were due to aortic disease; 66—26 males and 40 females—were due to disease of the mitral valve; and 7 deaths—5 males and 2 females—were due to disease of both these valves. The earliest record of valvular disease during 1937 was one death from mitral disease in a female between the ages of 5 and 10 years. Twenty-nine of the 60 male deaths from myocarditis of all forms occurred over the age of 65 years; and of the corresponding 64 female deaths, 28 occurred above this age.

Diseases of the coronary arteries constituted 41 deaths, of which 30 were of males and 11 of females. Among the males, 27 of the deaths were of persons over the age of 55 years, and among the females all except one of the 11 deaths were of persons over this age.

Two deaths were certified as due to pericarditis during the year. One of these persons was a male between the age of 20 and 25 years, and the other was a female between the age of 45 and 55 years.

Of all deaths from heart diseases, 553, or 70.3 per cent., occurred in persons over 65 years of age.

The mortality from heart disease since 1891 is given in Table XXXII. It will be seen from this table that the local death rate from these conditions rose irregularly up to the decade 1921-1925, since when there has been a substantial and progressive increase. It is doubtful whether deaths from heart disease are really more frequent than they were previously. A part at least

of the increase in the rate can be explained by changes in the methods of classifying deaths, and the fact that the population is gradually becoming older also does much to explain the increase. It will be seen that the national rates show similar tendencies. The rates for London are peculiar in that, whereas in the first forty years of the period quoted they were midway between the rates for West Ham and those for the country as a whole, the London rates began to exceed the national rates in the quinquennium 1916-1920, and since that period they have been considerably in excess of the rates for the country as a whole.

On the whole the death rates for females from heart diseases tend to be higher than the corresponding rates for males. The difference is not very substantial, but it is borne out by the national rates.

(b) Other circulatory diseases.

The diseases which I have included in this group are: aneurysm; diseases characterised by a hardening of the arteries (arterio-sclerosis, atheroma, etc.) with and without cerebral arterial lesions; gangrene, both senile and that due to other causes; and other diseases of the arteries. It also includes diseases of the veins and lymphatics, and abnormalities of blood pressure.

The group is covered by Nos. 96 to 103 of the International List. It thus includes certain cases of the important group of diseases popularly known as " shock " or " apoplexy," but the majority of these cases are included under another heading, and will be dealt with in later reports.

During the year 1937 the number of deaths from these vascular diseases was 118, of which 54 were of males and 64 of females. The death rate was 0.45 per 1,000 of the population. Diseases characterised by some process of hardening of the arteries (group 97) accounted for 100 of these deaths—42 being deaths of males, and 58 of females. Cerebral lesions accounted for 64 of the deaths, 21 of these being of males and 43 of females. The excess mortality of the female sex was here much more marked than in the main group "cerebral haemorrhage." Of the 100 deaths ascribed to arterio-sclerosis, 77 occurred in persons over the age of 65 years.

The number of deaths from aneurysm was 9, of which 7 were of males, and 2 of females. One of the male deaths occurred in the age group 25 to 35 years, and 4 between the age of 45 and

Table XXXII.

Deaths from heart disease.

Period	West Ham No. of deaths			Crude death-rates per 1,000 living						
				West Ham			London (both sexes)	England and Wales		
	Males	Females	Persons	Males	Females	Persons		Males	Females	Persons
1886-1890	—	—	—	—	—	—	1.411	1.518	1.608	1.564
1891-1895	—	—	1,145	—	—	**1.05**	1.424	1.508	1.598	1.555
1896-1900	—	—	1,548	—	—	**1.24**	1.350	1.489	1.542	1.517
1901-1905	—	—	1,368	—	—	**1.00**	1.285	1.416	1.481	1.450
1906-1910	—	—	1,402	—	—	**0.99**	1.211	1.404	1.439	1.422
1911-1915	768	884	1,652	1.07	1.18	**1.13**	1.415	1.485	1.498	1.492
1916-1920	776	846	1,622	1.12	1.17	**1.15**	1.607	1.683	1.465	1.562
1921-1925	835	954	1,789	1.09	1.19	**1.41**	1.663	1.486	1.582	1.537
1926-1930	1,254	1,422	2,676	1.66	1.79	**1.73**	2.281	1.981	2.072	2.028
1931-1935	1,692	1,838	3,530	2.45	2.54	**2.49**	2.990	2.655	2.660	2.658
1921	156	180	336	1.05	1.14	**1.09**	1.561	1.381	1.451	1.418
1922	157	171	328	1.04	1.07	**1.06**	1.701	1.512	1.619	1.568
1923	182	202	384	1.19	1.25	**1.22**	1.596	1.430	1.528	1.481
1924	166	164	330	1.07	1.01	**1.04**	1.687	1.510	1.616	1.565
1925	174	237	411	1.12	1.45	**1.29**	1.768	1.596	1.694	1.647
1926	208	233	441	1.35	1.44	**1.40**	1.790	1.606	1.691	1.650
1927	216	262	478	1.41	1.62	**1.52**	2.005	1.774	1.891	1.835
1928	261	275	536	1.75	1.75	**1.75**	2.211	1.893	2.004	1.951
1929	289	357	646	1.93	2.26	**2.10**	2.923	2.373	2.493	2.436
1930	280	295	575	1.91	1.91	**1.91**	2.506	2.252	2.274	2.264
1931	340	375	715	2.35	2.47	**2.41**	2.856	2.503	2.564	2.535
1932	302	323	625	2.14	2.18	**2.16**	2.907	2.550	2.565	2.558
1933	311	347	658	2.25	2.40	**2.33**	3.062	2.656	2.700	2.679
1934	365	415	780	2.71	2.94	**2.82**	3.010	2.716	2.671	2.693
1935	374	378	752	2.83	2.73	**2.78**	3.122	2.847	2.797	2.821
1936	404	418	822	3.11	3.07	**3.09**	3.426	3.153	3.051	3.100
1937	384	403	787	3.03	3.04	**3.03**	3.501	3.193	3.085	3.137

65 years. Relatively speaking, aneurysm claimed its victims at an earlier age than did the arterio-sclerotic group of diseases.

The number of cases of senile gangrene which were certified was 6, 3 being males and 3 females. All occurred above the age of 55 years.

DEATHS FROM VIOLENCE.

The total number of deaths from violence which occurred during 1937 was 118, of which 79 were of males and 39 of females. Suicide accounted for 27 of these deaths—20 males and 7 females—and the remainder, which were due to accidents and other forms of violence, were made up of 59 males and 32 females. The death rate from all forms of violence was 0.45 per 1,000 living. The death rate from accidents, etc., was 0.35 per 1,000 living, and the rate from suicide was 0.10.

Suicide. Ten of the deaths (6 males and 4 females) were due to coal-gas poisoning. All the female deaths due to this cause occurred over the age of 55 years. The next most common mode of committing suicide was by hanging, which accounted for the deaths of 6 males and one female. The remainder of the male deaths were made up as follows: cut-throat, 2; poisoning by lysol, 2; poisoning by aspirin, 1; drowning, 1; death through falling under a train, 1; death by fall from window, 1. One of the two remaining female deaths was due to a fall under a train, and the other to the severance of an artery.

Accidents, etc. Of the 91 deaths, the most frequent cause was accidental death at work, which accounted for 18 deaths of males and 4 of females. Home accidents and falls caused the deaths of 5 males and 9 females; 12 of these persons were over 75 years of age. Five males—ages ranging from 15 upwards—were found drowned, and in the case of the other 2 males and 1 female the verdict at the inquest was accidental drowning. One death was attributed to war wounds.

Mechanically propelled vehicles caused the deaths of 25 persons. Particulars of these accidents are given in Table XXXIII.

Trend of deaths from violence. Particulars of the deaths from and the death rates from violence are given in Table XXXIV. This table shows that in the last 46 years there has been a decline in the death rate from all forms of violence—a decline which really appeared suddenly in the period 1921-1925. The reduction in West Ham has been considerable, and is much greater than the corresponding reduction for the country as a whole. For all forms, the death rate for males has been approximately three times that for females—a ratio which is somewhat greater than that for the country as a whole.

Table XXXIII.

Accidental deaths due to mechanically propelled vehicles.

Type of vehicle	Sex	Age at death													All ages	
		0—	1—	2—	3—	4—	5—	15—	25—	35—	45—	55—	65—	75—	Males	Females
Trolley-bus ...	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	F	—	—	—	—	—	—	—	—	—	—	—	—	—		—
Tram-car ...	M	—	—		—	—	—	—	—	—	—	1	—	—	1	
	F	—	—	—	—	—	—	—	—	—	—	—	1	—		1
Motor buses and coaches ...	M	—	—	—	—	—	—	1	—	—	—	2	—	—	3	
	F	—	—	—	—	—	1	—	—	—	—	—	—	—		1
Private and other cars ...	M	—	—	—	—	—	—	1	—	—	—	1	1	—	3	
	F	—	—	—	1	—	—	2	—	1	—	1	—	—		5
Motor lorries ...	M	—	—	—	—	—	3	1	—	1	1	—	—	—	6	
	F	—	—	1	—	—	1	—	—	—	—	—	—	—		2
Other vehicles	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	F	—	—	—	—	—	—	—	—	—	—	—	—	—		—
Motor cycles ...	M	—	—	—	—	—	—	1	2	—	—	—	—	—	3	
	F	—	—	—	—	—	—	—	—	—	—	—	—	—		—
All vehicles ...	M	—	—	—	—	—	3	4	2	1	1	4	1	—	16	
	F	—	—	1	1	—	2	2	—	1	—	1	1	—		9
Pedal cycles ...	M	—	—	—	—	—	—	—	—	—	—	—	—	1	1	
	F	—	—	—	—	—	—	—	—	—	—	—	—	—		—
Other street accidents ...	M	—	—	—	—	—	—	—	—	—	—	1	1	1	3	
	F	—	—	—	—	—	—	—	—	—	—	1	—	1		2

The rates for the two main groups—accidents and suicides respectively—are not given in the table as they may tend to be based on small numbers. The accident rates are, however, very low considering the industrial nature of the area. This applies especially to females—a point upon which the Registrar-General commented recently.

Table XXXIV.

Deaths from violence.

Period	West Ham: No. of deaths.						All violence. Crude death-rates per 1,000 living					
	Accidents, etc.			Suicide			West Ham			England and Wales		
	Male	Female	Persons	Male	Fem'ls	Persons	Male	Female	Persons	Male	Female	Persons
1891-1895	—	—	622	—	—	72	—	—	**0.63**	0.937	0.365	0.642
1896-1900	—	—	992	—	—	56	—	—	**0.84**	0.916	0.364	0.631
1901-1905	—	—	752	—	—	86	—	—	**0.62**	0.857	0.341	0.591
1906-1910	—	—	742	—	—	131	—	—	**0.62**	0.799	0.325	0.554
1911-1915	603	261	864	79	20	99	0.95	0.38	**0.66**	0.860	0.316	0.576
1916-1920	604	230	834	65	33	98	0.97	0.36	**0.66**	1.008	0.285	0.605
1921-1925	412	158	570	100	33	133	0.67	0.24	**0.45**	0.660	0.261	0.452
1926-1930	405	142	547	105	57	162	0.68	0.25	**0.46**	0.770	0.318	0.534
1931-1935	362	121	483	125	46	171	0.70	0.23	**0.46**	0.770	0.346	0.550
1921	76	41	117	25	8	33	0.68	0.31	**0.49**	0.651	0.253	0.443
1922	78	37	115	15	6	21	0.62	0.27	**0.44**	0.637	0.253	0.436
1923	82	31	113	26	2	28	0.71	0.20	**0.45**	0.667	0.255	0.452
1924	78	20	98	17	8	25	0.61	0.17	**0.39**	0.652	0.266	0.451
1925	98	29	127	17	9	26	0.74	0.23	**0.48**	0.694	0.278	0.477
1926	81	25	106	19	7	26	0.65	0.20	**0.42**	0.695	0.291	0.484
1927	72	23	95	23	17	40	0.62	0.25	**0.43**	0.753	0.304	0.519
1928	83	36	119	18	10	28	0.68	0.29	**0.48**	0.784	0.328	0.546
1929	87	26	113	21	6	27	0.72	0.20	**0.46**	0.800	0.336	0.558
1930	82	32	114	24	17	41	0.72	0.32	**0.51**	0.817	0.330	0.563
1931	78	27	105	29	8	37	0.74	0.23	**0.48**	0.759	0.338	0.540
1932	75	23	98	21	10	31	0.68	0.22	**0.45**	0.777	0.329	0.544
1933	78	23	101	28	7	35	0.77	0.21	**0.48**	0.790	0.352	0.562
1934	67	28	95	24	13	37	0.67	0.29	**0.48**	0.782	0.359	0.562
1935	64	20	84	23	8	31	0.66	0.20	**0.42**	0.744	0.353	0.540
1936	63	36	99	22	13	35	0.65	0.36	**0.50**	0.750	0.372	0.553
1937	59	32	91	20	7	27	0.62	0.29	**0.45**	0.756	0.371	0.556

CANCER.

The number of deaths from cancer and other malignant tumours during 1937 was 367, of which 181 were deaths of males and 186 of females. This gives a death rate of 1.41 per 1,000 of the population. The actual number of persons who died from these conditions is the lowest since 1927, and the death rates show that the incidence of these deaths was the lowest since 1931. The death rate for males (1.43) was slightly higher than the death rate for females (1.40).

The statistics for malignant disease since 1896 for West Ham and the country as a whole are given in Table XXXV. It will be seen from this table that both series of death rates have shown a progressive increase during this period, and that in both the rates have been practically doubled. It has not so far been definitely decided whether this increase is due to an actual increase in the number of persons who die as a result of malignant disease. It is certain that a part at least of the increase is due to the fact that diagnosis of these conditions is now more easily and satisfactorily carried out than was the case three or four decades ago. There is some evidence, however, that certain types of cancer are definitely increasing in frequency.

It should be noted that the differential sex rates for the country as a whole show that at all periods during the last forty years malignant disease has been a more fruitful cause of death in females than in males, but that this sex difference appears to be less marked now that it was formerly. In West Ham the process of equalization established itself during the early post-war period, and the death rate for males is now considerably greater than the rate for females. It is probable that this phenomenon is in part due to the increasing frequency of deaths from malignant disease of the lungs or of other parts of the respiratory tract.

It is satisfactory to note that the death rates from cancer for West Ham have been uniformly lower than the corresponding death rates for London and the country as a whole.

Details of the deaths from malignant disease for the year 1937 are given in Tables XXXVI(a) and XXXVI(b). Of the 181 male deaths, 16—or 8.8 per cent.—occurred in persons under 40 years of age, and 57—or 31.5 per cent.—in persons over 70 years of age. Of the 186 female deaths, the corresponding percentages are 3.8 and 25.8 respectively. The incidence in males

under 40 years is high, and is accounted for almost entirely by carcinoma of the lung or associated parts, by carcinoma of the lower part of the large bowel, and by sarcomata of the bones and other sites. Malignant tumours which caused death under 25 years of age were more common in males (5 deaths) than in females (1 death).

Table XXXV.

Deaths from cancer (malignant disease).

Period	West Ham No. of deaths			Crude death-rates per 1,000 living						
				West Ham			London (both sexes)	England and Wales		
	Males	Females	Persons	Males	Females	Persons		Males	Females	Persons
1896-1900	—	—	843	—	—	**0.67**	0.917	0.650	0.942	0.801
1901-1905	—	—	984	—	—	**0.72**	0.994	0.725	1.000	0.867
1906-1910	—	—	1,110	—	—	**0.78**	1.066	0.819	1.053	0.940
1911-1915	620	703	1,323	0.86	0.94	**0.90**	1.205	0.964	1.141	1.056
1916-1920	624	717	1,341	0.90	0.99	**0.95**	1.281	1.188	1.191	1.190
1921-1925	905	907	1,812	1.19	1.13	**1.16**	1.380	1.210	1.325	1.270
1926-1930	957	951	1,908	1.27	1.20	**1.23**	1.515	1.363	1.455	1.411
1931-1935	1,072	960	2,032	1.55	1.33	**1.44**	1.662	1.510	1.557	1.534
1921	177	172	349	1.19	1.09	**1.14**	1.328	1.142	1.281	1.215
1922	175	175	350	1.16	1.10	**1.13**	1.331	1.167	1.286	1.229
1923	184	165	349	1.20	1.02	**1.11**	1.389	1.203	1.326	1.267
1924	197	209	406	1.27	1.28	**1.28**	1.414	1.246	1.351	1.300
1925	172	186	358	1.11	1.14	**1.12**	1.437	1.290	1.377	1.336
1926	186	206	392	1.21	1.27	**1.24**	1.456	1.307	1.413	1.362
1927	170	191	361	1.11	1.18	**1.14**	1.489	1.332	1.417	1.376
1928	192	188	380	1.28	1.19	**1.24**	1.516	1.377	1.469	1.425
1929	188	183	371	1.25	1.16	**1.21**	1.550	1.386	1.483	1.437
1930	221	183	404	1.51	1.18	**1.34**	1.570	1.411	1.494	1.454
1931	215	193	408	1.48	1.27	**1.38**	1.637	1.450	1.516	1.484
1932	195	216	411	1.38	1.46	**1.42**	1.611	1.495	1.524	1.510
1933	245	161	406	1.77	1.11	**1.44**	1.650	1.490	1.559	1.526
1934	198	194	392	1.47	1.37	**1.42**	1.720	1.534	1.590	1.563
1935	219	196	415	1.66	1.42	**1.53**	1.694	1.578	1.595	1.587
1936	242	175	417	1.86	1.29	**1.57**	1.778	1.612	1.636	1.625
1937	181	186	367	1.43	1.40	**1.41**	1.788	1.634	1.632	1.633

Table XXXVI(a).

Sites and forms of fatal cancer. 1937.

		All ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–
(a) Deaths of males																	
	All sites	181	1	1	3	10	1	3	4	21	18	31	31	23	21	8	5
	Carcinoma	160	—	—	2	6	1	3	3	19	18	29	29	19	19	8	4
	Sarcoma	8	—	1	1	3	—	—	—	1	—	1	—	1	—	—	—
	Others, and ill-defined	13	1	—	—	1	—	—	1	1	—	1	2	3	2	—	1
45	Lip	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	Tongue	6	—	—	—	—	—	—	—	1	—	1	—	—	2	—	2
	Mouth	3	—	—	—	—	—	—	—	—	1	—	—	1	—	1	—
	Tonsil	3	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—
	Jaw	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	Pharynx	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
	Others (1)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	15	—	—	—	—	—	—	—	1	2	3	1	2	3	1	2
46	Oesophagus	10	—	—	—	—	—	—	—	1	3	2	3	1	—	—	—
	Stomach	32	—	—	—	—	1	—	1	4	5	4	9	3	3	1	1
	Small intestine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Cæcum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Hepatic flexure	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	Splenic flexure	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sigmoid flexure	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Large intestines (colon)	19	—	—	1	—	—	—	—	2	2	3	3	4	2	2	—
	Rectum (excluding anus)	18	—	—	—	1	—	—	1	2	—	4	3	4	2	1	—
	Liver	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	Gall bladder	3	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—
	Pancreas	10	—	—	—	—	—	—	—	3	—	2	2	1	1	1	—
	Others (2)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	94	—	—	1	1	1	—	2	13	10	16	20	13	11	5	1
47	Larynx	5	—	—	—	1	—	—	—	—	1	1	1	1	—	—	—
	Trachea	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Bronchus	6	—	—	—	—	—	—	—	2	1	1	2	—	—	—	—
	Lung	15	—	—	—	2	—	1	2	1	3	2	2	1	1	—	—
	Mediastinum	4	—	—	1	1	—	—	—	—	—	2	—	—	—	—	—
	Pleura	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
	Total	31	—	—	1	4	—	1	2	3	5	6	5	2	2	—	—
50	Breast	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
51	Kidney, suprarenal	3	—	—	—	2	—	—	—	—	—	—	1	—	—	—	—
	Bladder, urethra ureter	9	1	—	—	—	—	—	—	1	1	3	1	—	1	1	—
	Prostate	13	—	—	—	—	—	—	—	2	—	3	2	2	1	1	2
	Testis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Penis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Scrotum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	25	1	—	—	2	—	—	—	3	1	6	4	2	2	2	2
52	Skin	3	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—
53	Brain, meninges	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Thyroid	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
	Bones (except jaw)	5	—	—	—	3	—	—	—	1	—	—	—	—	1	—	—
	Lymph glands	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
	Others (3) and unspecified	6	—	—	—	—	—	2	—	—	—	—	1	2	1	—	—
	Total	13	—	1	1	3	—	2	—	1	—	—	1	2	2	—	—

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes intestine undefined, peritoneum, omentum, mesentery, anus
(3) Includes abdomen, eye, muscles, etc.

TABLE XXXVI(b).

SITES AND FORMS OF FATAL CANCER. 1937.

		All ages	0–	5–	15–	25–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85–
	(b) Deaths of females																
	All sites	186	—	1	—	5	1	5	10	17	27	32	40	26	11	8	3
	Carcinoma	175	—	—	—	4	1	5	10	16	25	31	39	22	11	8	3
	Sarcoma	5	—	1	—	1	—	—	—	1	1	—	—	1	—	—	—
	Others, and ill-defined	6	—	—	—	—	—	—	—	—	1	1	1	3	—	—	—
45	Lip	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tongue	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
	Mouth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tonsil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Jaw	2	—	—	—	—	—	—	—	1	—	—	1	-	—	—	—
	Pharynx	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Others (1)	2	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—
	Total	5	—	—	—	—	—	—	—	3	—	—	1	—	1	—	—
46	Oesophagus	2	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—
	Stomach	30	—	—	—	1	—	—	1	2	3	6	5	6	4	2	—
	Small intestine	4	—	—	—	—	—	—	—	1	—	—	1	2	—	—	—
	Cæcum	2	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—
	Hepatic flexure	3	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—
	Splenic flexure	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Sigmoid flexure	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Large intestine (colon)	20	—	—	—	—	1	—	1	—	4	5	5	1	1	1	1
	Rectum (excluding anus)	24	—	—	—	2	—	—	2	—	5	2	5	6	2	—	—
	Liver	4	—	—	—	—	—	—	—	—	—	1	2	—	—	1	—
	Gall bladder	4	—	—	—	—	—	—	—	—	1	1	1	—	—	—	1
	Pancreas	5	—	—	—	—	—	—	—	1	1	—	1	1	1	—	—
	Others (2)	2	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—
	Total	101	—	—	—	3	1	—	5	7	15	17	23	16	8	4	2
47	Larynx	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
	Trachea	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
	Bronchus	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Lung	6	—	—	—	1	—	—	—	1	2	1	1	—	—	—	—
	Mediastinum	2	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—
	Pleura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	11	—	—	—	1	—	—	—	1	2	1	3	2	—	1	—
48	Uterus	23	—	—	—	—	—	—	4	5	2	4	4	1	2	1	—
49	Ovary and Fallopian tube	6	—	—	—	—	—	2	—	—	2	1	1	—	—	—	—
	Valva and vagina	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
	Others	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	7	—	—	—	—	—	2	—	—	2	2	1	—	—	—	—
50	Breast	30	—	—	—	1	—	3	1	1	5	6	5	5	—	2	1
52	Skin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53	Brain, meninges	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Thyroid	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Kidney, suprarenal	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
	Bladder, urethra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Bones (except jaw)	2	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—
	Lymph glands	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Others (3) and unspecified	6	—	—	—	—	—	—	—	—	1	1	2	2	—	—	—
	Total	9	—	1	—	—	—	—	—	—	1	2	3	2	—	—	—

(1) Includes palate, cheek (internal surface), salivary glands, gums.
(2) Includes intestine undefined, peritoneum, omentum, mesentery, anus.
(3) Includes abdomen, eye, muscles, etc.

In both sexes the most common seat of malignant tumours was the digestive tract. The sex incidence of these tumours was very similar, and the relative frequency in the two sexes of tumours at different parts of the digestive tract was also similar. An exception to this statement was constituted by tumours of the pancreas, which accounted for the deaths of twice as many males as of females. Of the males, 19.1 per cent. of the deaths from malignant disease of the alimentary tract were of persons under 55 years of age, and of the females 15.8 per cent. Cancer of the digestive tract tended, on the whole, to kill at a slightly earlier age in males than in females.

Fatal malignant disease of the respiratory tract was approximately three times as common in males than in females. Of the 31 male deaths, 11 occurred in men under the age of 55 years. As a recorded cause of death in the prime of life, these conditions are now of considerable importance. In females, all except 2 of the 11 deaths were of women over 55 years of age.

In females, cancer of the breast accounted for the second highest number of all cancer deaths. It should be noted that almost half of these deaths were of women over 65 years of age. Cancer of the uterus and of the other genital organs gave a combined total which was equal to the number of deaths from cancer of the breast. About a third of these deaths occurred in women below the age of 55 years.

Of all the deaths from malignant disease, 335 were due to carcinomata, 13 to sarcomata, and 19 to other forms of malignant tumour, or tumours of undefined type.

TUBERCULOSIS.

The number of new cases of tuberculosis which came to the notice of the department during 1937 was 407. Of these cases, 324 (182 males and 142 females) suffered from the pulmonary form of the disease, and 83 cases (50 males and 33 females) from the non-pulmonary forms. The case rate for all forms of tuberculosis was 1.57 per 1,000 of the population. Further details of the notifications are given in the section of this report devoted to tuberculosis.

During the year the number of deaths ascribed by the Registrar-General to all forms of tuberculosis was 227, of which 138 were deaths of males and 89 of females. The number

of deaths due to tuberculosis of the respiratory system—including pulmonary tuberculosis and tuberculosis of the larynx—was 203, of which 127 were deaths of males and 76 of females. The death rate for all forms of tuberculosis was 0.87 per 1,000 of the population, as compared with rates of 0.89 for 1936, 0.92 for 1935, and 0.98 for 1934. The death rate for the respiratory forms of the disease was 0.78 per 1,000 of the population as compared with the rates of 0.78 for 1936, 0.83 for 1935, and 0.87 for 1934.

Data regarding the deaths from all forms of tuberculosis since 1896 are given in Table XXXVII., and in Table XXXVIII. corresponding data are given for deaths from respiratory forms since 1876.

The most outstanding feature which is brought out by these two tables is the very considerable decline which has occurred in the mortality from this disease. There is some doubt regarding the accuracy of the causes of death, as stated on death certificates, so far as the returns for tuberculosis during the last century are concerned. Post-mortem examinations were not then made so frequently as they are at the present time, and patients did not then have the opportunities for accurate diagnosis which exist to-day. Hence it is probable that in the earlier years of the tables the numbers given are an understatement of the true position. It is seen that the death rate from all forms of tuberculosis and from the respiratory form have both been approximately halved. On the whole, this decline has been continuous, but it is noteworthy that the fall was greatly accelerated during the immediate post-war years. This post-war reduction in the tuberculosis death rate was a significant example of the result of increasing care of the tuberculous patient and of an augmentation of the health consciousness of the community. It is satisfactory to note that the rates are still declining.

The local rates are higher than those for the country as a whole. This is understandable, since in a large urban community the tuberculosis rates often reflect the conditions which are inseperable from urban and industrial life. In this respect the West Ham rates compare favourably with the rates for other large urban centres of population. What is more important is the fact that, after the period ending with the war, the local rates have shown a decline which is roughly proportional to those for the country as a whole. Thus, the local rates have made good running after a delayed start.

Table XXXVII.

Deaths from tuberculosis (all forms).

Period	West Ham No. of deaths			Crude death-rates per million living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1896-1900	—	—	2,473	—	—	**1,977**	2,175	1,657	1,907
1901-1905	—	—	2,654	—	—	**1,948**	2,011	1,185	1,584
1906-1910	—	—	2,485	—	—	**1,755**	1,798	1,351	1,567
1911-1915	1,412	1,038	2,450	1,968	1,389	**1,673**	1,652	1,206	1,419
1916-1920	1,339	1,030	2,369	1,934	1,429	**1,676**	1,782	1,208	1,462
1921-1925	1,086	797	1,883	1,423	991	**1,201**	1,230	946	1,082
1926-1930	991	765	1,756	1,315	964	**1,135**	1,089	810	943
1931-1935	886	575	1,461	1,281	794	**1,032**	945	680	807
1921	233	158	391	1,562	1,001	**1,274**	1,267	998	1,127
1922	201	169	370	1,330	1,062	**1,193**	1,279	977	1,121
1923	202	168	370	1,319	1,042	**1,177**	1,205	932	1,062
1924	220	158	378	1,423	971	**1,191**	1,205	928	1,061
1925	230	144	374	1,482	882	**1,174**	1,195	895	1,039
1926	209	152	361	1,358	938	**1,143**	1,106	828	961
1927	194	155	349	1,263	958	**1,107**	1,112	843	972
1928	194	150	344	1,298	953	**1,121**	1,067	800	928
1929	202	144	346	1,348	913	**1,125**	1,122	810	959
1930	192	164	356	1,308	1,061	**1,182**	1,037	770	898
1931	187	109	296	1,291	718	**998**	1,041	762	896
1932	192	140	332	1,359	946	**1,148**	972	713	837
1933	192	121	313	1,390	836	**1,106**	968	692	824
1934	166	104	270	1,231	736	**978**	899	638	763
1935	149	101	250	1,127	729	**924**	848	599	718
1936	138	98	236	1,063	721	**888**	825	570	692
1937	138	89	227	1,089	670	**875**	824	576	695

An interesting feature which is shown by the West Ham rates is the fact that the deaths from respiratory tuberculosis among females are tending to show a more pronounced and continuous decline than are the corresponding rates for males. This feature is contrary to the experience of many other large areas, in which there has been a tendency for the female rates to decline much more slowly than the corresponding male rates. I shall deal with this matter again in later reports.

Table XXXVIII.

Deaths from tuberculosis of respiratory system.

Period	West Ham No. of deaths			Crude death-rates per million living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	917	—	—	**1,575**	2,138	1,948	2,041
1881-1885	—	—	1,060	—	—	**1,471**	1,928	1,739	1,831
1886-1890	—	—	1,481	—	—	**1,626**	1,782	1,498	1,636
1891-1895	—	—	1,697	—	—	**1,550**	1,633	1,302	1,462
1896-1900	—	—	1,643	—	—	**1,314**	1,530	1,131	1,324
1901-1905	—	—	1,829	—	—	**1,343**	1,438	1,013	1,218
1906-1910	—	—	1,741	—	—	**1,230**	1,299	927	1,107
1911-1915	1,065	747	1,812	1,484	1,000	**1,237**	1,246	872	1,051
1916-1920	1,071	820	1.891	1,547	1,138	**1,338**	1,384	916	1,124
1921-1925	887	637	1,524	1,621	792	**972**	984	741	857
1926-1930	851	648	1,499	1,129	817	**969**	898	651	770
1931-1935	775	506	1,281	1,121	699	**905**	795	557	672
1921	185	126	311	1,240	798	**1,013**	1,003	777	884
1922	163	134	297	1,079	842	**957**	1,024	766	889
1923	164	135	299	1,071	837	**951**	958	724	836
1924	184	124	308	1,190	762	**970**	969	729	844
1925	191	118	309	1,231	722	**970**	967	709	833
1926	174	127	301	1,131	784	**953**	897	655	771
1927	164	134	298	1,067	828	**945**	914	678	791
1928	165	124	289	1,104	788	**942**	879	641	755
1929	181	120	301	1,208	761	**979**	938	661	793
1930	167	143	310	1,138	925	**1,029**	863	624	739
1931	157	97	254	1,084	639	**856**	872	622	742
1932	166	114	280	1,175	770	**968**	806	578	687
1933	175	107	282	1,267	739	**997**	819	571	690
1934	149	92	241	1,105	651	**873**	759	520	635
1935	128	96	224	968	693	**827**	722	498	605
1936	118	88	206	909	647	**775**	703	472	583
1937	127	76	203	1,002	572	**782**	702	475	584

Table XXXIX.

Comparative statistics of other areas.

Name of town	Population as estimated by the Registrar-General, mid-1937	Per 1,000 population		Comparability factor (A.C.F.)	Adjusted death rate	Tuberculosis Death rate per 1,000 population		Infantile mortality rate	Maternal mortality (per 1,000 total births)		
		Birth rate	Crude death rate			Pulmonary	Other forms		From sepsis	From other causes	Total
Birmingham	1,043,000	16.30	11.70	1.10	12.90	0.72	0.08	60	0.74	2.22	2.96
Bradford	289,510	13.85	14.74	1.00	14.74	0.65	0.12	70	0.95	1.67	2.92
Bristol	415,100	14.46	11.44	0.98	11.21	0.67	0.13	46	1.12	2.41	3.53
Cardiff	220,200	15.40	12.60	1.06	13.30	0.82	0.17	65	0.85	2.82	3.67
Croydon	242,300	13.50	11.56	0.96	11.08	0.56	0.08	60	0.30	3.28	3.57
Hull	319,400	18.20	12.60	1.10	13.80	0.92	0.20	77	0.83	1.65	2.48
Leeds	491,800	14.80	13.36	1.07	14.30	0.72	0.11	67	0.79	1.45	2.24
Leicester	262,900	14.48	12.46	1.02	12.71	0.82	0.14	63	1.27	0.00	1.27
Liverpool	867,110	19.29	13.21	1.15	15.19	0.79	0.13	82	0.58	1.73	2.31
London	4,094,500	13.44	12.52	1.02	12.77	0.71	0.09	60	0.81	1.41	2.22
Manchester	751,371	14.31	13.52	1.14	15.41	0.88	0.15	76	1.34	2.85	4.19
Newcastle	290,400	16.50	13.30	1.13	15.03	0.93	0.19	91	1.00	3.21	4.21
Nottingham	278,800	15.96	13.44	1.03	13.84	0.84	0.15	80	0.87	1.95	2.82
Plymouth	210.460	14.60	13.06	0.98	12.79	0.69	0.07	46	2.19	3.13	5.32
Portsmouth	256,200	14.88	11.50	0.99	11.38	0.55	0.07	44	0.00	1.51	1.51
Salford	201,800	15.10	14.60	1.18	17.23	0.88	0.13	84	0.94	3.47	4.41
Sheffield	518,200	15.37	12.53	1.13	14.16	0.69	0.11	55	1.57	1.81	3.37
Stoke-on-Trent	272,800	16.70	13.10	1.22	16.00	0.80	0.14	81	0.84	3.75	4.59
Sunderland	182,900	19.70	14.00	1.12	15.70	0.80	0.23	85	1.06	2.39	3.45
West Ham	259,500	16.10	12.00	1.15	13.80	0.78	0.09	62	0.46	0.69	1.15

COMPARATIVE STATISTICS OF OTHER AREAS.

Comparative figures for West Ham and for nineteen other large urban areas are given in Table XXXIX. The main features of this table may be summarised as follows:—

(a) Only six other towns—namely: Birmingham, Hull, Liverpool, Newcastle, Stoke-on-Trent, and Sunderland—had a higher birth rate than West Ham.

(b) As judged by the adjusted death rate, eight other towns had a lower death rate than this area.

(c) Nine other towns had a lower death rate from pulmonary tuberculosis.

(d) The infant mortality rate was the eighth lowest amongst the towns quoted.

(e) Two other towns had a slightly lower death rate from puerperal sepsis, but the maternal mortality rate from all causes was the lowest of the towns quoted.

When considered in relation to the fact that West Ham is almost entirely an industrial area, these results may be considered as very satisfactory.

III. INFECTIOUS DISEASES.

INFECTIOUS DISEASES.

During the year 1937 the number of notifications of all infectious diseases (excluding tuberculosis) received was 2,239, as compared with 1,690 for the year 1936. The figure for 1937 represents an increase of 32.5 per cent. on the figure for the previous year. The increase is largely accounted for by an increase in the number of cases of scarlet fever notified, and by a less evident increase in the number of cases of diphtheria and of pneumonia. The deaths from notifiable diseases (excluding tuberculosis and pneumonia) during 1937 numbered 44, compared with 31 deaths in the previous year.

Main data on the weekly incidence, age grouping, and ward distribution of the principal infectious diseases are given in Tables I., II., and III. These tables do not include particulars regarding the following diseases: Malaria, cholera, relapsing fever, continued fever, typhus, plague. During the year under review, 5 cases of malaria were notified. There were no deaths from this or any of the other diseases mentioned, and no notifications were received in respect of these other conditions. No case of anthrax or of rabies came to the notice of the department.

The following was the quarterly distribution of notifications of all notifiable infectious diseases (exclusive of tuberculosis) during the year: 1st quarter, 523; 2nd quarter, 412; 3rd quarter, 631; 4th quarter, 673.

Of the 2,239 notifications, 27.7 per cent. referred to patients under 5 years of age, 61.3 per cent. to patients under 10 years, and 73.0 per cent. to patients under 15 years.

The deaths from the seven principal zymotic diseases—viz. smallpox, scarlet fever, diphtheria, enteric fever, measles, whooping cough, and diarrhoea and enteritis (under two years)—numbered 89, which gives a death rate of 0.34 per 1,000 living. For the years 1936, 1935 and 1934 the respective number of deaths from these seven conditions were 161, 82, and 206; and the death rates per 1,000 living were 0.61, 0.38 and 0.74. As judged by

Table I.

Weekly and quarterly notifications of infectious diseases.

Week	Smallpox	Scarlet fever	Diphtheria	Enteric fevers	Puerperal fever	Puerperal pyrexia	Acute pneumonia	Erysipelas	Cerebro-spinal fever	Ophthalmia neonatorum	Poliomyel. & polioenceph	Encephalitis lethargica	Dysentery	Tuberculosis: Pulmonary	Tuberculosis: Other	Measles (1)	Whooping cough (2)
1	—	17	6	—	—	3	23	3	—	—	—	—	—	6	2		
2	—	11	5	—	1	—	36	3	—	—	1	—	—	7	—		
3	—	9	7	2	—	2	27	4	—	—	—	—	—	8	3		
4	—	13	2	—	1	1	16	2	—	—	—	—	—	7	4		
5	—	14	7	—	—	—	9	6	1	—	—	—	—	6	1		
6	—	8	9	2	—	1	4	6	1	—	1	—	—	4	1		
7	—	11	8	—	—	1	3	4	—	—	—	—	—	7	2		
8	—	10	8	—	1	3	8	1	1	—	—	—	—	3	2		
9	—	10	10	—	—	1	4	2	—	—	—	—	—	6	1		
10	—	17	11	1	—	1	2	6	—	—	—	—	1	7	1		
11	—	26	7	—	—	3	9	2	—	—	—	—	1	8	4		
12	—	19	8	—	—	1	12	—	—	—	—	—	—	8	1		
13	—	15	8	—	—	3	14	4	—	—	—	—	—	3	1		
1st qr.	—	180	96	5	3	20	167	43	3	—	2	—	2	80	23		
14	—	6	7	—	1	2	7	2	—	1	—	—	—	5	—		
15	—	17	6	—	—	—	4	4	—	1	—	—	1	9	3		
16	—	20	3	—	—	—	8	2	—	—	—	—	—	11	2		
17	—	15	5	—	—	2	8	3	—	—	—	—	—	5	3		
18	—	15	7	1	—	—	5	—	1	—	—	—	—	8	1		
19	—	8	11	—	—	2	7	3	1	—	1	—	—	5	1		
20	—	11	8	—	—	2	4	2	—	—	1	—	—	5	2		
21	—	9	10	—	—	3	4	5	1	1	1	—	—	10	4		
22	—	6	4	—	—	2	7	—	—	—	1	—	—	10	2		
23	—	11	6	—	—	—	7	3	—	—	—	—	—	7	2		
24	—	10	7	—	—	2	3	2	—	1	1	—	—	8	4		
25	—	24	6	2	—	1	3	1	—	1	3	—	—	8	3		
26	—	25	12	2	—	2	5	2	—	—	1	—	—	1	1		
2nd qr.	—	177	92	3	1	18	72	29	3	5	9	—	1	92	28		
27	—	26	11	—	—	2	6	2	—	—	1	—	—	3	1		
28	—	26	14	—	—	3	1	3	—	—	—	—	—	8	1		
29	—	26	13	—	—	—	5	—	—	—	—	—	—	3	1		
30	—	30	9	—	—	2	4	3	—	—	1	—	—	3	—		
31	—	18	3	—	—	1	4	4	—	1	—	—	—	9	1		
32	—	15	6	1	—	1	1	4	—	—	1	—	—	5	1		
33	—	14	9	—	—	—	1	2	—	—	—	—	—	5	1		
34	—	9	7	—	—	2	4	—	—	—	—	—	—	5	3		
35	—	32	18	—	—	1	4	3	—	—	1	—	—	7	—		
36	—	33	19	1	—	1	4	2	—	—	1	—	—	2	—		
37	—	42	19	1	—	—	2	4	—	—	1	—	—	3	—		
38	—	39	10	—	—	5	4	5	—	—	—	—	—	3	1		
39	—	48	19	—	—	4	4	6	—	—	1	—	—	9	—		
3rd qr.	—	358	157	3	—	22	44	38	—	1	7	—	—	65	10		
40	—	36	14	—	* —	1	3	—	—	—	2	—	1	8	1		
41	—	31	17	3	—	2	6	5	—	—	—	—	—	8	1		
42	—	37	13	1	—	2	4	3	—	—	—	—	—	3	—		
43	—	37	15	—	—	—	3	9	—	—	—	—	—	1	2		
44	—	31	8	—	—	1	1	6	—	2	—	—	—	7	3		
45	—	25	12	—	—	2	12	1	1	—	—	—	—	6	—		
46	—	26	10	—	—	—	6	3	—	1	—	—	—	7	2		
47	—	30	14	—	—	2	6	2	—	—	—	—	—	6	1		
48	—	33	14	—	—	—	4	2	—	—	—	—	—	5	1		
49	—	21	12	—	—	—	8	6	—	1	—	—	—	5	—		
50	—	21	5	—	—	2	4	10	—	—	—	—	—	4	—		
51	—	15	12	—	—	2	6	4	—	—	—	—	—	4	—		
52	—	16	12	—	—	1	8	6	1	—	—	—	—	—	—		
4th qr.	—	359	158	4	—	15	71	57	2	4	2	—	1	64	11		
Whole year	—	1074	503	15	4	75	354	167	8	10	20	—	4	301	72		

* Puerperal fever ceased to be notifiable on 3rd October, 1937.
(1), (2). These diseases were not notifiable during 1937.

Table II.

Infectious diseases. 1937. Cases and deaths by age and sex.

Ages (years)	Scarlet fever				Diphtheria				Enteric fever				Erysipelas				Pneumonia			
	Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases (acute)		Deaths (all forms)	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 1	4	5	—	—	4	4	—	1	—	—	—	—	1	1	1	1	15	12	33	18
1—	30	27	—	1	11	14	—	1	—	—	—	—	—	1	—	—	10	18	10	10
2—	29	30	—	1	19	11	2	1	1	—	—	—	1	—	—	—	7	7	2	2
3—	35	35	—	—	26	13	—	1	—	1	—	—	1	—	—	—	8	2	1	2
4—	65	64	—	—	37	29	—	1	1	—	—	—	—	—	—	—	5	4	2	1
5—	65	86	—	—	22	32	3	1	—	—	—	—	—	—	—	—	4	4	1	—
6—	50	72	—	—	34	24	—	1	—	—	—	—	—	—	—	—	7	5	—	—
7—	56	51	—	—	35	22	—	2	—	—	—	—	—	—	—	—	7	4	—	1
8—	33	32	—	—	13	13	—	—	—	—	—	—	—	2	—	—	1	1	—	—
9—	25	23	—	1	10	15	—	—	—	—	—	—	—	—	—	—	2	2	—	—
10—	65	81	1	—	30	57	1	2	—	2	—	—	3	6	—	—	10	4	—	1
15—	27	24	—	—	3	12	—	1	2	3	1	—	4	7	—	—	16	6	1	—
20—	11	13	—	—	—	3	—	—	—	2	—	—	3	6	—	—	13	5	1	2
25—	8	19	—	—	2	6	—	—	1	—	—	—	6	7	—	—	23	13	9	3
35—	1	3	—	—	—	2	—	—	—	2	—	—	9	15	—	—	29	14	5	5
45—	2	2	—	—	—	—	—	—	—	—	—	—	13	25	—	—	22	14	22	9
55—	—	1	—	—	—	—	—	—	—	—	—	—	15	22	2	1	18	14	29	14
65—	—	—	—	—	—	—	—	—	—	—	—	—	6	7	—	—	6	12	15	22
75—	—	—	—	—	—	—	—	—	—	—	—	—	2	4	—	—	6	4	15	14
All ages	506	568	1	3	246	257	6	12	5	10	1	—	64	103	3	2	209	145	146	104

TABLE II. (CONTINUED).

INFECTIOUS DISEASES. 1937. CASES AND DEATHS BY AGE AND SEX.

Ages (years)	Cerebro-spinal fever				Acute poliomyelitis and polio-encephalitis				Encephalitis lethargica				Dysentery				Puerperal pyrexia	Puerperal fever
	Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases	Deaths
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Under 1	3	—	3	—	4	—	1	—	—	—	—	—	—	1	—	—		
1—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—		
2—	—	1	—	1	1	1	—	—	—	—	—	—	—	—	—	—		
3—	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—		
4—	—	—	—	—	1	2	—	—	—	—	—	—	—	—	—	—		
5—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—		
7—	1	—	1	—	1	1	—	—	—	—	—	—	—	—	—	—		
8—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
9—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—		
15—	—	—	—	1*	1	—	—	—	—	—	—	—	—	—	—	—	2	—
20—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	—
25—	1	—	1	—	—	—	—	—	—	—	1	—	1	—	—	—	47	—
35—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	10	—
45—	—	—	—	—	—	1	—	1	—	—	—	2	—	—	—	—	—	—
55—	—	—	—	1	—	—	—	—	—	—	—	2	—	—	—	—		
65—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
75—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
All ages	6	2	5	3	13	7	1	1	—	—	2	4	3	1	—	—	79	—

* Death of case notified in 1936.

Table III.

Infectious diseases in wards. 1937.

No. of cases (C): No. removed to hospital (R): No. of deaths (D).

Ward	Scarlet fever			Diphtheria			Enteric fevers			Erysipelas			Acute pneumonia			Cerebro-spinal fever			Acute polio-myelitis and encephalitis			Ence-phalitis lethargica			Dysentery			Ophthalmia neonatorum			Puerperal fever and pyrexia		
	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D	C	R	D
New Town ..	58	47	—	15	15	1	—	—	—	16	7	—	14	8	14	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	3	2	—
Forest Gate ..	68	53	1	11	10	1	—	—	—	9	3	—	15	7	19	—	—	—	1	—	—	—	—	—	—	—	—	1	1	—	14	14	—
High Street ..	53	47	—	21	21	—	—	—	—	10	6	1	21	12	16	1	1	1	2	2	—	—	—	—	—	—	—	—	—	—	4	4	—
Broadway	23	21	—	21	21	—	1	1	—	6	2	2	15	6	15	—	—	—	1	1	—	—	—	1	—	—	—	—	—	—	13	13	—
Park	40	38	—	26	24	3	—	—	—	5	2	—	17	6	16	—	—	—	2	2	—	—	—	—	—	—	—	—	—	—	8	6	—
Upton	41	33	—	11	10	1	1	1	—	8	2	—	15	6	22	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	4	3	—
Plashet Road ..	94	75	—	14	13	—	—	—	—	5	1	—	12	3	8	1	1	*2	1	1	1	—	—	—	—	—	2	2	—	2	1	—
West Ham	50	40	—	45	45	—	3	3	—	5	1	—	16	10	15	—	—	—	2	2	—	—	—	—	—	—	1	1	—	3	3	—
Plaistow	155	118	—	38	38	1	1	1	—	12	2	—	23	6	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	—
Bemersyde	37	30	—	11	11	1	1	1	—	6	2	—	14	1	8	—	—	—	—	—	—	—	—	1	—	—	—	—	—	2	—	—
Canning Town and Grange	117	92	1	67	67	3	1	1	—	14	5	—	34	15	21	2	2	1	4	4	1	—	—	1	—	—	—	—	—	—	1	1	—
Hudsons	95	75	1	70	69	1	3	3	—	16	6	1	23	10	14	—	—	—	1	1	—	—	—	—	—	—	—	1	—	—	8	4	—
Ordnance	55	45	—	52	51	1	2	2	1	10	2	—	31	17	13	1	1	1	1	1	—	—	—	1	—	—	—	1	1	—	6	—	—
Beckton Road ..	44	37	—	30	30	1	—	—	—	16	8	1	35	16	20	1	1	1	1	1	—	—	—	—	—	—	—	2	—	—	3	2	—
Tidal Basin	63	52	—	19	19	1	1	1	—	16	12	—	34	14	16	1	1	1	—	—	—	—	—	1	—	—	—	2	—	—	1	—	—
Custom House and Silvertown ..	81	69	1	52	52	3	1	1	—	13	8	—	35	20	16	1	1	1	3	3	—	—	—	—	3	3	—	—	—	—	3	2	—
Totals	1,074	872	4	503	496	18	15	15	1	167	69	5	354	157	250	8	8	8	20	19	2	—	—	6	4	4	—	10	5	—	79	59	—

* One case notified in 1936

these conditions the year 1937 must be considered a healthy year. This zymotic death rate takes no account, however, of deaths from pneumonia and influenza, which together contribute considerably to the total mortality of any area.

The total number of the notified cases removed to hospital was 1,709. This gives a removal rate of 76.3 per cent., as compared with rates of 70.8 for 1936, 73.7 for 1935, and 65.6 for 1934. It is satisfactory to note that the removal rate is on the whole increasing, although the conditions to which this state gives rise are not unassociated with certain difficulties. The accommodation at the isolation hospital is sometimes taxed to the utmost, and at certain seasons a few cases of scarlet fever and diphtheria have to be treated in the London Fever Hospital. During the year 1937 the number of patients who were admitted to that institution was 104, of whom 99 suffered from scarlet fever and 5 from diphtheria.

It should be noted that, as in the tables in the section on Vital Statistics, the rates given in the tables in this section are crude rates. Therefore, the reservations which are mentioned on page 57 should be borne in mind in the study of these tables.

SMALLPOX.

No case of this disease was notified during the year.

In connection with the diagnosis of smallpox, three requests for a consultant's opinion were received from practitioners during the year. In each instance the final diagnosis was chicken-pox.

Particulars of the work carried out in connection with vaccination are given on page 46.

SCARLET FEVER.

The number of cases of scarlet fever which were notified during the year was 1,074, as compared with 666 in 1936 and 1,057 in 1935. Of the 1,074 cases, 506 were males and 568 were females. The case rate was 4.14 per 1,000 of the population. The number of deaths from this disease was 4, of which one was the death of a male, and 3 were deaths of females. The death rate per 1,000 of the population was 0.02, and the fatality rate was 0.37 per cent. The number of patients removed to hospital was 872, which gives a removal rate of 81.19 per cent. The disease was of a mild type and the fatality was the lowest since 1925.

Table IV.

Notifications of scarlet fever.

Period	Notifications		Removals to hospital		Fatality Per cent.	England and Wales. Case rate per 1.000 living
	No.	Rate per 1,000 living.	No.	Per cent.		
1888-1890	1,822	**3.20**	—	—	9.50	—
1891-1895	7,414	**6.77**	—	—	3.47	—
1896-1900	5,203	**4.16**	920	17.68	2.69	—
1901-1905	5,480	**4.02**	2,115	38.59	3.12	—
1906-1910	7,412	**5.24**	3,939	53.14	2.94	—
1911-1915	4,351	**2.97**	3,051	70.12	1.52	3.50
1916-1920	4,103	**2.90**	1,944	47.38	0.83	2.13
1921-1925	3,837	**2.45**	2,855	74.41	0.96	2.64
1926-1930	7,182	**4.64**	4,829	67.24	0.40	2.53
1931-1935	5,286	**3.73**	3,974	75.18	0.68	2.82
1921	1,695	**5.52**	1,119	66.02	0.65	3.64
1922	746	**2.40**	592	79.36	1.21	2.85
1923	530	**1.69**	412	77.74	1.32	2.24
1924	388	**1.20**	320	82.47	1.03	2.16
1925	478	**1.50**	412	86.19	1.26	2.36
1926	1,311	**4.15**	934	71.24	0.53	2.10
1927	1,987	**6.30**	1,230	61.90	0.35	2.16
1928	1,513	**4.93**	923	61.00	0.33	2.61
1929	1,455	**4.73**	1,032	70.93	0.41	3.05
1930	916	**2.99**	710	77.51	0.44	2.76
1931	657	**2.21**	551	83.87	0.76	2.05
1932	672	**2.32**	598	88.99	0.45	2.12
1933	1,356	**4.79**	1,034	76.25	0.44	3.21
1934	1,544	**5.59**	996	64.51	1.04	3.75
1935	1,057	**3.90**	795	75.21	0.57	2.96
1936	666	**2.51**	494	74.17	0.60	2.56
1937	1,074	**4.14**	872	81.19	0.37	2.33

Table V.

Deaths from scarlet fever (all ages).

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	327	—	—	**0.56**	0.716	0.648	0.681
1881-1885	—	—	391	—	—	**0.54**	0.451	0.419	0.435
1886-1890	—	—	238	—	—	**0.26**	0.248	0.234	0.241
1891-1895	—	—	257	—	—	**0.23**	0.186	0.179	0.182
1896-1900	—	—	140	—	—	**0.11**	0.140	0.129	0.134
1901-1905	—	—	171	—	—	**0.13**	0.132	0.121	0.126
1906-1910	—	—	218	—	—	**0.15**	0.091	0.082	0.086
1911-1915	27	39	66	0.04	0.05	**0.05**	0.065	0.059	0.062
1916-1920	15	19	34	*0.02*	*0.03*	**0.02**	0.037	0.030	0.033
1921-1925	21	16	37	0.03	*0.02*	**0.02**	0.029	0.029	0.029
1926-1930	19	10	29	*0.03*	*0.01*	**0.02**	0.017	0.016	0.017
1931-1935	21	15	36	0.03	*0.02*	**0.03**	0.016	0.017	0.017
1921	6	5	11	*0.04*	*0.03*	*0.04*	0.035	0.034	0.034
1922	5	4	9	*0.03*	*0.03*	*0.03*	0.036	0.037	0.036
1923	5	2	7	*0.03*	*0.01*	*0.02*	0.027	0.024	0.026
1924	1	3	4	*0.01*	*0.02*	*0.01*	0.022	0.023	0.023
1925	4	2	6	*0.03*	*0.01*	*0.02*	0.026	0.025	0.025
1926	3	4	7	*0.02*	*0.02*	*0.02*	0.019	0.016	0.017
1927	5	2	7	*0.03*	*0.01*	*0.02*	0.015	0.014	0.015
1928	4	1	5	*0.03*	*0.01*	*0.02*	0.014	0.015	0.015
1929	5	1	6	*0.03*	*0.01*	*0.02*	0.019	0.017	0.018
1930	2	2	4	*0.01*	*0.01*	*0.01*	0.018	0.019	0.019
1931	1	4	5	*0.01*	*0.03*	*0.02*	0.012	0.014	0.014
1932	2	1	3	*0.01*	*0.01*	*0.01*	0.012	0.014	0.013
1933	2	4	6	*0.01*	*0.03*	*0.02*	0.018	0.019	0.018
1934	12	4	16	*0.09*	*0.03*	*0.06*	0.024	0.024	0.024
1935	4	2	6	*0.03*	*0.01*	*0.02*	0.013	0.015	0.014
1936	1	3	4	*0.01*	*0.02*	*0.02*	0.013	0.012	0.012
1937	1	3	4	*0.01*	*0.02*	*0.02*	0.009	0.008	0.009

Incidence by age and season. From Table I. it will be seen that one-third of the cases occurred in the first half of the year, one-third in the third quarter, and one-third in the fourth quarter. The weekly incidence reached its maximum in the last three weeks of the third quarter, and from then onwards there was no marked change in the weekly incidence until the end of November. There was no definite epidemic at any period during the year.

The largest number of cases—viz. 155—occurred in Plaistow ward, and this ward actually had the highest incidence with a case rate of 8.80 of the population. The wards with the next highest incidence were Plashet Road (7.47), Canning Town and Grange (6.40), Hudsons (5.23), Custom House and Silvertown (4.46), and Forest Gate (4.12). The lowest incidence was in Broadway (1.76).

From the point of view of age grouping, 30.3 per cent. of the cases occurred in persons under the age of 5 years, 45.3 per cent. between the ages of 5 and 10 years, and 13.6 per cent. between the ages of 10 and 15 years.

The percentage of males attacked throughout the year was 47.3, but this percentage was by no means constant in different age groups. At certain age periods the excess percentage of females was considerably higher.

The statistics of scarlet fever are set out fully in Tables IV. and V. The statistics for incidence show that there has been considerable variation in the prevalence of this condition during the last fifty years. The highest incidence was reached in the period 1881-1895, and the lowest quinquennial rate was in the period 1916-1920. Annual rates show that there has been an increase of prevalence at intervals of about six or seven years. The general trend of incidence is certainly downwards. Comparison of the local rates with those for England and Wales show the slight excess incidence associated with an urban area.

The death rate from scarlet fever has decreased enormously in the last sixty years. From the figures given it will be seen that the highest death rate—0.56 per 1,000 living—occurred in the earliest period, namely 1876-1880. During the period 1886-1895 the death rate was reduced to a half of what it had been, and in the ensuing fifteen years the death rates were again approximately halved. Sintce 1911 there has been a further marked decrease in the rate, so that the number of deaths which are due to this disease

now number very few indeed. The reduction has been so considerable that the death rates for individual years are now of little value except to show broadly that deaths have been few.

A comparison of these local figures with the rates for the country as a whole shows that the decline has been very comparable in the two areas. Only in the period 1906-1910 is there any indication that there was some excess mortality in the local rates. There has been little difference in the death rates for the two sexes in the country as a whole. The local figures are based on so few deaths that a definite statement on this point is hardly warranted, but the figures suggest that mortality in males in this area is somewhat higher than in females.

The case mortality has shown a corresponding decline in the last fifty years. In the period before 1890 scarlet fever was a serious disease which was fatal in about ten per cent. of cases. Between 1890 and 1910 there was a considerable decline in fatality, but an even more marked decline occurred during the war period. The mortality at the present day is less than a tenth of what it was in the " eighties."

The fatality rates for individual years being based upon small numbers of deaths are liable to misinterpretation.

The figures which I have given for this area present very emphatically one aspect of the problem of scarlet fever. There is, however, a more sinister aspect. This condition was equally mild three centuries ago, and at that period the most famous physician of the day referred to it contemptuously as " this name of a disease." Yet about a hundred years later scarlet fever occupied a high place among the causes of death. Although it is to be hoped that the present low mortality will continue, false optimism should not be encouraged. The serum treatment of the condition has given the physician a weapon which was unknown to our ancestors, but the lesson of diphtheria shows that the introduction of a new and very virulent strain of an organism into the community will tax the resources of even the most modern methods of treatment.

DIPHTHERIA.

The number of cases of diphtheria notified during the year was 503, as compared with 468 in 1936 and 771 in 1935. Of the 503 cases, 246 were males and 257 were females. The case rate

Table VI.

Notifications of diphtheria (including membranous croup).

Period	Notifications		Removals to hospital		Fatality per cent.	England and Wales. Case rate per 1,000 living
	No.	Rate per 1,000 living.	No.	Per cent.		
1888-1890	389	0.68	—	—	32.13	—
1891-1895	2,747	2.51	—	—	23.19	—
1896-1900	5,103	4.08	1,231	24.12	16.97	—
1901-1905	3,968	2.91	1,926	48.54	12.83	—
1906-1910	2,646	1.87	1,803	68.14	12.06	—
1911-1915	2,089	1.43	1,705	81.62	10.91	1.41
1916-1920	3,810	2.70	2,921	76.67	9.97	1.49
1921-1925	3,600	2.30	3,312	92.00	4.28	1.29
1926-1930	4,381	2.83	3,957	90.32	3.65	1.53
1931-1935	2,749	1.94	2,672	97.20	6.00	1.36
1921	659	2.15	560	84.98	4.86	1.76
1922	673	2.17	611	90.79	6.54	1.37
1923	701	2.23	671	95.72	3.85	1.05
1924	801	2.48	751	93.76	4.12	1.07
1925	766	2.41	719	93.86	2.35	1.23
1926	698	2.21	669	95.85	1.86	1.31
1927	954	3.02	802	84.07	4.19	1.33
1928	1,049	3.42	913	87.04	3.24	1.55
1929	815	2.65	767	94.11	4.79	1.59
1930	865	2.82	806	93.18	3.93	1.84
1931	356	1.20	356	100.00	3.09	1.26
1932	303	1.05	295	97.36	3.96	1.08
1933	515	1.82	498	96.70	10.49	1.18
1934	804	2.91	788	98.01	6.09	1.70
1935	771	2.85	735	95.33	5.06	1.60
1936	468	1.76	464	99.15	3.21	1.41
1937	503	1.94	496	98.61	3.58	1.49

Table VII.

Deaths from diphtheria and membranous croup (all ages).

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	47	—	—	**0.08**	0.117	0.127	0.122
1881-1885	—	—	158	—	—	**0.22**	0.152	0.161	0.157
1886-1890	—	—	231	—	—	**0.25**	0.164	0.175	0.170
1891-1895	—	—	637	—	—	**0.58**	0.253	0.254	0.253
1896-1900	—	—	866	—	—	**0.69**	0.275	0.270	0.272
1901-1905	—	—	509	—	—	**0.37**	0.205	0.203	0.204
1906-1910	—	—	319	—	—	**0.23**	0.153	0.154	0.154
1911-1915	106	122	228	0.15	0.16	**0.16**	0.144	0.137	0.140
1916-1920	206	174	380	0.30	0.24	**0.27**	0.157	0.133	0.143
1921-1925	70	84	154	0.09	0.10	**0.10**	0.090	0.086	0.088
1926-1930	67	93	160	0.09	0.12	**0.10**	0.081	0.079	0.080
1931-1935	76	89	165	0.11	0.12	**0.12**	0.077	0.074	0.076
1921	13	19	32	*0.09*	*0.12*	**0.10**	0.127	0.125	0.126
1922	20	24	44	0.13	0.15	**0.14**	0.112	0.102	0.107
1923	13	14	27	*0.08*	*0.09*	**0.09**	0.072	0.070	0.071
1924	17	16	33	*0.11*	*0.10*	**0.10**	0.065	0.064	0.065
1925	7	11	18	*0.05*	*0.07*	*0.06*	0.072	0.070	0.071
1926	7	6	13	*0.05*	*0.04*	*0.04*	0.076	0.077	0.077
1927	19	21	40	*0.12*	0.13	**0.13**	0.071	0.068	0.070
1928	11	23	34	*0.07*	0.15	**0.11**	0.084	0.078	0.081
1929	17	22	39	*0.11*	0.14	**0.13**	0.086	0.088	0.087
1930	13	21	34	*0.09*	0.14	**0.11**	0.090	0.085	0.088
1931	4	7	11	*0.03*	*0.05*	*0.04*	0.070	0.064	0.067
1932	4	8	12	*0.03*	*0.05*	*0.04*	0.058	0.058	0.058
1933	28	26	54	0.20	0.18	**0.19**	0.067	0.065	0.066
1934	24	25	49	0.18	0.18	**0.18**	0.102	0.100	0.101
1935	16	23	39	*0.12*	0.17	**0.14**	0.088	0.084	0.086
1936	7	8	15	*0.05*	*0.06*	*0.06*	0.078	0.073	0.075
1937	6	12	18	*0.05*	*0.09*	*0.07*	0.070	0.074	0.072

was 1.94 per 1,000 of the population. The number of deaths from this disease was 18, of which 6 were of males and 12 of females. The death rate per 1,000 of the population was 0.07, and the fatality rate was 3.58 per cent. The number of patients removed to hospital was 496, which gives a removal rate of 98.61 per cent.

Age and seasonal incidence. Reference to Table I. will show that, as is usually the case with this disease, three-fifths of the attacks occurred during the third and fourth quarters of the year. The incidence in the early part of the third quarter was perhaps a little higher than is often found to be the case, but there was nothing to suggest epidemic prevalence during any particular week.

Table III. shows that the greatest number of cases occurred in the Hudsons Ward. The case rate here was 3.85 per 1,000 of the population, and the wards with the next highest incidence rates were West Ham (3.22), Ordnance (3.06), Custom House and Sivertown (2.86), Canning Town and Grange (2.73), and Plaistow (2.16). The lowest incidence (0.67) was found in Forest Gate ward, but several other wards had low rates.

From the standpoint of age incidence it can be shown from Table II. that 77.1 per cent. of the cases occurred under the age of ten years, and that 77.8 per cent. of the deaths occurred under this age. On the other hand, there was no marked variation in the case mortality at different age periods. Under 5 years this rate was 4.16 per cent.; from five to ten years it was 3.18 per cent.; and over ten years 3.48 per cent. A notable feature of the figures for this year was the great excess of females in cases over the age of ten years. At these ages 80 females were attacked as against 35 males.

The statistics of diphtheria are set out fully in Tables VI. and VII. The figures for incidence which are given in Table VI. show considerable variation in the quinquennial periods. The low rate in the first period is probably explained by the fact that the practice of notification had not then been adopted by practitioners as fully as it might have been. During the period 1891-1905 the case rate was high, with a peak towards the middle of the period, and since the latter date there has been some reduction in the case rates. In many areas diphtheria shows peak periods which are separated by about eight or ten years, and the same factor can be shown to be operative in the local rates. This factor

also serves to lessen the value of a comparison between the local rates and those for the country as a whole. Diphtheria is not at its maximum incidence throughout the country in any one year, and the rates for England and Wales therefore tend to show less marked variations than do the local rates. It is nevertheless significant that the local rates are often almost double the national rates. This excess incidence is partly accounted for by the urban nature of the local community.

The death rates reflect a more satisfactory state of affairs. In the early periods covered by Table VII. deaths from diphtheria were often attributed to other diseases, and consequently the mortality was comparatively low. The true mortality from this disease is apparent in the period 1891-1900, when it averaged over 0.6 per 1,000 of the population. Improvements in treatment, especially the introduction of antitoxin treatment, led to a progressive reduction in mortality, and the average rate during the last fifteen years is only about one-sixth of the rate for the closing years of last century. It should be noted that until the post-war period the local rates were often more than double the national rates, but that within recent years this difference has tended to disappear. Locally there has been no significant difference in the rates for males and females respectively, and this similarity in the effects of the disease on the two sexes is borne out by the national rates.

An instructive demonstration of the results of efficient treatment in this disease is given in column 6 of Table VI. It will be seen that the fatality rate in the pre-antitoxin era was very high, and that a quarter or more of all affected persons died. Since the closing years of last century this rate has decreased rapidly and progressively—with the exception of the rate for the years 1931-1935. The excess fatality in this period was caused by the very high rate in 1933, and by slightly lower rates in the two succeeding years. I have so far not obtained any direct bacteriological evidence on this point, but there appears to be no reason to doubt the fact that these high rates were caused by the introduction of a new and very virulent strain of the organism into the community in the year 1933, and it is probable that the strain was the *gravis* strain, which was then prevalent in certain other cities. This occurrence points to the fact that no definite conclusion should ever be drawn regarding the future behaviour of this disease.

Supply of antitoxin to practitioners. A supply of diphtheria antitoxin is kept at the Health Department for the use of practitioners who may desire to begin treatment before the patient is removed to hospital. After office hours antitoxin may be obtained from the Isolation Hospital. During the year 1937 seven requests for antitoxin were received by the department from local practitioners, and the average amount issued per patient was 18,000 units.

The number of requests for the years 1932 to 1936 inclusive were 8, 15, 31, 26 and 3 respectively. It would seem that there is normally little demand for this service, and that it is only when diphtheria becomes especially prevalent or virulent that any large call is made upon it. From the point of view of treatment there is no doubt that the most satisfactory procedure is to admit the patient to hospital at the earliest possible moment.

Immunization against diphtheria. Immunization against diphtheria is carried out at three clinics; the majority of the children are immunized at West Ham Lane clinic. In addition, immunization of children who have been admitted to Plaistow Hospital for various reasons is carried out at the hospital. Particulars of the latter service are given in the report of the medical superintendent.

Immunization is also carried out by general practitioners who receive the immunizing reagent from the Public Health Department.

During the year 1937 the total number of children immunized at the clinics was 557. Of these, 349 were under five years of age and 208 were over five years of age.

The number of final Schick tests carried out at the clinics was 389. Of these only 11 gave a positive result. In each of these cases further doses were given and further tests were carried out.

The number of children immunized by practitioners was 19.

The question of diphtheria in immunized children is dealt with in the report of the medical superintendent of Plaistow Hospital.

I do not propose to deal further with the question of the prevention of diphtheria in this report. A brief review of the position is sufficient to show that the proportion of the child population which has been immunized is low, and that the number of susceptible children in the community must be large.

ENTERIC FEVER.

The number of cases of enteric fever notified during the year was 15 as compared with 5 during the previous year and 3 during 1935. Of these cases 5 were males and 10 females. The case rate was 0.06 per 1,000 living. One death in a male was registered, and the death rate was 0.004 per 1,000 of the population. The fatality rate was 6.67 per cent. All the patients notified were treated in hospital.

The cases were spread fairly equally throughout the year, 5 occurring in the first quarter, 3 in the second quarter, 3 in the third quarter, and 4 in the fourth quarter. The ward distribution was also fairly broad, as will be seen from Table III. In considering this table it should be mentioned that two cases occurred in the same house in Ordnance ward, and a similar happening took place in West Ham ward. Ten of the 15 cases were between the ages of 15 and 45 years, but 3 of the cases were between the ages of 2 and 5 years.

In Tables VIII. and IX. the statistics of enteric fever are set out since the last years of last century. The enormous decrease in the number of notifications is well seen. The incidence in the closing years of the nineteenth century was about eighty times greater than what it was in the period 1931-1935. A comparison with the incidence rates for England and Wales so far as they are available shows a corresponding decline.

The death rates which are set out in Table IX. give an even more significant illustration of the changes which have been effected in the comparatively short space of fifty years. The death rate from enteric fever in West Ham for the period 1881-1885 was almost 120 times greater than what it was in the period 1931-1935. There is no doubt that the decline in mortality from this disease is a striking piece of evidence of the beneficial results of an enlightened system of public health practice. The statement refers especially to the great improvement in water supply, which was effected in the early years of the present century, and to the concurrent and subsequent improvement in the methods of disposal of faecal matter. The abolition of the privy, in itself an event apparently only distantly related to the science of medicine, was fraught with results which were far-reaching in their effect on the health of the nation. The sporadic cases which occur nowadays are usually due to carriers or to infected food, and their origin is therefore often difficult to trace.

Table VIII.

Notifications of enteric fever.

Period	Notifications		Removals to hospital		Fatality per cent.	England and Wales Case rate per 1,000 living
	No.	Rate per 1,000 living	No.	Per cent.		
1888-1890	451	0.79	—	—	27.72	—
1891-1895	1,301	1.19	—	—	18.91	—
1896-1900	1,945	1.56	192	9.87	17.58	—
1901-1905	1,737	1.28	754	43.41	16.23	—
1906-1910	827	0.58	582	70.37	14.75	—
1911-1915	427	0.29	330	77.28	19.67	0.25
1916-1920	220	0.16	140	63.64	14.55	0.12
1921-1925	93	0.06	41	44.09	13.98	0.09
1926-1930	77	0.05	61	79.22	15.58	0.08
1931-1935	31	0.02	18	58.06	9.68	0.05
1921	22	0.07	7	31.82	9.09	0.10
1922	14	0.05	3	21.43	14.29	0.06
1923	25	0.08	10	40.00	4.00	0.08
1924	19	0.06	16	84.21	21.05	0.11
1925	13	0.04	5	38.46	30.77	0.07
1926	18	0.06	16	88.89	16.67	0.07
1927	22	0.07	20	90.91	22.73	0.09
1928	20	0.07	13	65.00	5.00	0.09
1929	11	0.04	7	63.64	18.18	0.07
1930	6	0.02	5	83.33	16.67	0.07
1931	9	0.03	9	100.00	11.11	0.06
1932	9	0.03	5	55.56	0.00	0.06
1933	—	—	—	—	—	0.04
1934	10	0.04	3	30.00	10.00	0.03
1935	3	0.01	1	33.33	33.33	0.04
1936	5	0.02	5	100.00	20.00	0.06
1937	15	0.06	15	100.00	6.67	0.05

Table IX.

Deaths from enteric fevers (all ages).

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	103	—	—	**0.177**	0.281	0.273	0.277
1881-1885	—	—	169	—	—	**0.234**	0.230	0.203	0.216
1886-1890	—	—	204	—	—	**0.224**	0.195	0.164	0.179
1891-1895	—	—	246	—	—	**0.225**	0.194	0.154	0.173
1896-1900	—	—	342	—	—	**0.273**	0.205	0.147	0.175
1901-1905	—	—	282	—	—	**0.207**	0.135	0.092	0.113
1906-1910	—	—	122	—	—	**0.086**	0.084	0.056	0.070
1911-1915	46	38	84	0.064	0.051	**0.057**	0.059	0.037	0.048
1916-1920	21	11	32	0.030	*0.015*	**0.023**	0.028	0.020	0.024
1921-1925	9	4	13	*0.012*	*0.005*	*0.008*	0.013	0.012	0.013
1926-1930	9	3	12	*0.012*	*0.004*	*0.008*	0.010	0.009	0.009
1931-1935	1	2	3	*0.001*	*0.003*	*0.002*	0.006	0.005	0.005
1921	1	1	2	*0.007*	*0.006*	*0.007*	0.017	0.015	0.016
1922	2	—	2	*0.013*	—	*0.006*	0.013	0.011	0.012
1923	1	—	1	*0.007*	—	*0.003*	0.012	0.011	0.012
1924	3	1	4	*0.019*	*0.006*	*0.013*	0.013	0.012	0.013
1925	2	2	4	*0.013*	*0.012*	*0.013*	0.010	0.010	0.010
1926	3	—	3	*0.019*	—	*0.009*	0.010	0.009	0.009
1927	3	2	5	*0.020*	*0.012*	*0.016*	0.010	0.009	0.009
1928	1	—	1	*0.007*	—	*0.003*	0.011	0.011	0.011
1929	1	1	2	*0.007*	*0.006*	*0.007*	0.010	0.009	0.010
1930	1	—	1	*0.007*	—	*0.003*	0.009	0.007	0.008
1931	—	1	1	—	*0.007*	*0.003*	0.007	0.006	0.006
1932	—	—	—	—	—	—	0.007	0.006	0.006
1932	—	—	—	—	—	—	0.006	0.005	0.006
1934	—	1	1	—	*0.007*	*0.004*	0.004	0.004	0.004
1935	1	—	1	*0.008*	—	*0.004*	0.004	0.004	0.004
1936	1	—	1	*0.008*	—	*0.004*	0.006	0.006	0.006
1937	1	—	1	*0.008*	—	*0.004*	0.005	0.005	0.005

MEASLES.

The year 1937 was not a "measles year," and only one death occurred from this cause. The disease was not then notifiable, and no accurate information is available regarding the actual number of cases which occurred in the area. Measles was made notifiable in the County Borough of West Ham by an Order of the Ministry of Health, dated 29th September, 1938.

The mortality statistics of measles are set out in Table X. This table shows that in the period 1931-1935 the death rate was roughly about a third of what it was in the period 1876-1880. This large decline was not a continuous process, since the mortality in the period 1876-1880 was almost doubled in the decade 1886-1895, and a marked decline did not occur until the years which succeeded the war. The decline in the death rate is apparently continuing, but such a conclusion should be accepted with some reservation. Measles, like several of the other infections of childhood, is apt to behave in a paradoxical manner. It is regrettable that I have not so far been able to obtain data for the years before 1876, since these data would probably be of considerable interest. In several areas the mortality from measles was comparatively low towards the middle of last century, and a gradual increase took place during the third and fourth quarter of the century. This increase is reflected in the rates for the country as a whole for the period 1876-1890. It is possible that Table X. starts at a period when the local rates were on the increase after a period of low mortality, and that at the present time we are approaching the trough between two waves of high mortality, the crest of the first wave having been in the period 1891-1895. It should not therefore be assumed that the present low rates will necessarily continue.

The rates as a whole compare favourably, so far as the rate of decline is concerned, with those for England and Wales, though the local rates for individual periods are, perhaps naturally, above the national rates. As for the country as a whole, the local rates show that the mortality is nearly always slightly higher in males than in females.

WHOOPING COUGH.

Whooping cough is not at present a notifiable disease in this area, and no accurate information is available regarding the number of cases which occurred during the year. The number of

Table X.

Deaths from measles at all ages.

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	205	—	—	**0.35**	0.406	0.366	0.386
1881-1885	—	—	349	—	—	**0.48**	0.439	0.391	0.414
1886-1890	—	—	581	—	—	**0.64**	0.499	0.439	0.468
1891-1895	—	—	731	—	—	**0.67**	0.432	0.384	0.407
1896-1900	—	—	689	—	—	**0.55**	0.445	0.398	0.420
1901-1905	—	—	717	—	—	**0.53**	0.348	0.308	0.327
1906-1910	—	—	820	—	—	**0.58**	0.309	0.274	0.291
1911-1915	422	412	834	0.59	0.55	**0.57**	0.374	0.315	0.343
1916-1920	301	290	591	0.43	0.40	**0.42**	0.246	0.177	0.208
1921-1925	150	136	286	0.20	0.17	**0.18**	0.136	0.109	0.122
1926-1930	129	124	253	0.17	0.16	**0.16**	0.106	0.087	0.096
1931-1935	104	76	180	0.15	0.10	**0.13**	0.075	0.062	0.068
1921	3	7	10	*0.02*	*0.04*	*0.03*	0.066	0.053	0.059
1922	69	49	118	0.46	0.31	**0.38**	0.164	0.136	0.149
1923	7	5	12	*0.05*	*0.03*	*0.04*	0.157	0.121	0.138
1924	51	63	114	0.33	0.39	**0.36**	0.138	0.112	0.125
1925	20	12	32	0.13	*0.07*	**0.10**	0.153	0.122	0.137
1926	42	36	78	0.27	0.22	**0.25**	0.098	0.081	0.089
1927	2	4	6	*0.01*	*0.02*	*0.02*	0.102	0.083	0.092
1928	38	31	69	0.25	0.20	0.22	0.121	0.098	0.109
1929	6	16	22	*0.04*	*0.10*	**0.07**	0.092	0.080	0.086
1930	41	37	78	0.28	0.24	**0.26**	0.119	0.093	0.105
1931	1	2	3	*0.01*	*0.01*	*0.01*	0.092	0.073	0.082
1932	45	32	77	0.32	0.22	**0 27**	0.093	0.077	0.085
1933	—	1	1	*0.00*	*0.01*	*0.01*	0.053	0.044	0.048
1934	56	38	94	0.42	0.27	**0.34**	0.102	0.085	0.093
1935	2	3	5	*0.02*	*0.02*	*0.02*	0.036	0.031	0.033
1936	27	23	50	0.21	0.17	**0.19**	0.075	0.061	0.067
1937	1	—	1	*0.01*	*0.00*	*0.00*	0.028	0.023	0.026

Table XI.

Deaths from whooping cough at all ages.

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1876-1880	—	—	379	—	—	**0.65**	0.491	0.563	0.528
1881-1885	—	—	521	—	—	**0.72**	0.426	0.491	0.459
1886-1890	—	—	700	—	—	**0.77**	0.413	0.473	0.444
1891-1895	—	—	547	—	—	**0.50**	0.366	0.427	0.397
1896-1900	—	—	629	—	—	**0.50**	0.333	0.382	0.358
1901-1905	—	—	651	—	—	**0.48**	0.281	0.320	0.301
1906-1910	—	—	583	—	—	**0.41**	0.231	0.274	0.253
1911-1915	191	229	420	0.27	0.31	**0.29**	0.194	0.222	0.209
1916-1920	163	205	368	0.24	0.28	**0.26**	0.156	0.157	0.157
1921-1925	171	229	400	0.22	0.28	**0.26**	0.125	0.137	0.131
1926-1930	114	138	252	0.15	0.17	**0.16**	0.091	0.103	0.097
1931-1935	59	79	138	0.09	0.11	**0.10**	0.051	0.061	0.056
1921	11	26	37	*0.07*	0.16	**0.12**	0.113	0.128	0.121
1922	74	101	175	0.49	0.64	**0.56**	0.157	0.176	0.167
1923	13	10	23	*0.08*	*0.06*	**0.07**	0.104	0.112	0.108
1924	37	47	84	0.24	0.29	**0.26**	0.101	0.105	0.103
1925	36	45	81	0.23	0.28	**0.25**	0.149	0.162	0.156
1926	12	8	20	*0.08*	*0.05*	**0.06**	0.100	0.110	0.105
1927	28	45	73	0.18	0.28	**0.23**	0.088	0.099	0.094
1928	15	11	26	*0.10*	*0.07*	**0.08**	0.071	0.079	0.075
1929	50	64	114	0.33	0.41	**0.37**	0.147	0.172	0.160
1930	9	10	19	*0.06*	*0.06*	*0.06*	0.047	0.055	0.051
1931	16	19	35	*0.11*	*0.13*	**0.12**	0.058	0.067	0.063
1932	10	19	29	*0.07*	*0.13*	**0.10**	0.068	0.079	0.074
1933	21	26	47	0.15	0.18	**0.17**	0.051	0.061	0.056
1934	7	8	15	*0.05*	*0.06*	*0.05*	0.044	0.056	0.051
1935	5	7	12	*0.04*	*0.05*	*0.04*	0.035	0.042	0.039
1936	11	7	18	*0.08*	*0.05*	*0.07*	0.049	0.053	0.051
1937	5	13	18	*0.04*	*0.10*	*0.07*	0.041	0.045	0.043

deaths which took place was 18, of which 5 were of males and 13 of females. The death rate was 0.07 per 1,000 of the population.

The statistics of whooping cough are given in Table XI. This table shows that, though the number of deaths which occurred in any individual year recently was comparatively small, yet the total adds up to a considerable number of young children who succumbed to a malady for which there is a possibility that prevention may be before long a practical proposition. In the last ten years the number of deaths from this disease was 333. This represents almost as many deaths as occurred in the corresponding period from diphtheria and scarlet fever combined.

Table XI. shows that the downward trend of mortality which is seen in the whooping cough rates for the country as a whole is reflected in the local rates, though the latter are considerably higher than the former. In the period under review the local rates reached their peak in the period 1886-1890, when a rate of 0.77 per 1,000 living was attained. Thereafter a decline took place, mainly by three steps. The first step occurred between the period 1886-1890 and the period 1891-1895, and the lower rate persisted with little change until 1910. During the pre-war and early war years a further decline took place, and there was again little change in the new rates until after 1925. In the most recent period, beginning in the year 1926, a further notable decline in the death rate occurred. It is possible that this step-effect has been accentuated by the periodic years of increased prevalence and mortality, but on the whole it seems that the figures do bring out a feature which is real. The rates for the country as a whole show a corresponding decline of a much more gradual and progressive nature. The differential rates for the two sexes bring out the fact that the mortality is slightly greater in females than in males.

It is possible that the decline in the mortality from whooping cough is associated with the increasing practice of sending patients to hospital—especially if they are suffering from certain complications. This practice is to be highly commended, and it is a pity that it is not more widely recognised by parents that many lives could be saved if medical advice were obtained early in the course of the disease, so that the patient could be admitted to hospital if necessary.

ERYSIPELAS.

The number of cases of erysipelas notified during the year was 167, of which 64 were males and 103 females. This gives a case rate of 0.64 per 1,000 living. The corresponding numbers of cases for the years 1934, 1935, and 1936, were 174, 126, and 145 respectively. The number of deaths was 5, which gives a death rate of 0.02 per 1,000 of the population. The number of patients removed to hospital was 69, so that the removal rate was 41.32 per cent.

Age and seasonal incidence. Table I. shows that the cases occurred fairly regularly throughout the year. The highest incidence was in the fourth quarter. From Table II. it will be seen that the largest proportion—77.7 per cent.—of the patients were over the age of 45 years. From the figures for the year 1937 it is evident that the disease was especially fatal under 1 year of age, and in the decade 55 to 65 years. The incidence was highest in the New Town ward (1.04 per 1,000 living), and the wards with the next highest incidence were Beckton Road (0.92), Hudsons (0.88), Tidal Basin (0.78), and Custom House (0.72). The lowest incidence (0.36) occurred in the West Ham Ward.

The statistics of erysipelas since 1891 are given in Table XII. The case rate has shown a slight reduction from a maximum of 0.94 in the period 1911-1915 to 0.60 in the period 1931-1935. The rates are about 50 per cent. higher than the corresponding case rates for England and Wales. The death rates on the other hand have shown a marked decline from a rate of 0.08 forty years ago to a rate of 0.02 in the last quinquennial period. The decline is more obvious in the local than in the national rates.

These data for erysipelas are particularly interesting if they are viewed together with the data for scarlet fever. In both diseases a relatively enormous decline in the death rate has been effected in the space of forty or fifty years, but in the same period there has been only a slight reduction in the attack rate. In both diseases the decline in the mortality is due largely to a reduction of the fatality in individual cases. The fatality of scarlet fever declined to about one-fifth of what it was in the period 1901-1905, and the fatality of erysipelas declined to about a third of what it was at that period. In both diseases these features were associated with an increasing removal rate—though in the cases of erysipelas this increase was intermittent.

Table XII.

Erysipelas. Notifications and deaths.

Period	West Ham					Crude rates per million living			
	Cases	Deaths	Fatality per cent.	Removed to hospital		West Ham		England and Wales	
				No.	Per cent.	Case rate	Death rate	Case rate	Death rate
1891 1895	—	82	—	—	—	—	75	—	48
1896-1900	—	62	—	—	—	—	50	—	35
1901-1905	992	71	7.16	52	5.24	728	52	—	36
1906-1910	1,214	53	4.37	123	10.13	858	37	—	28
1911-1915	1,381	49	3.55	264	19.12	943	33	669	27
1916-1920	1,012	38	3.75	68	6.72	716	27	434	20
1921-1925	848	26	3.07	158	18.63	541	17	347	19
1926-1930	1,027	20	1.95	180	17.53	664	13	414	23
1931-1935	844	24	2.84	310	36.73	596	17	423	28
1921	165	13	7.88	19	11.52	537	42	349	19
1922	153	—	0.00	32	20.92	493	0	345	18
1923	138	4	2.90	17	12.32	439	13	321	16
1924	177	8	4.52	32	18.08	558	25	332	17
1925	215	1	0.47	58	26.98	675	3	385	22
1926	213	2	0.94	41	19.25	674	6	373	21
1927	197	8	4.06	27	13.71	625	25	374	21
1928	200	4	2.00	30	15.00	652	13	414	23
1929	188	6	3.19	41	21.81	611	20	447	26
1930	229	—	0.00	41	17.90	760	0	460	26
1931	188	13	6.91	73	38.83	634	44	381	25
1932	158	—	0.00	59	37.34	546	0	361	25
1933	198	3	1.52	78	39.39	700	11	446	30
1934	174	8	4.60	55	31.61	630	29	510	36
1935	126	—	0.00	45	35.71	465	0	416	26
1936	145	—	0.00	48	33.10	546	0	403	24
1937	167	5	2.99	69	41.32	644	19	370	14

The significance of these findings lies in the fact—the importance of which has been recognised only within recent years—that erysipelas and scarlet fever are both due to the same type of organism. These "streptococci" may be very widespread in the throats of apparently healthy individuals, and while many escape with mild and ill-defined infections, others develop a disease which can be given a name. In both diseases increasing hospitalization has done little to reduce the incidence, but in both this factor has been accompanied by a significant reduction in the proportion of fatal cases. Whether these two features stand to each other in the relation of cause and effect is a matter which cannot be dealt with here.

ENCEPHALITIS LETHARGICA.

No cases of this disease were notified during the year. There were six deaths of patients who had been notified in previous years as having contracted the disease.

ACUTE POLIOMYELITIS.

There was a slight increase in this condition during the year 1937. The number of cases notified was 18, of whom 13 were males and 5 females. This gives a case rate of 0.07 per 1,000 of the population. The number of cases notified during the year 1936 was 3.

No definite connection between the cases was traced in the year 1937.

Most of the cases were notified in the second half of the second quarter and in the third quarter of the year. The ages of the patients ranged from 11 months to 17 years in the case of males, and from two-and-a-half to seven years in the case of females.

Two of the patients died, but in neither case was death due to the disease notified. In one case death was due to pneumonia and in the other to meningitis.

The most recent enquiries show that three of the patients have apparently recovered, and the remainder are in various stages of recovery either in hospital or attending hospital for appropriate treatment.

ACUTE POLIO-ENCEPHALITIS.

Two cases of this disease occurred during the year—one in Plashet Road ward and one in Canning Town and Grange ward. One case was in a male aged 1 year; this patient recovered. The other was in a female of 50 years; the patient died.

CEREBRO-SPINAL FEVER.

The number of cases of this disease which occurred during the year was 8, of which 6 were males and 2 females. The case rate was 0.031 per 1,000 living. As is seen in Table I., most of the cases occurred in the first half of the year. Six of the eight cases were under 4 years of age. All of the patients were removed to hospital.

The actual number of deaths from this disease which occurred during the year was 8, but one of these deaths referred to a patient who was notified as suffering from cerebro-spinal fever in 1936. Based on the deaths of cases notified during 1937, the death rate is 0.27 per 1,000 living, and the fatality rate 87.50 per cent.

MALARIA.

During the year 5 cases of this disease were notified. In each instance the disease was believed to have been contracted abroad. All the patients were seamen and all were admitted to the Seamen's Hospital. Two of the cases were notified during the tenth week, two during the twenty-second week, and one during the thirty-second week. There were no deaths.

DYSENTERY.

Four cases of dysentery were notified during the year. Three of these patients were seamen who were admitted to the Seamen's Hospital. The fourth patient was a child of six months. There were no deaths.

DIARRHOEA AND ENTERITIS.

During 1937 the number of deaths of children under two years of age from diarrhoea and enteritis was 47. The corresponding figures for the years 1934, 1935, and 1936 were 31, 19, and 73 respectively. Of the 47 children who died, 31 were males and 16 females. The death rate per 1,000 of the population was 0.18, and the death rate per 1,000 live births was 11.22.

Table XIII.

Deaths from diarrhoea and enteritis (under two years).

(Rates based upon less than 20 deaths are printed in *italic* type.)

Period	West Ham									England and Wales Rate per 1,000 live births
	No. of deaths			Rate per 1,000 living			Rate per 1,000 live births			
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	
1876-1880	—	—	379	—	—	0.65	—	—	16.80	18.68
1881-1885	—	—	467	—	—	0.65	—	—	15.30	15.41
1886-1890	—	—	697	—	—	0.77	—	—	20.02	17.18
1891-1895	—	—	872	—	—	0.80	—	—	21.46	17.32
1896-1900	—	—	1,744	—	—	1.39	—	—	39.91	23.79
1901-1905	—	—	1,864	—	—	1.37	—	—	39.86	21.03
1906-1910	—	—	1,336	—	—	0.94	—	—	29.99	15.25
1911-1915	785	652	1,437	1.09	0.87	0.98	35.07	30.48	32.83	23.56
1916-1920	337	259	596	0.49	0.36	0.42	17.37	14.07	15.76	11.19
1921-1925	249	197	446	0.33	0.24	0.28	12.73	10.56	11.67	9.58
1926-1930	158	112	270	0.21	0.14	0.17	10.28	7.66	9.00	7.52
1931-1935	119	75	194	0.17	0.10	0.14	10.06	6.60	8.37	6.07
1921	85	77	162	0.57	0.49	0.53	20.19	19.10	19.66	16.06
1922	25	21	46	0.17	0.13	0.15	6.10	5.44	5.78	6.58
1923	40	30	70	0.26	0.19	0.22	9.96	7.93	8.97	8.12
1924	48	27	75	0.31	0.17	0.24	13.18	7.58	10.41	7.58
1925	51	42	93	0.33	0.26	0.29	14.17	12.29	13.25	8.77
1926	52	41	93	0.34	0.25	0.29	14.95	12.69	13.86	9.16
1927	14	20	34	*0.09*	0.12	0.11	*4.56*	6.84	5.68	6.69
1928	26	19	45	0.17	*0.12*	0.15	8.59	*6.58*	7.61	7.22
1929	35	22	57	0.23	0.14	0.19	12.09	7.66	9.89	8.26
1930	31	10	41	0.21	*0.06*	0.14	10.70	*3.69*	7.31	6.15
1931	22	19	41	0.15	*0.13*	0.14	8.16	*7.39*	7.79	5.90
1932	39	20	59	0.28	0.14	0.20	15.25	8.26	11.85	6.60
1933	29	15	44	0.21	*0.10*	0.16	12.93	*6.93*	9.99	6.98
1934	21	10	31	0.16	*0.07*	0.11	9.39	*4.77*	7.15	5.36
1935	8	11	19	*0.06*	*0.08*	*0.07*	*3.82*	*5.23*	*4.52*	5.56
1936	42	31	73	0.32	0.23	0.27	19.54	15.24	17.45	5.75
1937	31	16	47	0.24	0.12	0.18	14.49	7.81	11.22	5.54

The statistics of this important condition are set out fully in Table XIII. Before the closing years of the nineteenth century deaths which were undoubtedly due to "epidemic" or "summer" diarrhoea were often attributed to some other cause—either as the result of the cause of death which was filled in on the certificate, or of the manner of allocating the cause of death certified. The true importance of this condition as a cause of death of infants and young children is therefore not seen until the period 1896-1900, when the rate was 39.91 per 1,000 live births. No reduction took place until the period 1916-1920, when the rate was halved, and since that date the rate has again been practically halved. In other words, whereas in this area at the beginning of the century epidemic diarrhoea caused on an average about 370 deaths of young children every year, it now causes about 40 deaths. The actual number of deaths in any year naturally shows great variation. After a hot dry summer more deaths are supposed to occur than after a wet summer. Nevertheless, epidemic prevalence of this disease is now a comparatively trivial affair to what it was forty years ago.

There is no doubt that increasing attention to the proper care of the young infant has contributed considerably to this decline. In this way the establishment of infant welfare clinics has played a part. Another important factor in the decline is the reduction of horse-drawn traffic, and consequently in the amount of stable manure and the number of flies. Urban areas nearly always have a higher rate of mortality than rural areas, and in this respect the local rates should be higher than those for less dense centres of population. It is therefore satisfactory to note that the West Ham five year rate has been proportionately much more reduced than the corresponding rate for England and Wales.

A study of the number of deaths which has been caused yearly by this condition in the last ten years should be sufficient to convince the reader that, though it does not warrant the attention of one of the "notorious" or "popular" infections, it is nevertheless a very potent cause of death. Continued attention by each individual and by the local authority to the cleanliness of the district, and continued care on the part of each mother in the feeding of her infant, are the most likely means of ensuring a further reduction in the mortality.

INFLUENZA.

Influenza in itself is not a notifiable disease in this country. The number of notifications received in respect of one of its major complications—influenzal pneumonia—is dealt with in the section on pneumonia. During the year 1937 the number of deaths from influenza was 93, of which 49 were of males and 44 of females. The death rate per 1,000 of the population was 0.36. The corresponding number of deaths for the years 1934, 1935, and 1936 were 24, 19, and 20 respectively; and the death rates for these years were 0.09, 0.07, and 0.11. It might be said that 1937 was almost an "influenza year," since the number of deaths indicated that the disease was present almost in epidemic proportions.

Influenza is one of the most baffling of diseases from the standpoint of the epidemiologist, and it is therefore difficult to discuss its vagaries in a short note. From Table XIV. it is immediately apparent that the death rate has not diminished during the last forty years, and the figures at their face value suggest that the mortality has not decreased. This fact is partly explained by changes in the method of allocating deaths. Whatever the statistical difficulties, it is evident that influenza is a serious cause of death in any five year period.

The table unfortunately starts at a period just after the passing of the peak of a great epidemic wave, and it is seen that the reduction in mortality was gradual. The period 1916-1920 shows a very high mortality rate, which is due almost entirely to the great pandemic of 1918-1919. After this event the mortality again declined gradually. More detailed analysis of the figures for the post-war years shows that smaller epidemics occurred at irregular intervals. If we take as a rough measure of epidemic proportions a death rate of 0.50, it is seen that the disease was prevalent to this degree in the country as a whole in the years 1922, 1927, 1929 and 1933, and for practical purposes also in the year 1924. Applying the same criterion to the local rates it is seen that the disease was also present in epidemic proportions locally in the years 1922, 1929, and 1933. In 1924 and in 1927 the mortality was much less than in the country as a whole, so that it might be said that this area escaped some of the expected consequences of the epidemic. It is characteristic of influenza that it spreads as rapidly as the fastest means of human travel—whatever that may be at the particular period under discussion. In the London area escape from infection can sometimes be anticipated but never assured, and the

Table XIV.

Deaths from influenza (all ages).

(Rates based upon less than 20 deaths are printed in *italic* type)

Period	West Ham No. of deaths			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1891-1895	—	—	286	—	—	**0.26**	0.423	0.405	0.414
1896-1900	—	—	231	—	—	**0.18**	0.312	0.309	0.310
1901-1905	—	—	152	—	—	**0.11**	0.196	0.189	0.192
1906-1910	—	—	204	—	—	**0.14**	0.235	0.234	0.235
1911-1915	145	89	234	0.20	0.12	**0.16**	0.192	0.168	0.179
1916-1920	728	834	1,562	1.05	1.16	**1.11**	1.167	0.953	1.047
1921-1925	247	291	538	0.32	0.36	**0.34**	0.377	0.359	0.368
1926-1930	207	188	395	0.27	0.24	**0.26**	0.382	0.360	0.370
1931-1935	178	174	352	0.26	0.24	**0.25**	0.317	0.312	0.315
1921	34	42	76	0.23	0.27	**0.25**	0.250	0.226	0.237
1922	101	125	226	0.67	0.79	**0.73**	0.568	0.559	0.563
1923	25	22	47	0.16	0.14	**0.15**	0.235	0.207	0.220
1924	60	67	127	0.39	0.41	**0.40**	0.493	0.487	0.490
1925	27	35	62	0.17	0.21	**0.19**	0.339	0.316	0.327
1926	38	23	61	0.25	0.14	**0.19**	0.243	0.216	0.229
1927	59	60	119	0.38	0.37	**0.38**	0.575	0.559	0.567
1928	20	14	34	0.13	*0.09*	**0.11**	0.216	0.178	0.196
1929	80	86	166	0.53	0.55	**0.54**	0.731	0.737	0.734
1930	10	5	15	*0.07*	*0.03*	*0.05*	0.144	0.110	0.126
1931	45	52	97	0.31	0.34	**0.33**	0.360	0.360	0.360
1932	23	42	65	0.16	0.28	**0.22**	0.320	0.334	0.327
1933	91	56	147	0.66	0.39	**0.52**	0.564	0.570	0.567
1934	13	11	24	*0.10*	*0.08*	**0.09**	0.151	0.128	0.139
1935	6	13	19	*0.05*	*0.09*	*0.07*	0.193	0.171	0.182
1936	15	14	29	*0.12*	*0.10*	**0.11**	0.162	0.136	0.148
1937	49	44	93	0.39	0.33	**0.36**	0.456	0.452	0.454

death rate is frequently a measure of the extent of infection. We may ask why the local death rates were so comparatively low in the years 1924 and 1927. Much discussion has centred round the question whether an attack of influenza gives immunity to later infection, and a commonly accepted view is that it may do so—but only for a short period. In the period 1916-1920, and again in the year 1922 this area suffered more severely from influenza than did the country as a whole. There is perhaps a suggestion here that the immunizing effect was of a more prolonged character, and that this accounted for the comparatively low local rates in the succeeding epidemic years.

Throughout this tabulated history of influenza males have invariably had a higher death rate than females, but in West Ham in the period 1916-1925 the opposite was the case.

The behaviour of influenza resembles that of several other infectious diseases which affect primarily the throat or the respiratory passages. Even the most enlightened community can do little to prevent the introduction of a new strain of the virus into its midst, with consequences which on a smaller scale resemble the catastrophe which ensues when a new disease finds its way into virgin soil.

PNEUMONIA.

The number of notifications of acute pneumonia—primary and influenzal—which were received during 1937 was 354, of which 209 were in respect of males and 145 of females. The case rate was 1.36 per 1,000 living. The corresponding number of cases in the years 1934, 1935, and 1936 were 453, 290 and 320 respectively, and the case rates for these years were 1.64, 1.07, and 1.20. Of the 354 cases, the number removed to hospital was 157. This gives a removal rate of 44.35 per cent.

The distribution of these cases by season, age, and wards is given in Tables I.—III. inclusive. Almost half the cases occurred in the first quarter of the year, and after that the second and fourth quarters were almost equally affected. It should be noted that the number of cases in the first four weeks of the year were so large as to constitute epidemic prevalence in these weeks. The percentage of the cases which occurred in the age groups under 5, 5—15, 15—25, 25—45, and over 45 years, were 24.9, 14.4, 11.3, 22.3, and 27.1 respectively.

Table XV.

Deaths from pneumonia, all forms (all ages).

Period	West Ham No. of deaths *			Crude death rates per 1,000 living					
				West Ham			England and Wales		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1896-1900	—	—	1,333	—	—	1.07	1.440	0.984	1.205
1901-1905	—	—	2.011	—	—	1.48	1.496	1.069	1.275
1906-1910	—	—	1,875	—	—	1.32	1.439	1.043	1.235
1911-1915	1,209	967	2,176	1.69	1.29	1.49	1.332	0.910	1.112
1916-1920	1,525	1,109	2,634	2.20	1.54	1.86	1.575	0.931	1.216
1921-1925	1,254	991	2,245	1.64	1.23	1.43	1.152	0.790	0.963
1926-1930	934	761	1,695	1.24	0.96	1.10	1.054	0.706	0.873
1931-1935	690	567	1,257	1.00	0.78	0.89	0.875	0.610	0.737
1921	240	158	398	1.61	1.00	1.30	1.104	0.745	0.916
1922	355	304	659	2.35	1.91	2.12	1.280	0.883	1.073
1923	210	129	339	1.37	0.80	1.08	1.051	0.704	0.870
1924	260	234	494	1.68	1.44	1.56	1.192	0.835	1.006
1925	189	166	355	1.22	1.02	1.11	1.134	0.784	0.951
1926	172	156	328	1.12	0.96	1.04	0.986	0.683	0.828
1927	201	159	360	1.31	0.98	1.14	1.135	0.776	0.948
1928	177	135	312	1.18	0.86	1.02	0.964	0.622	0.786
1929	250	195	445	1.67	1.24	1.45	1.322	0.909	1.107
1930	134	116	250	0.91	0.75	0.83	0.863	0.543	0.696
1931	161	142	303	1.11	0.94	1.02	0.989	0.702	0.840
1932	161	115	276	1.14	0.78	0.95	0.857	0.623	0.735
1933	129	111	240	0.93	0.77	0.85	0.876	0.624	0.745
1934	149	117	266	1.10	0.83	0.96	0.856	0.570	0.707
1935	90	82	172	0.68	0.59	0.64	0.796	0.532	0.659
1936	107	96	203	0.82	0.71	0.76	0.841	0.551	0.690
1937	146	104	250	1.15	0.78	0.96	0.876	0.576	0.720

The number of deaths from all forms of pneumonia was 250, of which 146 were of males and 104 of females. The death rate from all forms of pneumonia was 0.96 per 1,000 of the population.

From Table XV. it is seen that the death rates from all forms of pneumonia have not shown any great variation during the last forty years. During the period 1916-1920 the influenza epidemic was accompanied by an increased death rate from other forms of pneumonia. If this period is excluded, the crude rates seem to suggest that there is a slight downward trend in the rates. During the whole of the period studied the local rates have been higher than the national rates, and the excess has on the whole been most marked in those years in which influenza was prevalent. The death rates for males are consistently higher than the corresponding female rates.

BRONCHITIS.

The number of deaths which were due to bronchitis was 160, of which 84 were of males and 76 of females. This gives a death rate of 0.62 per 1,000 of the population. The corresponding number of deaths for the year 1936 was 134, which gives a death rate of 0.52. This disease is further discussed on page 96.

TROPICAL AND RARE DISEASES.

Under this general heading are included the following diseases: cholera, plague, anthrax, rabies, relapsing fever and continued fever. No cases of any of these diseases occurred in the area during the year.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

Puerperal pyrexia was defined in the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, as " any febrile condition (other than a condition which is required to be notified as puerperal fever) occurring in a woman within twenty-one days after childbirth or miscarriage in which a temperature of 100.4° F.(38°C.) or more has been sustained during a period of twenty-four hours, or has recurred during that period." Under the Public Health Act 1936 which came into force on the 1st October, 1937, puerperal fever ceased to be notifiable, and on and after that date any condition which would have been notified previously as puerperal fever was to be notified as puer-

peral pyrexia. In this section notification of the two conditions are treated together. During the year the number of notifications received was 79, which gives a rate of 13.59 per 1,000 total notified births. The number of these cases removed to hospital was 59. This gives a removal rate of 74.70 per cent. The distribution of cases in the first three quarters of the year was fairly equal (Table I.), and almost 60 per cent. of the cases occurred in the age group 25—35 years (Table II.). No deaths occurred from puerperal fever.

The epidemiology of the condition is further discussed under the heading " Maternal Mortality " in the section on Vital Statistics.

OPHTHALMIA NEONATORUM.

This disease, the duty of notifying which was, under the Public Health (Ophthalmia Neonatorum) Regulations, 1926, placed solely upon the medical practitioner in charge of the case, consists of a purilent discharge from the eye of an infant occurring within twenty-one days of birth.

The number of cases of this condition which were notified during the year 1937 was 10. This gives a case rate of 1.78 per 1,000 total notified live births. Five of the cases were removed to hospital. No case occurred in the first quarter of the year; in the succeeding three quarters the number of cases notified were 5, 1, and 4 respectively. There were no deaths.

Further notes on these cases appear in the section on Maternity and Child Welfare.

PLAISTOW FEVER HOSPITAL.

REPORT FOR THE YEAR ENDED
31ST DECEMBER, 1937.

BY
DONALD MACINTYRE, M.D., D.P.H.,
Medical Superintendent.

This hospital has available 210 beds for the treatment of cases of the common infectious diseases. It is built in seven two-storey blocks. Six of these blocks comprise two large wards, giving an average accommodation of 15 beds each, and each large ward has a side-ward attached providing separate accommodation for one or two patients. The seventh block has three wards on each floor. Two of the ground-floor wards have accommodation for two and four patients respectively, and the third is a single-bedded ward. The upper floor is reserved for the treatment of staff cases.

The diseases commonly treated are scarlet fever, diphtheria, enteric fever, measles, whooping cough, chicken-pox, erysipelas, pneumonia, cerebro-spinal fever, influenza, and puerperal fever. The number of beds allocated to any particular disease is varied from time to time according to the prevalence of the different infections. The "barrier" method of nursing is practised in the main wards for the isolation of cases with infectious complications, and one of the wards is equipped for the nursing of cases of different infections by the "bed-isolation" method.

A receiving-room is available for the examination of cases of suspected infectious disease which have been sent in by medical practitioners, or brought along by relatives. This room is also used for the swabbing of children who have been recommended for admission to a convalescent home.

A disinfecting station, equipped with two large steam disinfectors, is attached to the hospital, and a garage provides accommodation for five motor vehicles.

Summary of the conditions treated. The number of patients under treatment during 1937 was 1,916. This is an increase of 229 over the number treated in the previous year, and was due mainly to a rise in the prevalence of scarlet fever. There was a slight fall in the number of fatal cases. These numbered 48, as compared with 54 in the previous year and 56 in 1935.

The admissions of scarlet fever cases rose to 797 from 522 in the previous year, and during part of the year all the cases notified could not be admitted owing to lack of accommodation. The type of disease showed no appreciable change; it continued generally mild and the fatality rate remained low.

A decrease occurred during 1936 in both the prevalence and the virulence of diphtheria as compared with the two previous years; the admissions fell to 469 from 722 in 1935 and 777 in 1934, and the deaths also decreased to 14 from 35 and 37 respectively. During 1937 there was no appreciable change in the prevalence or the virulence of the infection. The admissions showed an increase of only 10 over the number in 1936, and there were 14 deaths, the same number as in 1936. The occurrence of streptococcal infection in diphtheria cases was not quite so common as in the previous two years. During 1937, the number of patients who contracted scarlet fever was 17, and 24 others developed tonsillitis during convalescence; of these, 9 developed otorrhoea.

During the year, 11 children who had been previously immunized against the disease were admitted as suffering from diphtheria. One of these proved to be a case of septic pharyngitis, and one suffered from laryngitis. The remaining 9 cases had definite clinical attacks of diphtheria with positive swabs. In 5 of these the attack was mild and in 4 it was moderately severe. After the administration of a small dose of antitoxin the patients all made a rapid and satisfactory recovery.

Ten cases of enteric fever were under treatment. All made a satisfactory recovery.

As 1937 was an inter-epidemic year, the number of measles cases treated was small. In the autumn and winter months the admissions began to increase; the cases were mostly of a mild type.

Whooping cough was more than ordinarily prevalent during the year, and severe cases with complications were admitted as accommodation became available. This disease

was responsible for more deaths than any other infection except diphtheria.

As compared with the previous three years, there was an increase in the number of patients who were treated for pneumonia, and the fatality rate was high in 1937.

Erysipelas was not unusually prevalent and the majority of the cases were of a mild type.

At the beginning of the year 183 patients were in residence and 1,733 were admitted during the year, making a total of 1,916 cases under treatment. Of these, 1,659 were discharged, 48 died, and 209 remained under treatment at the end of the year.

The chief causes of death during the year are briefly summarised in Table I.

TABLE I.

DEATHS IN THE HOSPITAL IN 1937.

Disease.	Number of deaths.
Diphtheria	14
Whooping cough	13
Pneumonia	10
Meningitis	5
Scarlet fever	2
Measles	1
Chicken-pox	1
Other diseases	2
Total deaths	48

The fatality rate, calculated on all the cases admitted during the year, was 2.77 per cent.

Table II. shows the admissions and deaths for each month of the year, and in Table III. the annual admissions and deaths from the principal infectious diseases since the hospital was opened are set out.

SCARLET FEVER. The number of notified cases admitted during the year was 839. Of these, the diagnosis was amended after admission in 42 cases, or 5.0 per cent. of the admissions.

Table II.

Plaistow Fever Hospital. Admissions (Adm.) and deaths in 1937.

Month.	Scarlet fever.		Diphtheria.		Typhoid fever.		Measles.		Pneumonia.		Erysipelas.		Chicken-pox		Whooping cough.		Puerperal fever.		Other diseases.		All diseases	
	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths
January	43	—	5	—	1	—	1	—	19	4	1	—	1	—	5	—	—	—	20	—	96	4
February	39	—	26	1	2	—	1	—	4	2	5	—	8	—	6	2	—	—	26	1	117	6
March	55	—	35	1	1	—	2	—	6	2	5	—	4	—	8	1	—	—	17	1	113	5
April	74	1	30	2	—	—	1	—	6	1	2	—	5	—	13	4	—	—	24	1	155	9
May	34	—	34	2	1	—	6	—	3	—	1	—	6	—	9	3	1	—	19	—	114	5
June	37	—	30	4	—	—	3	—	1	1	3	—	3	—	8	—	—	—	29	2	114	7
July	104	—	52	2	—	—	—	—	1	—	1	—	1	—	1	1	—	—	33	—	193	3
August	58	1	29	—	1	—	1	—	1	—	—	—	2	—	3	—	—	—	18	1	113	2
September	90	—	62	—	1	—	1	—	1	—	1	—	1	—	3	1	—	—	20	—	180	1
October	112	—	83	1	3	—	—	—	—	—	2	—	1	—	2	1	—	—	24	—	227	2
November	50	—	32	—	—	—	—	—	1	—	1	—	2	—	1	—	—	—	11	—	98	—
December	87	—	61	1	—	—	5	1	2	—	4	—	6	—	4	—	—	—	24	2	193	4
Whole year	783	2	479	14	10	—	21	1	45	10	26	—	40	—	63	13	1	—	265	8	1733	48

Table III.

Plaistow Fever Hospital. Admissions (adm.) and deaths (d'ths) since 1896.

Year.	Scarlet fever.		Diphtheria.		Typhoid fever.		Measles.		Pneumonia		Whooping cough.		Erysipelas		Other diseases.		All diseases	
	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths
1896	170	8	114	23	...	...	...	...	...	...	...	...	...	...	...	...	284	31
1897	188	6	163	21	...	...	...	...	...	...	...	...	...	...	...	...	351	27
1898	206	4	249	42	...	...	...	...	...	...	...	...	...	...	...	...	455	46
1899	192	2	309	49	...	...	...	...	...	...	...	...	...	...	...	...	501	51
1900	177	4	269	36	...	...	...	...	...	...	...	...	...	...	...	...	446	40
1901	203	16	310	66	47	4	...	...	...	...	...	...	...	...	...	...	560	86
1902	257	12	431	72	138	30	...	...	...	...	...	...	...	...	...	...	826	114
1903	370	10	334	48	84	17	...	...	...	...	...	...	...	...	...	...	788	75
1904	679	29	351	31	95	15	...	...	...	...	...	...	...	...	...	...	1125	75
1905	747	18	438	53	62	14	...	...	...	...	...	...	...	...	...	...	1247	85
1906	806	18	421	70	127	18	...	...	...	...	...	...	...	...	...	...	1354	106
1907	667	29	422	82	68	12	...	...	...	...	...	...	...	...	...	...	1157	123
1908	665	26	373	47	73	12	...	...	...	...	...	...	...	...	...	...	1111	85
1909	990	32	337	35	34	5	...	...	...	...	...	...	...	...	...	...	1361	72
1910	655	17	260	45	71	14	...	...	...	...	...	...	...	...	...	...	986	76
1911	491	13	295	52	70	15	...	...	...	...	...	...	...	...	...	...	856	80
1912	562	17	291	35	49	10	...	...	...	...	...	...	...	...	...	...	902	62
1913	782	13	333	24	42	6	...	...	...	...	...	...	...	...	...	...	1157	43
1914	699	10	380	43	36	7	...	...	...	...	...	...	...	...	...	...	1115	60
1915	575	8	403	60	40	11	...	...	...	...	...	...	...	...	...	...	1018	79
1916	310	7	533	64	23	2	...	...	...	...	...	...	...	...	...	...	866	73
1917	304	8	559	67	27	4	...	...	...	...	...	...	...	...	...	...	890	79
1918	213	4	464	70	25	...	...	...	...	...	...	...	...	...	...	...	702	74
1919	373	3	601	57	15	2	18	2	5	2	...		...	...	24	3	1036	69
1920	748	6	769	62	14	3	11	...	2	2	...	...	1	...	25	5	1570	78

Table III. (continued).

Plaistow Fever Hospital: Admissions (adm.) and deaths (d'ths) since 1896.

Year.	Scarlet fever.		Diphtheria.		Typhoid fever.		Measles.		Pneumonia		Whooping cough.		Erysipelas		Other diseases.		All diseases	
	Adm.	D'ths	Adm	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths	Adm.	D'ths
1921	1,119	10	560	32	7	...	1	...	2	2	...	...	...	...	21	11	1710	55
1922	592	8	611	40	3	1	15	...	5	1	21	4	1	...	23	9	1271	63
1923	412	7	671	23	10	...	33	...	12	6	...	...	10	...	34	7	1182	43
1924	317	4	713	27	2	1	100	19	24	7	44	15	8	...	137	7	1345	80
1925	412	4	719	18	5	1	81	6	24	2	22	8	14	1	150	9	1427	49
1926	899	6	647	13	7	...	85	17	25	5	5	2	15	2	189	11	1872	56
1927	1250	3	816	34	12	2	19	1	17	5	13	5	5	...	96	7	2228	57
1928	916	3	901	29	7	...	60	9	16	3	13	4	17	1	122	9	2052	58
1929	983	5	741	33	4	...	20	2	19	5	17	9	15	1	150	4	1949	59
1930	670	1	719	24	5	...	86	15	11	1	12	1	14	1	133	9	1650	52
1931	540	4	327	10	...	...	33	2	62	12	108	13	51	8	222	14	1343	63
1932	590	2	293	9	...	...	282	33	214	37	118	14	42	4	326	29	1865	128
1933	913	6	535	49	...	...	9	...	54	17	44	11	52	3	207	19	1814	105
1934	798	9	777	37	...	...	76	8	21	9	4	1	14	1	174	10	1864	75
1935	702	4	722	35	...	...	34	3	5	2	30	2		...	217	10	1720	56
1936	522	3	469	14	3	...	223	26	25	3	24	3	19	1	182	4	1467	54
1937	797	2	479	14	10	...	21	1	45	10	63	13	26	...	292	8	1733	48
Totals	24461	401	20109	1695	1215	206	1207	144	588	131	538	105	304	23	2724	185	51146	2890
Fatality per cent.	1.64		8.43		16.95		11.93		22.28		19.52		7.57		6.7		5.65	

The number of accepted cases was therefore 797. A scarlatiniform rash was present in 74 per cent. of the cases on the day of admission, but 27 per cent. of these did not show any desquamation afterwards. Eight per cent. of the admissions had no rash or desquamation during their period of residence, and of these cases five developed scarlet fever in the wards. In six cases a relapse occurred during the second and third week of illness.

At the beginning of the year there were in residence 77 patients suffering from scarlet fever, making a total of 874 cases under treatment. Of these, 777 were discharged, 2 died, and 95 remained under treatment at the end of the year.

Age distribution. The age incidence of the 797 patients who were accepted as suffering from scarlet fever is shown in Table IV.

TABLE IV.

SCARLET FEVER. AGE INCIDENCE OF HOSPITAL CASES.

Age (years)	Number of cases.	Per cent.
Under 1 ..	7	0.88
1	251	31.49
5	342	42.92
10	110	13.80
15	39	4.89
20	48	6.02
All ages ..	797	100.00

The duration of illness on the day of admission is shown in Table V.

TABLE V. SCARLET FEVER.

Day of illness.	1st	2nd	3rd	4th	5th	6th	7th	Over 7.
No. of Cases	47	218	243	125	75	32	20	37
Per cent. of total	5.9	27.4	30.5	15.7	9.4	4.0	2.5	4.6

The average duration of illness on admission was 3.43 days.

Corrected diagnosis. The 42 cases in which the diagnosis was amended after admission were found to be suffering from the following complaints:—Urticaria, 2; toxic rash, 5; transient erythema, 2; tonsillitis, 6; rubella, 4; drug rash, 2; influenza, 2; rhinitis, 1; diphtheria, 2; cellulitis, 1; bronchitis, 1; pneumonia, 1; tuberculous meningitis, 1; chicken-pox, 2; gastritis, 1; pharyngitis, 2; malnutrition, 1; no appreciable disease, 6.

Three cases admitted as diphtheria and two admitted as measles proved to be suffering from scarlet fever.

Fatality rate. One of the two fatal cases was a girl aged 3 years, who was suffering from septic scarlet fever complicated by faucial diphtheria. In the other case, a boy aged 2 years, the disease developed three days after he had a severe sunburn of the chest and shoulders, and he succumbed to toxaemia within a fortnight of admission.

The fatality rate was 0.25 per cent. of the admissions.

Scarlet fever antitoxin. This was administered intramuscularly to 92 cases suffering from a severe attack. The dosage varied from 10 to 70 c.cs., the average being 16 c.cs. per patient.

Sulphanilamide drugs. Encouraging results were obtained early in the year from the oral administration of proseptasine tablets in the treatment of some of the common complications of scarlet fever, particularly otorrhoea and septic sores. All the cases of otorrhoea however did not respond to the treatment. One interesting case was that of a boy, aged 5 years, who developed profuse double otorrhoea in the fourth week of his illness. He was treated by a course of proseptasine tablets (one tablet four hourly for four days). No appreciable improvement in the otorrhoea resulted, and six weeks later he developed acute streptococcal meningitis. This was treated vigorously with proseptasine and prontosil, given partly by intrathecal injection and partly by oral tables. About 30 c.c.s of turbid cerebro-spinal fluid were withdrawn once daily and this was replaced by 10 c.c.s of soluseptasine or prontosil soluble; this was continued for seven days. The patient also received two prontosil tablets by mouth every four hours for four days. For five days his temperature was swinging up daily to 103° and his pulse rate to 140. On the sixth and seventh days there was a definite improvement in his condition, and by the eighth day his temperature had dropped to normal and did not rise again. The cerebro-spinal fluid also cleared, and a few days later

the discharge from both ears dried up. He ultimately made a complete recovery.

A trial was also made of the value of prontosil and proseptasine for the prevention of the complications of scarlet fever when administered early in the disease. The two drugs were used in about an equal number of cases, and the dosage employed was 5 to 10 c.c.s of the soluble preparation injected intramuscularly on admission, followed by the oral administration of one tablet three times a day for four days. In 150 cases so treated no beneficial effects were observed. There was no diminution of toxic symptoms during the acute stage, and the incidence of complications was not reduced when compared with non-treated cases. Four cases developed a papular rash a fortnight after the administration of the drug, but no other toxic effect was observed.

Of the 777 cases discharged, 264, or 33.98 per cent., suffered from complications as shown in Table VI.

TABLE VI.

SCARLET FEVER. FREQUENCY OF COMPLICATIONS.

Complication.	No. of cases.	Per cent. of all cases.
Adenitis	64	8.23
Albuminuria	17	2.18
Arthritis	8	1.02
Nephritis	5	0.64
Otorrhoea	61	7.85
Rhinitis	62	7.97
Septic sores	18	2.32
Tonsillitis	23	2.95
Vaginitis	6	0.77
All complications ..	264	33.98

The average duration of residence of all cases was 38.47 days.

Return cases. The number of "return cases" of scarlet fever which were admitted to this hospital during the year was 28. When considered in relation to the 777 scarlet fever patients discharged during the year, this number gives a return case rate of 3.60 per cent. The monthly incidence is shown in Table VII.

TABLE VII.

SCARLET FEVER. RETURN CASES, 1937. MONTHLY INCIDENCE.

Month.	Number of patients discharged.	Return cases to Plaistow Hospital.	Percentage.
January	48	—	—
February	57	2	3·51
March	37	5	13·51
April	48	1	2.08
May	70	2	2.86
June	41	2	4.88
July	70	1	1.43
August	65	—	—
September	70	4	5·71
October	128	6	4.69
November	56	—	—
December .. .	87	5	5·75
Whole year	777	28	3.60

DIPHTHERIA. The number of notified cases which were admitted during the year was 606. The diagnosis was amended after admission in 127 of these cases, or 20.96 per cent. of the admissions. The number of accepted cases was therefore 479.

At the beginning of the year 82 patients were in residence, and the total number under treatment was 561. Of these 454 were discharged, 14 died, and 93 remained under treatment at the end of the year. The average duration of residence was 59.54 days.

Age incidence. The age incidence of the 479 accepted cases of diphtheria is shown in Table VIII.

Corrected diagnosis. The 127 cases which proved to be wrongly diagnosed were found after admission to be suffering from the following complaints:—Tonsillitis, 84; laryngitis, 15; pharyngitis, 5; Vincent's angina, 6; scarlet fever, 3; measles, 2; stomatitis, 2; no apparent disease, 2; rhinitis, 3; gastro-enteritis, 1; tuberculous meningitis, 1; catarrhal jaundice, 1; otitis media, 1; asthma, 1.

The patients who were discharged or who died during the year are classified in Table IX.

TABLE VIII.

DIPHTHERIA. AGE INCIDENCE OF HOSPITAL CASES.

Age (years)	Number of cases.	Per cent.
Under 1	9	1.88
1—	151	31.52
5—	214	44.68
10—	80	16.70
15—	14	2.92
20—	11	2.30
Total	479	100.00

TABLE IX.

DIPHTHERIA. TYPE OF DISEASE.

(*a*) *All cases.*

Type of disease.	Cases admitted		Deaths.	Fatality per cent.
	Number.	Per cent. of total.		
Faucial ..	373	79.71	12	3.21
Laryngeal ..	23	4.91	2	8.69
Nasal	44	9.40	—	—
Bacteriological	28	5.98	—	—
All forms	468	100.00	14	2.99

(*b*) *Faucial cases.*

Faucial cases.	Number.	Per cent.
Mild	124	33.24
Moderate	147	39.41
Severe	102	27.35

Paralysis. Post-diphtheritic paralysis occurred in 35 of the above cases. It was mild in 24 cases and severe in 11 cases.

Laryngeal diphtheria. Forty-one cases were admitted as laryngeal diphtheria, but 18 of these proved to be wrongly diagnosed. Of the 23 true cases, 8 required tracheotomy, and 2 of these patients died. One of the fatal cases was complicated by whooping cough and broncho-pneumonia, and the other had broncho-pneumonia.

Fatal cases. The 12 deaths which occurred among the faucial cases were of children whose ages varied from 9 months to 15 years; the average age was 6 years. All of these proved fatal within the first three weeks of the disease, and the average duration of illness on admission was 3.5 days. The amount of antitoxin administered to these patients averaged 130,000 units per patient.

Further particulars of the patients who died from diphtheria in the hospital during the year are given in Table X.

TABLE X.

DIPHTHERIA. PARTICULARS OF FATAL CASES.

Age.	Sex.	Date of admission.	Duration of illness on admission (days).	Amount of antitoxin given. (units).	Duration of illness at death. (days).
(a) Faucial cases.					
2 yrs. 9 mths.	F	13.2.37	3	112,000	5
6 yrs.	F	24.3.37	4	200,000	21
5 yrs.	M	1.5.37	4	200,000	7
7 yrs.	F	11.5.37	3	240,000	14
15 yrs. 6 mths.	F	29.5.37	5	100,000	6
10 yrs.	M	22.5.37	3	100,000	16
7 yrs.	F	11.6.37	3	200,000	8
3 yrs. 3 mths.	F	16.6.37	2	132,000	3
2 yrs. 8 mths.	M	23.6.37	3	220,000	6
6 yrs.	F	19.7.37	4	120,000	4
5 yrs.	M	4.10.37	3	200,000	7
9 mths.	F	28.3.37	2	80,000	6
(b) Laryngeal cases.					
1 yr. 6 mths.	M	25.11.36	14	44,000	67
5 yrs.	M	26.11.37	1	—	1

Treatment. The amount of antitoxin administered to the nasal and mild faucial cases averaged 13,000 units per case. The moderate faucial cases received an average of 35,000 units. To the severe faucial cases, the antitoxin was administered partly by intravenous and partly by intramuscular injection, and the amount averaged 116,000 units per patient.

TYPHOID FEVER. Of 21 cases which were admitted as suspected typhoid fever, 10 proved to be suffering from the disease. The other 11 cases suffered from the following complaints:— Ulcerative colitis, 1; enteritis, 4; ulcerative stomatitis, 1; acute rheumatism, 1; cholecystitis, 1; influenza, 1; broncho-pneumonia, 1; constipation, 1. The case of ulcerative colitis proved fatal; this patient was a man aged 23 years.

Of the 10 positive cases, 3 suffered from typhoid fever and 7 from a paratyphoid B infection.

With one exception, all the cases were comparatively mild, and all made a satisfactory recovery. The exception was a girl of three years who, two days before admission, suffered a severe intestinal haemorrhage for which a blood transfusion had been administered. On admission she was weak and anæmic. Diarrhœa persisted during the following ten days, and she had an irregular temperature, with occasional rises over 103°, until the fifth week of the disease. Her general condition, however, slowly improved. Towards the end of the fifth week of illness she complained of slight pain in the right groin on movement. This pain gradually increased, and a week later a swelling appeared over the right hip-joint. An X-ray examination showed the swelling to be due to a dislocation. The condition was caused by arthritis, which is a very rare complication of typhoid fever. The patient was transferred to Whipps Cross Hospital for surgical treatment.

MEASLES. This was not an epidemic year and the majority of the patients admitted were suffering from a mild type of infection. Of 22 patients who were under treatment during the year, 17 were discharged, one died, and four remained under treatment at the end of the year. The fatal case was a child aged three years whose illness was complicated by broncho-pneumonia.

WHOOPING COUGH. The numbers of cases under treatment was 64. Of these, 49 were discharged, 13 died, and 2 remained

under treatment at the end of the year. Broncho-pneumonia was present as a complication in all the fatal cases, and their ages varied from five months to five years, the average being two years. Five cases of diphtheria, four cases of scarlet fever, and one case of mumps were incubating whooping cough on the day of admission.

Erysipelas. Twenty-six cases were under treatment, in all of which the attack was mild or of moderate severity, and all recovered. The face was the part affected in 21 of the cases, the arm in 3 cases, and the leg in 2 cases.

Pneumonia. The cases in this group were all children suffering from broncho-pneumonia and bronchitis. The number under treatment was 52. Of these, 40 were discharged, 10 died, and 2 remained under treatment at the end of the year. The fatal cases were all infants under two years of age.

Chicken-pox. This disease continued rather prevalent throughout the year, and secondary cases occurred in the scarlet fever and diphtheria wards from patients admitted in the incubation stage of the infection. The majority of the cases were of moderate severity. The number under treatment was 43, and of these 41 were discharged, one died, and one remained under treatment at the end of the year. The fatal case was a child aged 15 months who suffered from "varicella gangrenosa." The gangrenous lesions appeared on the scalp, and resulted in extensive areas of sloughing.

Meningitis. At the end of January a girl of two years was admitted suffering from meningococcal meningitis, and two days later her young brother aged nine months was admitted suffering from the same disease. Both were infected with the type II. meningococcus. The boy was moribund on admission and died twelve hours later. The girl was treated with serum intravenously and intrathecally, and made satisfactory progress during the first fortnight of the illness. At this period, however, she suffered from severe serum sickness, and subsequently she drifted into the chronic stage from which she succumbed three months later.

A girl of 18 years died from pneumococcal meningitis five days after admission, and two children of four years and eight months respectively died of tuberculous meningitis.

Acute anterior poliomyelitis. Five cases of this disease were under treatment. Four of them were children under five years of age, and one was a boy aged 17 years. All made some improvement, but it was not complete, a varying amount of paralysis remaining in each case on discharge. The left arm was the part affected in two cases and the leg in two cases. In the fifth case the part affected was the musculature of the right side of the neck and face.

Other diseases. Included in this group are the following:—Rubella, 8; mumps, 11; diphtheria contacts, 2; puerperal pyrexia, 1; otorrhœa, 2; scabies, 1; septic rash, 1; meningism, 1; anæmia, 1; empyema, 1; encephalitis, 1; acute mastoid, 1; babies (with mothers), 2; endocarditis, 2; re-admitted, 4.

One case suffering from endocarditis proved fatal. All the others recovered.

Cross infection. During the year four patients who were admitted in the incubation stage of chickenpox infected 13 others, and one scarlet fever patient admitted incubating mumps infected five others. Seventeen diphtheria patients contracted scarlet fever, and 16 scarlet fever patients developed nasal diphtheria during convalescence. One scarlet fever patient contracted measles.

Gate cases. Particulars of the patients suspected to be suffering from infectious diseases who were brought to the hospital for diagnosis, together with particulars of the disease which affected those patients who were admitted, are set out in Table XI.

Staff. The medical staff of the hospital consists of one medical superintendent and two assistant medical officers. The nursing staff consists of one matron, one assistant matron, one night sister, one sister-tutor, eight ward sisters, six staff nurses, and 57 probationers. The administrative staff consists of one steward and one clerk.

The domestic staff consists of 60 maids, three seamstresses, and two lodge attendants. The out-door staff consists of one engineer, eight porters, four stokers, five motor-drivers, two gardeners, one laboratory assistant, one disinfector, and eight other workers.

Staff sickness. Two Dick-positive nurses contracted scarlet fever before they were immunized, and two Schick-positive nurses contracted mild attacks of diphtheria during the period of immunization. All recovered. Two other nurses contracted rubella, and one maid contracted facial erysipelas.

During the year 26 nurses and maids were warded with tonsillitis and 20 with influenza. Forty-one others were off duty for short periods with minor ailments. All recovered.

The number of nurses upon whom the Schick test was performed was 56. Of these 22—or 39.28 per cent.—gave a positive result. The number of the positives who were immunized was 14.

TABLE XI.

GATE CASES. NUMBER EXAMINED AND ADMITTED.

How sent.	No. seen at gate.	No. admitted.			
		Diphtheria	Scarlet fever.	Other diseases.	Total.
By medical practitioner	148	33	19	8	60
By relatives ..	451	29	31	16	76
From other hospitals	74	7	2	6	15
For swabbing (convalescent patients)	523	—	—	—	—

The number of nurses upon whom the Dick test was performed was 56. Of these 21—or 37.5 per cent—gave a positive result. The number of the positives who were immunized was 14.

PROPHYLAXIS OF DIPHTHERIA AND SCARLET FEVER.

(a) *Diphtheria.* The number of patients upon whom the Schick test was performed was 493. Of these 290—or 58.82 per cent.—gave a positive result. The number of these positives who were immunized was 268.

(b) *Scarlet fever.* The number of patients upon whom the Dick test was performed was 237. Of these 110—or 46.41 per cent.—gave a positive result. The number of the positives who

TABLE XII. EXAMINATION OF SWABS (DIPHTHERIA).

Source of swab.	Number examined.	Number positive.	Per cent. positive.
(1) Medical practit.:—			
(a) faucial	2,105	223	10.59
(b) nasal	208	31	14.90
(c) aural	5	1	20.00
Total	2,318	255	11.00
(2) Other instit'ns.:—			
(a) faucial	293	26	8.87
(b) nasal	69	13	18.84
(c) aural	2	—	—
Total	364	39	10.71
(3) Gate cases:—			
(a) faucial	118	12	10.17
(b) nasal	94	17	18.09
(c) aural	2	1	50.00
Total	214	30	14.02
(4) Health Dept.:—			
(a) faucial	162	22	13.58
(b) nasal	110	26	23.64
Total	272	48	17.64
(5) I.C.A.A.:—			
(a) faucial	323	11	3.40
(b) nasal	320	39	12.19
Total	643	50	7.77
(6) I.C.C.S.:—			
(a) faucial	58	—	—
(b) nasal	52	7	13.46
Total	110	7	6.36
(7) W.H.C.M.*:—			
(a) faucial	257	8	3.11
(b) nasal	254	22	8.66
Total	511	30	5.87
Total examinations.. ..	4,432	459	10.35

*West Ham Central Mission.

were fully immunized was 36, and the number partly immunized was 59.

DISINFECTION. During 1937 the number of articles which were removed from infected houses for disinfection was 19,640. The number of hospital articles disinfected was 22,943. Further details of these articles are given in another section.

LABORATORY WORK. Details of the swabs examined for the presence of the diphtheria bacillus during the year are set out in Table XII.

DIPHTHERIA IN THE INOCULATED. During the year there were 11 cases of diphtheria in children who had been previously immunized. Details of these cases are given in Table XIII.

Table XIV.

Particulars of children who developed diphtheria after inoculation. 1937.

Case No.	Age. (years)	Sex.	Initial Schick	Immunization		Final Schick
			Date and result	Date	Doses	Date and result
1	7	M.	Not done	28. 2.35 2. 3.35 14. 3.35	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	6. 6.35 Negative
2	4	F.	Not done	26. 1.35 2. 2.35 9. 2.35	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	9. 5.35 Negative
3	6	M.	22.10.36 Pos.	13. 5.36 20. 5.36 27. 5.36 22.10.36	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M. 1.5c.c.T.A.M	Diph. contracted before final test.
4	4	M.	Not done	11. 9.36 2.10.36 9.10.36	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	Did not attend.
5	6	M.	Not done	8.11.35 15.11.35 22.11.35	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	17. 4.36 Negative
6	7	M.	17.4.36 Pos.	8.11.35 15.11.35 22.11.35	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	30. 4.36 Negative
7	11	F.	Not done	16. 4.35 30. 4.35 8. 5.35	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	17.10.35 Negative
8	11	M.	10.10.35 Pos.	17.10.35	1.5c.c.T.A.M	Did not attend.
9	2	M.	Not done	2.10.36 9.10.36 16.10.36	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	Did not attend.
10	2	M.	Not done	1. 7.36 8. 7.36 15. 7.36	1c.c.T.A.M. 1c.c.T.A.M. 1c.c.T.A.M.	21. 1.37 Negative
11	4	M.	Aug. 1937 Pos.	August, 1937.	1c.c.T.A.M.	6.11.37 Slt. pos.

TABLE XIV. (CONTINUED).

PARTICULARS OF CHILDREN WHO DEVELOPED DIPHTHERIA AFTER INOCULATION. 1937.

Case No.	Date of onset	Type of disease	Serum given (units)	Severity	Period in Hosp. (weeks)	Result C = cure
1	7. 9.36	Faucial	20,000	Mild	9	C
2	20. 1.37	Faucial	40,000	Moderate	10	C
3	10. 5.37	Laryngeal	12,000	Proved laryngitis	8	C
4	29. 8.37	Faucial	120,000	Severe	13	C
5	4. 9.37	Nasal	32,000	Mild	6	C
6	2. 9.37	Faucial	60,000	Moderate	6	C
7	22. 9.37	Tonsillitis	Nil	Mild	3	C
8	9.10.37	Faucial	120,000	Severe	12	C
9	3. 9.37	Faucial	38,000	Moderate	6	C
10	5.11.37	Faucial	12,000	Mild	4	C
11	4.11.37	Faucial	12,000	Mild	8	C

VENEREAL DISEASES.

The West Ham Council does not itself administer a scheme for dealing with venereal diseases. Under the Public Health (Venereal Diseases) Regulations, 1916, a joint scheme was inaugurated in 1917 for the Greater London area, the participating authorities being the London County Council, the counties of Middlesex, Essex, Hertford, Buckingham, Surrey, and Kent, and the county boroughs of West Ham, East Ham, and Croydon. The London County Council is responsible for the administration of the scheme. In addition to paying its proportionate share of the cost of the scheme, which is approximately one twenty-fifth of the total expenses incurred, the Council makes a grant to the British Social Hygiene Council to further propaganda work in this area.

Free treatment can be obtained by anyone at any of the twenty-one hospitals approved under the joint agreements. There are also six hostels, assisted by financial grants, where women suffering from these diseases can be accommodated with a view to facilitating continued treatment. These institutions are as follows:—

Royal Free—20-22 Highbury Quadrant, N.
Royal Free—62 Regents Park Road, N.W.
St. Thomas'—148 Lambeth Road, S.E.
Salvation Army—122-4 Lower Clapton Road, E.
Salvation Army—126-8 Lower Clapton Road, E.
West London Mission—35 Parkhurst Road, N.7.

No West Ham residents attended any of these hostels during 1937.

The particulars of the above-mentioned scheme have been brought to the notice of the inhabitants of the district by the exhibiting of enamel plaques, which give a list of the participating hospitals and urge the necessity for immediate treatment.

Local medical practitioners are fully conversant with the facilities for diagnosis and treatment of venereal diseases. There are thirteen practitioners who are qualified to receive supplies of

arseno-benzol compounds. These compounds are also supplied on request to St. Mary's Hospital, Plaistow, E.13, and to Queen Mary's Hospital, Stratford, E.15, but no request was made during 1937.

Table I. sets out particulars of the attendances at the various hospitals of West Ham residents during the year under review.

TABLE I.

WEST HAM PATIENTS. ATTENDANCES AT CLINICS.

Disease.	New patients.	Total attendances, 1937.
Syphilis	49	24,979
Soft chancre ..	3	
Gonorrhoea	170	
Non-venereal ..	239	
All conditions ..	461	24,979

It is interesting to note that very few of the 461 new cases who were seen at the clinics visited the health department for advice. This suggests that particulars of treatment facilities are now well known.

Pathological examinations. With regard to the pathological examinations of various material or specimens, for or at the centres, particulars will be found in Table II.

TABLE II.

PATHOLOGICAL EXAMINATIONS.

Type of exam.	No. of examinations.
Spirochaetes ..	46
Gonococci	3,573
Wassermann ..	883
Others	1,554
Total	6,056

Particulars of examinations carried out on specimens submitted by general practitioners will be found in Table III.

TABLE III.

PATHOLOGICAL EXAMINATIONS.

For practitioners.	No. of examinations.
Spirochaetes ..	—
Gonococci	6
Wassermann ..	25
Others	35
Total	66

For reference purposes the work carried out at the various hospitals and institutions of the scheme are set out in Tables IV. to VIII.

TABLE VI.

VENEREAL DISEASES (JOINT SCHEME).

Utilization of facilities at hostels, 1937.

Area.	No. of patients.	Aggregate No. of days in residence.	Percentage (days).
London County	128	13,912	49.6
Middlesex	34	3,998	14.2
Essex	20	2,412	8.6
Surrey	15	2,556	9.1
Kent	22	3,691	13.2
Herts	9	851	3.0
Bucks	9	655	2.3
East Ham	—	—	—
West Ham	—	—	—
Croydon	—	—	—
	237	28,075	100%

TABLE IV.

VENEREAL DISEASES (JOINT SCHEME).

Summary of work done by the hospitals during the year 1937.

	London.	Middlesex.	Essex.	Surrey.	Kent.	Herts.	Bucks	East Ham.	West Ham.	Croydon.	Total.	Other Places.	Grand Total.
New Patients :—													
Syphilis	1,964	332	105	113	85	28	18	13	49	7	2,714	213	2,927
Soft Chancre... ...	82	4	5	6	1	1	...	2	3	1	105	114	219
Gonorrhoea ...	6,532	1,115	463	402	148	133	64	93	170	27	9,147	805	9,952
Not venereal... ...	8,239	1,647	643	643	254	172	81	123	239	93	12,134	593	12,727
TOTAL	16,817	3,098	1,216	1,164	488	334	163	231	461	128	24,100	1,725	25,825
Total attendances ...	728,459	99,687	54,974	31,214	13,970	8,050	3,530	13,770	24,979	3,407	982,040	18,402	1,000,442
No. of in-patient days ...	31,583	3,470	3,581	1,862	1,815	1,306	305	110	434	40	44,506	10,523	55,029
A.B.C. doses ...	...	...	...	...	...	...	...	...	...	...	...	...	50,724
Pathological Examinations.													
For or at Centres :—													
Spirochaetes ...	1,935	162	117	44	11	16	9	15	46	2	2,357	161	2,518
Gonococci	100,415	16,490	11,411	6,319	2,489	1,461	753	2,315	3,573	666	145,892	4,458	150,350
Wassermann ...	34,060	4,241	2,773	3,058	793	469	270	460	883	268	47,275	1,754	49,029
Others	42,894	5,199	4,561	3,323	1,148	601	301	764	1,554	377	60,722	3,509	64,231
TOTAL	179,304	26,092	18,862	12,744	4,441	2,547	1,333	3,554	6,056	1,313	256,246	9,882	266,128
For Practitioners :— ...													
Spirochaetes ...	8	...	1	...	...	...	...	...	...	...	9	...	9
Gonococci	4,317	126	245	117	39	115	18	2	6	1,092	6,077	10	6,087
Wassermann ...	14,686	673	1,338	308	216	87	134	33	25	686	18,186	432	18,618
Others	9,248	313	522	191	50	40	18	6	35	1,071	11,494	467	11,961
TOTAL	28,259	1,112	2,106	616	305	242	170	41	66	2,849	35,766	909	36,675

Table V.

Venereal diseases (joint scheme).

Summary of work done at the London Clinics for all areas from 1917.

Year.	New cases.						Total venereal cases.		Total non-venereal cases.		Total attendances		In-patient days.		Pathological examinations for	
	Syphilis.		Soft chancre.		Gonorrhoea.											
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Clinic.	Practitioners.
1917	4,427	3,351	199	11	3,830	1,207	8,456	4,569	1,192	1,168	120,659		63,923		13,988	3,649
1918	3,764	3,002	116	13	4,844	1,940	8,724	4,955	1,345	1,348	169,485		66,095		25,973	6,380
1919	6,394	3,391	463	18	10,441	2,440	17,298	5,849	3,418	1,700	201,626	106,096	24,025	49,186	51,554	10,464
1920	6,988	3,579	766	25	10,669	2,427	18,423	6,031	4,403	2,189	329,940	134,093	29,430	52,182	58,920	14,027
1921	5,088	3,100	458	13	8,573	2,136	14,119	5,249	3,696	2,354	357,503	138,706	30,272	49,420	66,134	18,472
1922	4,207	2,600	309	12	8,233	2,402	12,749	5,014	3,759	2,191	387,631	141,372	28,809	83,755	74,022	19,836
1923	4,497	2,631	311	4	9,043	2,520	13,851	5,155	4,167	2,477	412,915	142,594	29,661	77,001	69,784	24,403
1924	4,174	2,452	301	4	8,565	2,785	13,040	5,241	4,869	2,423	424,850	164,152	31,620	70,836	79,005	24,797
1925	3,556	2,346	268	11	8,464	2,857	12,288	5,214	5,726	2,954	459,011	187,120	29,313	73,141	106,064	26,346
1926	3,725	2,013	301	2	8,825	2,858	12,851	4,873	5,830	3,158	490,578	196,497	31,258	70,477	100,543	27,565
1927	3,886	2,209	203	7	9,637	2,859	13,726	5,075	6,799	3,365	554,171	213,107	21,268	91,145	107,512	27,046
1928	3,433	1,837	229	6	8,249	2,647	11,911	4,490	6,369	3,226	544,969	218,566	23,821	41,285	107,410	29,785
1929	3,303	1,628	276	4	8,271	2,503	11,850	4,135	5,656	3,145	557,747	211,125	23,121	28,399	114,840	32,605
1930	3,389	1,826	347	12	8,620	2,503	12,356	4,351	6,305	3,857	623,820	212,399	21,033	30,183	125,177	33,309
1931	3,009	1,521	326	12	7,713	2,260	11,048	3,793	6,853	4,253	699,752	230,596	23,408	33,133	161,092	35,498
1932	3,270	1,671	172	15	8,566	2,656	12,008	4,342	7,286	4,316	737,558	246,363	22,774	31,249	196,357	40,626
1933	3,072	1,638	185	10	8,791	3,313	12,048	4,961	7,325	4,380	804,042	293,172	23,504	29,077	219,852	39,649
1934	2,673	1,506	159	6	8,689	3,031	11,521	4 543	7,520	4,539	820,469	321,818	22,928	31,161	261,116	37,286
1935	2,578	1,352	336	14	8,184	2,768	11,098	4,134	8,575	4,596	826,122	312,370	21,654	33,912	255.403	38,354
1936	1,866	1,055	275	21	7,724	2,319	9,865	3,395	8,076	4,741	807,397	294,981	23,214	34,128	263.050	37,748
1937	1,783	1,144	211	8	7,636	2,316	9,630	3,468	7,718	5,009	726,120	274,322	22,666	32,363	266,128	36,675

TABLE VII. VENEREAL DISEASES (JOINT SCHEME).
Utilisation of treatment facilities during 1937.

Hospital.	New cases.					No. of Persons.		Total attend-ances.	No. of in-patient days.
	Syphilis.	Soft chancre.	Gonorrhoea.	Not V.D.	Total.	Ceased to attend.	Dis-charged		
Albert Dock	85	33	325	207	650	43	430	11,018	2,569
Gt. Ormond St.	22	—	9	532	563	16	543	2,578	1,956
Guy's	157	8	492	956	1,613	329	1,393	57,096	3,199
King's College	139	—	124	280	543	128	366	13,404	706
L.C.C. Clinic (Whitechapel)	337	13	1,425	1,890	3,665	970	2,441	257,581	6,183
Metropolitan	43	6	173	126	348	117	201	29,326	240
Miller General	103	3	180	76	362	225	142	14,207	284
Royal Free	155	—	388	987	1,530	161	1,538	30,568	3,282
Royal Northern	119	7	457	460	1,043	213	817	54,969	68
St. George's	97	3	538	386	1,024	291	796	39,705	750
St. John's (Lewisham) ...	56	4	124	285	469	46	395	8,287	483
St. Mary's	347	—	1,196	891	2,434	613	1,690	94,318	2,198
*St. Paul's	34	1	165	261	461	174	173	22,465	52
St. Thomas'	512	23	1,938	3,085	5,558	1,130	3,816	183,130	3,703
Seamen's	151	114	688	298	1,251	916	270	14,853	10,242
S. London for Women ...	43	—	97	247	387	39	251	11,239	651
University College	141	2	362	152	657	332	331	30,735	646
West London	270	—	861	1,249	2,380	737	1,899	87,929	1,730
Westminster	111	2	208	128	449	149	343	30,579	189
S.A. Mothers'	2	—	160	231	393	93	187	6,455	6,217
Children's, Waddon ...	3	—	42	—	45	—	50	—	9,681
TOTALS	2,927	219	9,952	12,727	25,825	6,722	18,072	1,000,442	55,029

* Three months only.

TABLE VIII. VENEREAL DISEASES (JOINT SCHEME).
Pathological examinations and specific treatment, 1937.

Hospital.	Pathological examinations.									A.B.C. doses given.
	Spirochaetes.		Gonococci.		Wassermann.		Others.		Total.	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)		
Albert Dock	24	—	844	45	692	291	1,384	582	3,862	753
Gt. Ormond St.	1	—	1,110	56	839	224	586	161	2,977	261
Guy's	164	—	13,252	1,126	3,269	2,731	6,661	1,274	28,477	3,157
King's College	13	3	918	63	1,305	2,720	249	93	5,364	1,560
L.C.C. Clinic (Whitechapel)	730	4	36,377	2,286	8,116	3,284	14,542	3,872	69,211	14,483
Metropolitan	21	—	935	107	627	333	677	591	3,291	1,029
Miller General	3	—	1,316	13	271	1,050	96	91	2,840	1,119
Royal Free	39	—	19,644	154	2,945	1,408	4,734	1,557	30,481	2,494
Royal Northern	41	—	3,605	63	998	1,288	339	79	6,413	2,385
St. George's	72	1	1,535	36	1,890	60	2,104	15	5,713	2,223
St. John's (Lewisham) ...	6	—	306	43	532	219	450	29	1,585	501
St. Mary's	185	—	15,426	415	4,292	1,917	3,864	92	26,191	5,804
*St. Paul's	33	—	1,745	44	837	97	910	36	3,702	734
St. Thomas'	683	1	24,148	626	14,730	389	16,541	376	57,494	234
Seamen's	143	—	3,949	75	1,079	110	2,935	42	8,333	1,719
S. London for Women ...	2	—	3,924	677	597	374	664	224	6,462	435
University College	180	—	1,756	26	963	19	241	—	3,185	2,199
West London	143	—	14,650	201	3,962	1,285	5,633	1,272	27,146	5,427
Westminster	33	—	2,284	31	736	819	1,091	1,575	6,569	4,187
S.A. Mothers'	2	—	2,626	—	349	—	530	—	3,507	20
Children's, Waddon ...	—	—	—	—	—	—	—	—	—	—
TOTALS	2,518	9	150,350	6,087	49,029	18,618	64,231	11,961	302,803	50,724

* Three months only.

(a) For centre, 266,128 (b) For practitioners, 36,675

IV. TUBERCULOSIS

TUBERCULOSIS.

INTRODUCTION.

It will be seen from the following sections that there was a slight increase in the number of notifications of all types of tuberculosis during the year, but that there was a fall in the death rate from the disease. Fluctuations of small extent may be expected, and these slight increases in no way vitiate the conclusion that the disease is steadily becoming less prevalent. Nevertheless, in a large industrial area such as West Ham the low rates which have been recorded within recent years are a very satisfactory feature.

Attention has repeatedly been directed to the fact that in the large towns in the country there is a definite increase in the incidence of pulmonary tuberculosis in young adults. Several theories have been advanced to explain this unpleasant tendency. From the figures which are given in Table V. it will be seen that during the year 1937 the total number of new cases of all forms of tuberculosis in the area was 407, and that of these 115—or 28.3 per cent.—referred to patients between the ages of 15 and 25 years. When this proportion is regarded from the comparative aspect, it must be considered as high. It should be noted that of the 142 new cases of pulmonary tuberculosis in females of all ages, 33—or 23.2 per cent.—were girls between 15 and 20 years, and 26—or 18.3 per cent.—were girls between 20 and 25 years, so that in females 41.5 per cent. of the new cases suffering from the pulmonary form of the disease were young adult females. Expressed in another way, new cases of pulmonary tuberculosis in young adult females between the ages of 15 and 25 years constituted 14.5 per cent. of all new cases of tuberculosis—pulmonary and non-pulmonary—at all ages. This result is probably an expression of the mode of life of the young adults of our time. The problem cannot be discussed further in a report of this nature, but it is one which merits the attention of both the scientist and the social worker.

STATISTICS.

The general trend of incidence of and mortality from tuberculosis is dealt with on page 110. The total number of cases of tuberculosis on the register on 31st December, 1937, was 2,099 as compared with 2,067 at the corresponding date in the previous year. This represents an increase of 32 cases.

There were added to the register during the year, on account of fresh notifications and inward transfers, 407 cases. As a result of death, removal from the area, or change in diagnosis, 375 names were removed from the register. (See Table X.)

NOTIFICATIONS. During the year, 301 cases of pulmonary and 72 cases of non-pulmonary tuberculosis were formally notified, making a total of 373 cases (212 males and 161 females). The 1936 figures were: pulmonary, 295; non-pulmonary, 60.

TABLE I.

TUBERCULOSIS. FORMAL NOTIFICATIONS, 1937.

Age (years)	Primary notifications (new cases)						Total new cases.
	Pulmonary.		Non-pulmonary.		Both sexes.		
	Males.	Females.	Males.	Females.	Pulmonary.	Non-pulmonary.	
0—	—	—	1	1	—	2	2
1—	4	5	10	4	9	14	23
5—	4	1	7	4	5	11	16
10—	4	3	6	1	7	7	14
15—	16	33	5	6	49	11	60
20—	22	23	4	1	45	5	50
25—	36	33	6	3	69	9	78
35—	28	14	1	5	42	6	48
45—	30	12	2	—	42	2	44
55—	19	4	1	2	23	3	26
65—	5	5	1	1	10	2	12
All ages	**168**	**133**	**44**	**28**	**301**	**72**	**373**
All notifications (primary & secondary)	295	239	63	58	534	121	655

From the point of view of age grouping, it is found that 7.0 per cent. of the total notifications of pulmonary tuberculosis which were received were in respect of children under 15 years, and 93.0 per cent. were in respect of persons over 15 years. As regards non-pulmonary tuberculosis, 47.2 per cent. were children under 15 years, and 52.8 per cent. were individuals over 15 years. The corresponding figures for the previous year were 5.4 per cent. and 94.6 per cent. in respect of pulmonary tuberculosis, and 46.7 per cent. and 53.3 per cent. in respect of non-pulmonary tuberculosis.

Table I. gives details regarding the ages of notification of pulmonary and non-pulmonary cases respectively. The figures for *primary* notifications at all ages represent the total new cases of tuberculosis which were *formally notified* to the medical officer of health during the year. These figures are printed in bold type.

Table II. gives the age grouping of cases of tuberculosis which came to the notice of the medical officer of health, otherwise than by formal notification, during the year.

TABLE II.

TUBERCULOSIS. CASES NOT FORMALLY NOTIFIED, 1937.

Age (years)	Pulmonary.		Non-pulmonary.		Both sexes.		Total not notified.
	Males.	Females.	Males.	Females.	Pulmonary.	Non-pulmonary.	
0—	—	1	—	—	1	—	1
1—	1	—	1	1	1	2	3
5—	—	1	1	—	1	1	2
10—	—	—	—	3	—	3	3
15—	—	—	—	—	—	—	—
20—	1	3	1	—	4	1	5
25—	5	1	1	—	6	1	7
35—	2	—	2	—	2	2	4
45—	4	2	—	—	6	—	6
55—	1	—	—	—	1	—	1
65—	—	1	—	1	1	1	2
All ages	**14**	**9**	**6**	**5**	**23**	**11**	**34**

The source of information in respect of these 34 cases is given in Table III.

TABLE III.

TUBERCULOSIS. NON-NOTIFIED CASES. SOURCES OF INFORMATION.

Source of information as to the above-mentioned cases.	Number of cases.	
	Pulmonary.	Non-pulmonary.
Death returns:		
(a) from local registrars	9	5
(b) transferable deaths from Registrar General	1	—
Posthumous notifications	—	—
"Transfers" from other areas (other than transferable deaths)	13	6
Other sources (if any)	—	—
Total	23	11
Pulmonary and non-pulmonary ..	34	

Ward incidence of notified cases (primary notification). Table IV. gives the distribution in the various wards of the borough of the 373 cases notified in 1937, according to site affected. It will be seen that generally the variation of the incidence rate in different wards was slight. No definite conclusions can be drawn from the rates shown, but the data are of some importance for reference purposes.

Age incidence of new cases. In this section a distinction has hitherto been made between cases formally notified to the medical officer of health and cases which came to his notice through other channels. The true incidence of new cases is given by the sum of these two separate groups of cases, and for comparative purposes it is more accurate to take this combined figure. Table V. shows the true incidence of new cases in 1937, distributed according to the age and sex of the patients, and to the main type of the disease from which the patients suffered.

DEATHS. The total deaths from tuberculosis of all types during the year was 227, of which 138 were of males and 89 of females. In the previous year the total number was 236, of which 138 were of males and 98 of females. Of the total deaths from tuberculosis, the pulmonary form of the disease accounted for 203, or 89.43 per cent., the non-pulmonary form for 24, or 10.57 per cent. The death rate from pulmonary tuberculosis was 0.78

TABLE IV.

TUBERCULOSIS. PRIMARY NOTIFICATIONS, 1937.

DISTRIBUTION IN WARDS.

Ward.	Pulmonary.	Non-pulmonary.	Total.	Rate per 1,000 population
1. New Town	15	6	21	1.37
2. Forest Gate	14	6	20	1.21
3. High Street	21	6	27	1.75
4. Broadway	14	2	16	1.28
5. Park	15	6	21	1.55
6. Upton	18	1	19	1.29
7. Plashet Road	12	7	19	1.51
8. West Ham	11	5	16	1.14
9. Plaistow	15	4	19	1.08
10. Bemersyde	11	5	16	1.39
11. Canning Town and Grange	29	6	35	1.43
12. Hudsons	35	2	37	2.04
13. Ordnance	18	2	20	1.18
14. Beckton Road ..	26	5	31	1.77
15. Tidal Basin	27	4	31	1.51
16. Custom House and Silvertown ..	20	5	25	1.38
Whole borough	301	72	373	1.44

per 1,000 of the population, and from non-pulmonary tuberculosis 0.09 per 1,000 of the population, making a total death rate from all forms of the disease 0.87 per 1,000. The corresponding figures for 1936 were:—pulmonary 0.78 per 1,000, non-pulmonary 0.11 per 1,000, making a total of 0.89 per 1,000. The figures for 1937 therefore present a decrease of 0.02 per 1,000 in the non-pulmonary rates.

Comparative death rates. I am indebted to the Registrar-General for the following information. The provisional death rates from tuberculosis for England and Wales for the year 1937 were: respiratory 0.58 per 1,000 of the population; non-respiratory 0.12 per 1,000; all forms 0.70 per 1,000.

The pulmonary death rate for West Ham is therefore considerably above the respiratory death rate for the country as a

TABLE V.

TUBERCULOSIS. INCIDENCE OF NEW CASES (NOTIFIED AND NON-NOTIFIED), 1937.

Age (years)	Pulmonary.		Non-pulmonary.		All forms.	
	Males.	Females.	Males.	Females.	Number.	Rate per 1,000 population at ages.
0—	—	1	1	1	3	0.68
1—	5	5	11	5	26	1.48
5—	4	2	8	4	18	0.71
10—	4	3	6	4	17	0.70
15—	16	33	5	6	60	2.27
20—	23	26	5	1	55	2.16
25—	41	34	7	3	85	2.08
35—	30	14	3	5	52	1.65
45—	34	14	2	—	50	1.76
55—	20	4	1	2	27	1.30
65—	5	6	1	2	14	0.96
All ages	182	142	50	33	407	1.57

whole, but the non-respiratory rate is somewhat below the corresponding rate for England and Wales.

Since the respiratory death rate refers to persons who died from laryngeal tuberculosis in addition to tuberculosis of the lungs and pleura, the death rate from respiratory tuberculosis is not strictly comparable with the death rate from pulmonary tuberculosis. As the number of patients who die as a result of laryngeal tuberculosis unaccompanied by tuberculosis of the lungs and pleura is very small, the two rates may therefore be used for comparative purposes in this way.

From Table XXXIX. on page 114 it will be seen that, so far as pulmonary tuberculosis was concerned, nine towns had lower rates. So far as the death rate from other forms of tuberculosis was concerned, the death rate for London was equal to that for West Ham, and only four other towns had a lower rate than that of West Ham. When account is taken of the fact that the area is almost entirely industrial, these rates are not unsatisfactory. The general epidemiology of the disease in relation to the country as a whole is dealt with in another section.

Deaths at ages. The distribution of the 227 deaths, according to age, and sex, and type of disease, is shown in Table VI.

TABLE VI.

TUBERCULOSIS: AGE DISTRIBUTION OF DEATHS, 1937.

Age (years)	Pulmonary.		Non-pulmonary.		All Forms.	
	Males.	Females.	Males.	Females.	Number.	Rate per 1,000 population at ages.
0—	—	4	—	—	4	0.91
1—	1	—	7	2	10	0.57
5—	1	—	—	1	2	0.08
10—	—	1	—	—	1	0.04
15—	12	14	1	2	29	1.10
20—	15	13	—	2	30	1.18
25—	22	19	—	—	41	1.01
35—	17	7	2	2	28	0.89
45—	28	9	—	1	38	1.34
55—	25	7	1	1	34	1.63
65—	6	2	—	2	10	0.69
All ages	127	76	11	13	227	0.87

Further particulars of the deaths from non-respiratory tuberculosis are give in Table VII.

Deaths in wards. The actual deaths from different forms of tuberculosis which took place in the different wards of the borough, together with the ward death rates, are set out in Table VIII.

Duration of disease before death. The year of notification of each of the patients who died from tuberculosis in 1937 is given in Table IX. The following discussion relates especially to pulmonary cases, and the table does not give the percentage calculated for these cases only. The non-pulmonary deaths are, however, so few that they do not vitiate the conclusions. It is seen—excluding the 7 per cent. of deaths which occurred in persons who had not been notified as suffering from tuberculosis—

TABLE VII.

DEATHS FROM NON-RESPIRATORY TUBERCULOSIS, 1937.

Disease	Age (years)												All ages
	0–	1–	2–	5–	10–	15–	20–	25–	35–	45–	55–	65–	
Tuberculous meningitis	—	4	3	—	—	3	—	—	1	—	1	—	12
Tuberculous peritonitis	—	2	—	—	—	—	1	—	2	1	1	—	7
Miliary tuberculosis	—	—	—	1	—	—	1	—	—	—	—	—	2
Tuberculosis of sacro-iliac joint	—	—	—	—	—	—	—	—	—	—	—	1	1
Tuberculous ulcer of neck	—	—	—	—	—	—	—	—	—	—	—	1	1
Lupus	—	—	—	—	—	—	—	—	1	—	—	—	1
Total	—	6	3	1	—	3	2	—	4	1	2	2	24

that about 41 per cent. of the persons who died from the disease during the year had been notified within the previous twelve months. Further, about 62 per cent. of the persons who died from the disease during the year had shown symptoms sufficiently suggestive to warrant notification within the previous two years. These figures indicate a type of the disease which shows considerable activity. From the table it is seen also that only about 13 per cent. of the patients who died from tuberculosis in 1937 had survived for five years or longer from the date of first notification. There is no doubt that certain factors must contribute to

the rapidity with which death took place. It is unwise to dogmatize on figures for a single year, but it is possible that two factors may be responsible: (a) social conditions, and (b) a failure on the part of the patients to take full advantage of the excellent facilities for diagnosis and treatment which are offered by the local authority. Of the relationship between social conditions and tuberculosis I do not intend to speak in this report. If the second factor

TABLE VIII.

TUBERCULOSIS. DEATHS IN WARDS AND DEATH RATES PER 1,000 WARD POPULATION.

Ward.	Pulmonary.		Non-pulmonary.		All forms.	
	Deaths	Death-rate.	Deaths.	Death-rate.	Deaths	Death-rate.
1. New Town	11	0.72	1	0.06	12	0.78
2. Forest Gate	11	0.67	2	0.12	13	0.79
3. High Street	13	0.84	1	0.06	14	0.90
4. Broadway	10	0.80	1	0.08	11	0.88
5. Park	10	0.74	2	0.14	12	0.89
6. Upton	9	0.61	1	0.07	10	0.68
7. Plashet Road	9	0.72	2	0.15	11	0.87
8. West Ham	12	0.85	2	0.14	14	0.99
9. Plaistow ..	14	0.80	2	0.11	16	0.91
10. Bemersyde	8	0.70	1	0.08	9	0.78
11. Canning Town and Grange	23	0.94	2	0.08	25	1.02
12. Hudsons ..	17	0.94	1	0.06	18	0.99
13. Ordnance ..	12	0.71	1	0.05	13	0.77
14. Beckton Road	12	0.69	1	0.05	13	0.74
15. Tidal Basin	20	0.97	2	0.09	22	1.06
16. Custom House and Silvertown	12	0.66	2	0.11	14	0.77
Whole borough	203	0.78	24	0.09	227	0.87

is responsible, even in part, every effort should be made to induce the sufferers to improve their condition by constant attention to the recommendations which are made to them by the Council's specialists in tuberculosis work.

Table IX.

Year of notification of all deaths from tuberculosis in 1937.

	Year of notification.	Number of deaths in 1937.					Percentage of total deaths from tuberculosis
		Male.		Female.		Total.	
		Pulmonary	Non-pulmonary.	Pulmonary	Non-pulmonary		
Died in the Borough.	1923	—	—	1	—	1	0.44
	1925	—	—	1	—	1	0.44
	1926	—	1	—	—	1	0.44
	1927	2	—	—	—	2	0.88
	1928	—	—	2	—	2	0.88
	1930	1	—	—	—	1	0.44
	1931	1	—	—	—	1	0.44
	1932	2	—	—	—	2	0.88
	1933	1	—	1	1	3	1.32
	1934	3	—	3	—	6	2.65
	1935	5	—	3	—	8	3.52
	1936	12	—	10	1	23	10.14
	1937	10	—	14	1	25	11.01
Died outside the Borough.	1925	—	—	1	—	1	0.44
	1926	2	—	—	—	2	0.88
	1927	2	—	—	—	2	0.88
	1928	—	—	1	—	1	0.44
	1929	1	—	—	—	1	0.44
	1930	3	—	—	—	3	1.32
	1931	2	—	—	—	2	0.88
	1932	1	—	5	—	6	2.65
	1933	3	—	1	1	5	2.20
	1934	7	—	1	—	8	3.52
	1935	8	—	3	1	12	5.29
	1936	14	1	8	1	24	10.57
	1937	42	6	16	5	69	30.40
		122	8	71	11	212	93.39
	1937 Not notified	5	3	5	2	15	6.61
	Total	127	11	76	13	227	100.00

THE TUBERCULOSIS REGISTER.

The tuberculosis register is an accurate record of the number of notified cases. Tables X gives particulars of the cases added to and removed from the register during the year 1937.

TABLE X.

NOTIFICATION REGISTER.

	Pulmonary.			Non-pulmonary.			Total cases.
	Males.	Females	Total.	Males.	Females	Total.	
Number of cases of tuberculosis on register on 31st December, 1936	709	838	1,547	217	303	522	2,067
Number of cases *removed* from the register during the year by reason of :–							
(*a*) Withdrawal of notification ...	—	—	—	—	—	—	—
(*b*) Recovery from the disease ...	32	28	60	20	14	34	94
(*c*) Death	109	74	183	13	6	19	202
(*d*) Otherwise ...	21	41	62	7	10	17	79
Total removed from register	162	143	305	40	30	70	375
Number of cases added to the register during the year :–							
(*a*) New cases ...	168	133	301	44	28	72	373
(*b*) Posthumous notifications ...	6	4	10	3	2	5	15
(*c*) Transfers ...	8	5	13	3	3	6	19
Total added to register	182	142	324	50	33	83	407
Number of cases of tuberculosis on register on 31st December, 1937	729	837	1,566	227	306	533	2,099

For comparative purposes, particulars regarding the number of persons on the register in each year since 1931 are given in Table XI.

TABLE XI.

NUMBER ON TUBERCULOSIS REGISTER.

Year.	Number on register.			Increase (+) or decrease (−) as compared with previous year	
	Pulmonary.	Non-pulmonary.	Total.	Actual.	Percent. of previous years.
1931	2,373	991	3,364	—	—
1932	2,002	974	2,976	−388	−11.5
1933	1,751	1,020	2,771	−205	− 6.8
1934	1,690	603	2,293	−478	−17.2
1935	1,648	605	2,253	− 40	− 1.7
1936	1,547	520	2,067	− 86	− 3.8
1937	1,566	533	2,099	+ 32	+ 1.5

WORK OF THE DISPENSARY.

Special features of the work of the dispensary are discussed later in the report of the Chief Clinical Tuberculosis Officer. In Table XII. I give certain details of the work carried out at the dispensary in the year 1937. This table is modified from Form T. 145, which is required by the Ministry of Health.

CONTACTS. The number of new contacts examined during the year was 423, of whom 6 were found to be suffering from tuberculosis. The corresponding figures for the previous year were 464 and 8. Further particulars are given in Table XIII.

TABLE XIII.

CONTACTS FIRST EXAMINED DURING 1937.

	New contacts examined.	Found sputum T.B. +	Diagnosed tuberculous but sputum negative.	Diagnosed non-pulmonary tubercle.	Entirely non-tuberculous. Lost sight of. Removed from area.	Remaining under observation.	Admitted sanatoria for observation or treatment.
Men	69	2	—	—	66	1	1
Women	133	1	—	—	128	4	—
Boys	121	—	2	1	112	6	2
Girls	100	—	—	—	89	11	1
Total	423	3	2	1	395	22	4

Table XII.

Tuberculosis Dispensary. State of diagnosis at the end of the year 1937. (Modified from Ministry of Health Return, Form T/145, Table A.)

	PULMONARY				NON-PULMONARY				TOTAL			
A. New cases examined during the year (excluding contacts)	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Definitely tuberculous	125	99	7	10	12	15	12	4	137	114	19	14
Diagnosis not completed	—	—	—	—	—	—	—	—	77	66	68	29
Non-tuberculous	—	—	—	—	—	—	—	—	118	151	175	144
Totals									332	331	252	187
B. New contacts examined during the year :												
Definitely tuberculous	3	—	2	—	—	—	1	—	3	—	3	—
Diagnosis not completed	—	—	—	—	—	—	—	—	1	4	11	8
Non-tuberculous	—	—	—	—	—	—	—	—	65	129	107	92
Totals									69	133	121	100
C. Cases written off Dispensary Register :– Recovered	27	22	13	10	4	3	10	6	31	25	23	16
Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)									207	299	309	249
Totals									238	324	332	265

Number of persons on Dispensary register :—

Diagnosis completed	1,578
Diagnosis not completed	223
Total	1,801

The number of contacts who were still under observation on the 31st December, 1936, was 27: of these, 11 were diagnosed definitely tuberculous during the year; 14 were diagnosed as non-tuberculous; one was lost sight of; one remained under observation; and 7 were admitted to sanatoria for observation or treatment.

INSTITUTIONAL ACCOMMODATION FOR TUBERCULOSIS.

The Council possesses two institutions for the treatment of tuberculous patients—Dagenham Sanatorium, which accommodates 128 adults, and Langdon Hill Sanatorium, which has 40 beds for the treatment of children. These institutions are further described in the report of the medical superintendents. Table XIV. gives further details regarding the allocation of these beds.

Table XIV.

Allocation of beds at Dagenham and Langdon Hill Sanatoria.

Age (years)	Type of tuberculosis.	Dagenham.		Langdon Hill.		Total.
		Male.	Female.	Male.	Female.	
—15	Pulmonary	—	—	15	15	30
	Non-pulmonary	—	—	5	5	10
15—	Pulmonary	80	48	—	—	128
	Non-pulmonary	—	—	—	—	—
Total		80	48	20	20	168

In addition 92 beds at Whipps Cross Hospital are at present used for the treatment of tuberculosis—more especially cases of an advanced nature.

There were no extensive alterations or additions to these sanatoria during the year, and other structural alterations are described later in this section.

Treatment in the Authority's institutions during 1937. The number of patients treated in Dagenham and Langdon Hill Sanatoria is shown in tabular form in Tables XV. and XVI.

Table XV.

Tuberculosis. Treatment in Dagenham Sanatorium, 1937.
(Ministry of Health Form T. 145 (D)—modified.)

Adults (15—)	Remaining 1st January, 1937	Admitted.	Discharged.	Died.	Remaining 31st December 1937
Pulmonary—					
Males	76	136	116	40	56
Females	43	85	72	16	40
Non-pulmonary—					
Males	—	—	—	—	—
Females	—	—	—	—	—
Observation—					
Males	—	9	9	—	—
Females	1	10	10	—	1
Total	120	240	207	56	97

Table XVI.

Tuberculosis. Treatment in Langdon Hill Sanatorium, 1937.
(Ministry of Health Form T. 145 (D)—modified.)

Children (—15)	Remaining 1st January, 1937	Admitted.	Discharged.	Died.	Remaining 31st December 1937
Pulmonary—					
Males	11	15	13	—	13
Females	11	13	12	—	12
Non-pulmonary—					
Males	1	4	2	—	3
Females	2	4	3	—	3
Observation—					
Males	8	6	11	—	3
Females	4	2	2	—	4
Total	37	44	43	—	38

Duration of treatment. The duration of treatment in these institutions and the results of the treatment which the patients received are shown in Tables XVII. and XVIII.

TABLE XVII.

DAGENHAM SANATORIUM. ANALYSIS OF CASES DISCHARGED.
(MINISTRY OF HEALTH FORM T. 145 (G)—MODIFIED)

Period of treatment (adults).	Pulmonary.						Non-pulmonary.	Total.
	T.B. minus.			T.B. plus.				
	Quiescent.	Improved.	Not improved.	Quiescent.	Improved.	Not improved.		
Under 28 days								
Males ...	—	—	6	—	—	4	—	10
Females ...	—	—	1	—	—	3	—	4
1—3 months ...								
Males ...	1	5	—	—	10	3	—	19
Females ...	4	3	—	2	2	3	—	14
3—6 months								
Males ...	14	3	—	9	15	3	—	44
Females ...	5	1	—	3	12	5	—	26
6—12 months								
Males ...	3	2	—	15	7	3	—	30
Females ...	3	—	—	2	5	2	—	12
Over 12 months								
Males ...	2	—	—	4	4	2	—	12
Females ...	1	—	—	5	3	1	—	10
Total ...	33	14	7	40	58	29	—	181

Occupational therapy. Since the proportion of advanced or moderately advanced cases admitted to Dagenham Sanatorium is fairly high, it has not so far been found practicable to introduce any elaborate system of graded exercises. The actual amount of work which is allocated to different patients is decided more by the condition of the patient than dictated by any pre-arranged system. Table XX. gives an indication of the proportion of the patients who were in a condition to do work of this type.

Results of treatment in institutions. The results of treatment are further analysed in Table XIX.

Table XVIII.

Langdon Hill Sanatorium. Analysis of cases discharged.

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

Period of treatment	Children (—15 years).	Sex.	Pulmonary.						Non-pulmonary.			Non-t.b.	Total
			T.B. minus.			T.B. plus							
			Q.	Imp.	Not Imp.	Q.	Imp.	Not Imp.	Q.	Imp.	Not Imp.		
Under 28 days	Under 5	Males	—	—	—	—	—	—	—	—	1	—	1
		Females	—	—	—	—	—	—	—	—	1	—	1
	Over 5	Males	—	—	—	—	—	—	—	—	—	—	—
		Females	—	—	—	—	—	—	—	—	—	—	—
1—3 months	Under 5	Males	—	—	—	—	—	—	—	—	—	—	—
		Females	—	—	—	—	—	—	—	—	—	—	—
	Over 5	Males	—	—	—	—	—	—	—	—	—	1	1
		Females	—	—	—	—	—	—	—	1	—	—	1
3—6 months	Under 5	Males	—	—	—	—	—	—	—	—	—	—	—
		Females	—	—	—	—	—	—	—	—	—	—	—
	Over 5	Males	3	—	—	—	—	—	—	—	—	1	4
		Females	1	—	—	—	—	—	1	—	—	—	2
6—12 months	Under 5	Males	—	1	—	—	—	—	—	—	—	—	1
		Females	—	—	—	—	—	—	—	—	—	—	—
	Over 5	Males	8	—	—	—	—	—	1	—	—	—	9
		Females	4	—	—	1	—	—	1	—	—	—	6
Over 12 months	Under 5	Males	—	—	—	1	—	—	—	—	—	—	1
		Females	—	—	—	—	—	—	—	—	—	—	—
	Over 5	Males	8	—	—	1	—	—	—	—	—	—	9
		Females	6	—	—	—	—	—	1	—	—	—	7
Total			30	1	—	3	—	—	4	1	2	2	43

Q.—quiescent. Imp.—improved. Not imp. —not improved.

ADMINISTRATIVE ACTION.

Public Health (Prevention of Tuberculosis) Regulations, 1925. These regulations prohibit any person who is aware that he is suffering from tuberculosis of the respiratory tract to enter upon any employment or occupation in connection with a dairy which would involve the milking of cows, the treatment of milk, or the handling of vessels used for containing milk.

It was not necessary to take any statutory action under these regulations during the year.

Public Health Act, 1925. *Section* 62. The local authority has power under this section to apply to a court of summary jurisdiction for an order for the compulsory removal to a hospital or institution of any person who is suffering from pulmonary tuberculosis, and is in an infectious state, and is liable to spread infection to others. No action was taken in this connection during the year. The above-mentioned section has now been repealed by section 172 of the Public Health Act, 1936, which came into operation on 1st October, 1937.

Table XIX.

Dagenham and Langdon Hill Sanatoria.

Results of treatment in discharged cases (including deaths).

Excluding patients in residence under 28 days.

Group.	Adult males pulmonary.		Adult females pulmonary.		Children pulmonary.		Children non-pulmonary		Total.	
	No.	Per-cent.	No.	Per-cent.	No.	Per-cent.	No.	Per-cent.	No.	Per-cent.
Quiescent ...	48	34.78	25	32.89	33	97.05	4	80.00	110	43.47
Improved ...	46	33.33	26	34.21	1	2.95	1	20.00	74	29.24
Stationary ...	3	2.17	3	3.94	—	—	—	—	6	2.37
Worse ...	8	5.79	8	10.54	—	—	—	—	16	6.35
Died ...	33	23.93	14	18.42	—	—	—	—	47	18.57
Total discharges ...	138	100.00	76	100.00	34	100.00	5	100.00	253	100.00

Table XX.

Dagenham Sanatorium. Grade of exercise attained by adult patients.

	Males.	Females.	Total.
No exercise	34	29	75
Walking	46	11	45
Work	36	32	68
Total	116	72	188

No exercise—Either confined to bed or up only for a few hours daily.
Walking.—Up, but no exertion. Able to take short walks or do very limited work.
Work.—On full exercise.

REPORT ON THE WORK OF THE TUBERCULOSIS DISPENSARY

BY P. A. GALPIN, M.D., D.P.H.,
Chief Clinical Tuberculosis Officer.

The work of the dispensary has been carried out as usual during the year.

CLINICAL EXAMINATIONS. The number of cases examined is shown in Table XXI., in which figures for other years are also shown for comparison. The table also gives the number of persons examined as request cases or contacts.

TABLE XXI.

TUBERCULOSIS. EXAMINATIONS AT DISPENSARY.

Type of case.	Number examined at dispensary.					
	1927	1933	1934	1935	1936	1937
Examination by request ..	760	553	516	537	521	479
Contacts	699	507	351	401	464	423
Notified cases	198	98	104	74	69	48
Definite cases	516	419	328	276	301	284
Total exams.	2,173	1,577	1,299	1,288	,355	1,234

Six of the contacts were diagnosed as tuberculous, or 1.42 per cent. of the contacts examined.

PULMONARY TUBERCULOSIS.

Institutional treatment. The number of beds at Dagenham Sanatorium was adequate for the patients who accepted treatment there. The demand for beds necessarily fluctuates periodically, and at the end of the year 32 beds were unoccupied. The decline in the demand for beds is partly due to the decrease in the total number of cases needing this form of treatment. Whereas in 1927 the number of definite cases examined was 516, in 1937 only 284 were seen.

There has also been a considerable decline in the number of children notified, as the following figures show:—

Table XXII.

Tuberculosis. Notification in children.

Year.	Pulmonary.	Non-pulmonary.	Miliary.	Total.
1927	43	67	2	112
1937	20	42	—	62

Of the 20 pulmonary cases two only were found to have a positive sputum. If this decline continues, and there are good reasons to lead one to believe that it will, then it will be increasingly difficult to fill the beds at Langdon Hill Sanatorium with definite lung cases. At the end of the year 39 cases were under treatment at this sanatorium, and an analysis of these showed the following types of cases—

Pulmonary (T.B. plus)	2
Pulmonary (T.B. minus)	26
Observation	11
Total ..	39

It will be observed that the proportion of observation cases is high, and if this ratio continues it may be necessary to review the uses to which the institution is put. In this way it might be possible to utilize the sanatorium for types of cases for which there is at present difficulty in obtaining beds.

Table XXIII.

Tuberculosis. Domiciliary treatment.

	1933	1934	1935	1936	1937
Number of insured persons under treatment at end of the year	372	315	282	224	221
Number of reports received from panel doctors (G.P. 36) ..	635	615	435	374	329
Reports per patient ..	1.7	1.9	1.5	1.6	1.4

Domiciliary treatment. Particulars regarding the domiciliary treatment of tuberculous patients are given in Table XXIII.

The following suggestions may explain the decline in the number of reports received. In the past when a patient was referred to his panel doctor for domicilary treatment he would not attend at the dispensary again until twelve months had elapsed, or until his doctor sent him or recommended his re-examination on the quarterly report G.P. 36. In recent months this practice has been modified by recommending, in addition to domicilary treatment, dispensary supervision—i.e., the patient attends the dispensary at intervals of two to four weeks or longer. In such cases the quarterly report is not required.

The object of this change in procedure is twofold. In the first place, it is an attempt to ascertain whether the patient is pursuing the régime of life commenced in the sanatorium, and more particularly whether he has established the sound dietetic habits recommended. These consist mainly of the eating of a breakfast before commencing work, and the eating of fat with meat. The patients are advised to have, at least once a day, a meal of meat or fish, with vegetables, including green vegetables, and to eat green salads, summer and winter, three or four times a week. They are also advised to take wholemeal bread and a pint of milk daily. When the patient is not able to purchase the necessary food, a grant is made.

In the second place an attempt is made to discover how the patient thinks about the complaint, which he commonly refers to as " It." Some patients worry about their condition, and others try to forget it. A few, only a small number, learn to face and accept facts and to make the disease a part of themselves and their way of life. Most patients realise that worrying is harmful and even fatal, and endeavour to try to find things to do to take their mind off their condition. There is evidence that this method is only partially successful, and leads to unsatisfactory results. An attempt is made to persuade the patient to face realities by doing daily those things which help him to overcome the disease.

Dispensary treatment. Children and non-insured persons, able to attend at the dispensary, have been given treatment. At the end of the year 575 patients were under treatment.

During the year 748 sputum tests were made, and 304 X-ray examinations were carried out at Whipps Cross Hospital.

Artificial pneumothorax. Nine cases received this form of treatment and, during the year, 85 refills were given at the dispensary.

Non-pulmonary cases. Adults were treated mainly at the Royal Sea-Bathing Hospital, Margate, and the majority of the children at the Lord Mayor Treloar Cripples' Hospital, Alton.

Table XXIV.

Institutional treatment of non-pulmonary tuberculosis.

	Margate.	Alton.
Number of cases admitted ..	12	4
Number of cases discharged	14	8

Tuberculosis of the skin. Twelve cases have been receiving treatment at the London Hospital; two of these are new.

After-care.

Extra nourishment. At the end of the year 243 patients were in receipt of grants of extra nourishment.

Colonies and settlements. Details are given in Table XXV. of patients who received treatment at training colonies and village settlements.

Table XXV.

Treatment at colonies and settlements.

Name of institution.	Admitted.		Discharged.		Died.		Away at 31.12.37.	
	Male.	Female.	Male.	Female.	Male	Female.	Male.	Female.
British Legion Village Preston Hall ...	3	—	2	—	—	—	4	—
Papworth Village Settlement ...	6	—	1	1	1	—	7	1
Burrow Hill Colony ...	2	—	1	—	—	—	3	—
Total ...	11	—	4	1	1	—	14	1

DISPOSAL OF CASES. An analysis of primary notifications and transfer of patients suffering from pulmonary tuberculosis, showing the disposal of the cases during the year 1937, is given in Table XXVI.

TABLE XXVI.

PULMONARY TUBERCULOSIS.

	Men.	Women.	Children.	Total.
Admitted to Dagenham or Langdon Hill Sanatoria	68	42	10	120
Admitted to other institutions	18	19	2	39
Unable to accept institutional treatment	14	23	—	37
Dispensary treatment .	5	8	—	13
Dispensary supervision .	3	4	2	9
Domiciliary or home treatment	15	8	—	23
Diagnosis not confirmed .	1	2	—	3
Removed from West Ham area	—	—	—	—
Not examined	45	17	6	68
Total	169	123	20	312

An analysis of the 68 cases which were not examined is shown below:

Notified deaths	19
Cases in institutions (e.g. mental hospitals)	33
Declined to attend dispensary	9
Left West Ham area	2
Notification withdrawn	1
Lost sight of	4

The percentage of notified deaths to total deaths (169) is 11.2 and to the total notifications and transfers (312)—6.0.

REPORT ON THE WORK AT THE WEST HAM SANATORIA,

BY G. M. MAYBERRY, L.A.M., L.R.C.P.,
Medical Superintendent.

(*a*) *Dagenham Sanatorium.*

The institution, which was originally opened as a temporary sanatorium, consists of permanent and temporary buildings standing in an area of approximately seven acres. The accommodation for male patients consists of two permanent main buildings, each having two wards. On the hospital side there is a balcony, and the wards are divided into one- two- and three-bedded cubicles, to accommodate 28 patients. On the convalescent side there are 32 beds. In addition, there is accommodation for eight other convalescent patients in two-bedded rooms, and twelve in a temporary building. The accommodation for female patients is in two temporary buildings, both of which contain cubicles, one with 21 beds for hospital cases, and the other with 27 beds for convalescent patients. There is a small balcony at the end of each ward.

All new patients are admitted to the hospital side, and after examination and observation, if suitable are transferred as soon as possible to the convalescent side. This rule is strictly adhered to, and does much to prevent patients from feeling that their condition is incurable.

There is a large dining room for the patients, separate recreation rooms for both sexes, a church, a concert room, a laundry, a sputum sterilizer, disinfecting plant, an X-ray department, and a mortuary.

Alterations. During the year 1937 several important improvements and additions were carried out, such as a balcony to the male hospital block, and a re-construction of the sluice and ablution room on the female side, including the installation of a modern bed-pan sterilizer. A recreation room for the domestic staff was also provided. A brick building was erected adjoining the disinfector. This building now contains a sputum sterilizer which works under steam pressure, with boiler house and lavatory accommodation for male staff attached. A water softener was also installed in a self-contained building; already its advantages are being felt.

Admissions. During the year, 221 cases were admitted—136 males and 85 females. The average length of stay was 25 weeks. The percentage of bed cases was 55·3. The cases admitted were of the usual type. The patients could generally be divided into the following classes:—

(a) The chronic fibroid type of case which generally deteriorates at intervals. These patients gladly return to conditions which they realise will build them up again.

(b) The stage II. class of patients who for economic reasons remained at work too long, did not consult a doctor, or refused to avail themselves in the first instance of treatment when it was offered to them.

(c) Early cases, or cases with a limited lesion, and a little constitutional disturbance, the first symptom of which was often an early haemoptysis. These patients constitute the smaller proportion. The average patient who has had an initial haemoptysis will readily go to an institution, while a limited number will place health before everything and seek early diagnosis and treatment.

Treatment. Treatment first and foremost consists of fresh air, rest, graduated exercise, and good food constituting a strictly balanced diet, which it is often difficult to obtain in many homes. The lack of a satisfactory diet is often one of the pre-disposing causes of the disease.

Drugs are used as accessories to treatment; guaiacol, calcium, and iron have been found beneficial.

Intra-muscular injections of gold were tried in 25 cases, several cases having two courses. The results are certainly encouraging. While in some cases there has been no apparent change, taking everything into consideration it is reasonable to conclude that others have improved with carefully regulated doses. We have had no bad results.

Artificial pneumothorax. Though many advanced cases have been admitted, few have been found suitable for this form of treatment. In all 10 successful inductions were carried out, and 192 refills were done. Unilateral cases are undoubtedly the most suitable, and the more limited the disease the more successful the result is likely to be. As a large proportion of these cases do well with conservative treatment, it does not seem justifiable to attempt an induction before a reasonable period of observation.

With few exceptions, the more advanced cases should not be subjected to this treatment without very serious consideration. Over a number of years we have had the opportunity of observing the end results in the more advanced type of case. They were far from encouraging compared with the results in those patients who received prolonged conservative treatment. This method of treatment may be very valuable in a limited number of cases, but the selection requires very careful consideration.

Gas replacement was done in one case; the result was highly satisfactory.

Operative treatment. The present accommodation is not entirely suitable for carrying out this type of treatment, and where it is necessary arrangements are made for the transfer of the patient to hospital. Suitable cases are likely to be few, but considering the satisfactory results which are obtained in many cases, it is likely that surgical measures will be more frequently adopted in the future.

Light. A carbon arc lamp has been in use for a number of years. As a method of treatment for pulmonary tuberculosis we do not employ it, but it is a very useful adjuvant in the treatment of special cases.

Some years ago a considerable number of the staff were off duty with influenza. Each of the others were given 5 minutes' exposure to the rays as a prophylactic measure, and there were no further cases. This measure has been several times repeated with success.

Results of treatment. The results are frequently disappointing. There are many factors that contribute to this, and the following suggestions refer to the particular patients who were under treatment.

(a) The human element. The patient will often, for economic and other reasons, not remain long enough in the institution, and he imagines that he should, by medicine or some of the modern methods of treatment, be cured in quite a short period. He is ignorant of the fact that in about 90 per cent. of cases these methods are contra-indicated.

(b) The return to conditions which in many instances are quite unsuitable.

(c) Many patients would remain to complete their treatment to the

best advantage if they could be satisfied that those who are dependent on them would be sufficiently provided for during their absence. I fear that in many instances this is not so.

(d) There is no practical method of compelling a patient to remain in an institution, although his discharge may be a grave danger to his family and the public at large.

Grade work. No elaborate grading of patients is carried out. For male patients on outdoor work there are three grades:—

(1) Light work. For 2 hours in the morning.
(2) Heavier work such as digging for 2 hours in the morning.
(3) Same work as in grade 2, but the patients work both in the morning and afternoon.

Several patients are also employed polishing floors, and in looking after the billiards room and tables. The gardener is responsible for seeing that the patients carry out the work allotted to them.

The female patients are employed in domestic work, washing up, dusting, and cleaning lockers, and in addition a number do light gardening.

When the weather is favourable we aim at keeping patients occupied out of doors as much as possible.

Radiology. During the year 601 films were taken, and 55 patients were screened. Three barium meals were given. In addition, 43 films were taken of children from Langdon Hill sanatorium. Lipiodol was used in one case.

Dental treatment. Two patients received treatment from the dental surgeon at Whipps Cross Hospital, and were fitted with dentures. Many patients arrive at the institution with their teeth in a very decayed condition. Where the patient is not well enough to attend a dentist outside, a number of extractions are done annually in the institution with and without a local anaesthetic. It would be helpful if patients would visit a dentist before they are admitted.

Diet. Three substantial meals are served daily—at 8.30 a.m., 1.30 and 6.0 p.m. In addition milk is given in the morning and at bed time. The quantity of the food is not limited in any way, and there is plenty of variety.

No special diets are recognised, but they are ordered for each individual case as required.

Bacteriological and other examinations. With the admission of a large number of sputum positive cases, the more exacting bacteriological methods, beyond the scope of routine examination of sputum and repeated examination in negative cases, are seldom necessary. A blood sedimentation test has been carried out in a number of cases, mostly in those having gold injections. In many cases its usefulness would appear to be somewhat limited.

Recreation. During the winter months the usual arrangements were made by the Hospitals Committee for concert parties to visit the institution monthly. Whist drives and billiards handicaps are also held at intervals.

There are three billiards tables, two of which are full-sized, and also a bagatelle table. There are two putting greens. Dart boards, dominoes, and chess are among other games supplied.

Wireless is available for the patients, head-phones for the sick, and loud speakers mostly for the convalescent. The wireless set on the female side was provided through the generosity of Councillor Mr. A. G. Gay, J.P.

Staff. During the year the health of the staff as a whole has been satisfactory.

Unfortunately one member of the nursing staff contracted pulmonary tuberculosis. I am glad to report that, after treatment in the institution, she has now been on full duty for some time.

Great difficulty has been experienced in obtaining probationers, and for the first time in the history of the institution it became necessary to engage the services of private nurses.

Three nurses passed Part I. of the examination for the certificate of the Tuberculosis Association, and three obtained their final certificate. Of recent years many leave before completing their course of training, often to take up private work.

(*b*) *Langdon Hill Sanatorium.*

This institution was officially opened in October, 1927, for the admission of children suffering from pulmonary tuberculosis. It stands on a site of 99 acres, its elevation being one of the highest in Essex.

There is accommodation for forty children—twenty of each sex. The main building, which is connected up with the dining room and kitchen, has two wards of 14 beds each, with three two-bedded cubicles at each side, and a nurses' duty kitchen

between the two wards. There is an isolation ward on each side. There are sliding doors to each ward, and a covered verandah under which beds can be brought out. Adjoining the institution is an orchard, and in this and the surrounding woods the children can have very pleasant walks.

Other buildings include a nurses' home, maids' quarters, playroom, and a schoolroom. Two school teachers attend daily to give instruction to the children. The school is recognised by the Board of Education, and is inspected at intervals by one of their medical officers.

Admissions. During the year 44 cases were admitted, 25 males and 19 females. We get few advanced cases with positive sputum. The other cases consist of those who show radiologically an old standing focus, heavy root shadows, or evidence of pleurisy. While others show no definite signs they often have a cough and appear generally debilitated. In some cases there is a definite history of tuberculosis in the home.

In addition we had a number of children with abdominal tuberculosis and glands, a few of whom were operated on before admission.

In 23 cases the Mantoux test was carried out.

The average length of stay was approximately 61 weeks. The percentage of bed patients was 3.94.

Treatment. Beyond the ordinary open-air methods and the administration of drugs and adexolin in a few cases, active treatment has not been found necessary.

Results. The results can be considered highly satisfactory. Children with positive sputum have rarely any sputum after a short period of treatment. We have not found that children with a positive sputum and advanced disease are hopeless cases. With prolonged treatment the results are amazing at times. Many who have had treatment are now at work after a number of years. Unfortunately, others who were discharged in a hopeful condition, were later admitted to Dagenham Sanatorium.

Children are much more amenable to treatment than adults, and, after a sufficient period of treatment, if they could return to favourable conditions or be kept in an institution such as a colony for some years, a large proportion would be restored to a satisfactory state of health. In conclusion, I feel that enough is not done for the definite tuberculous child in the way of after-care.

Radiology. This has been extremely helpful from the point of view of diagnosis. During the year the number of films of Langdon cases taken at Dagenham Sanatorium was 43.

Dental treatment. All children who require this treatment are seen by the school dentist before admission, and not admitted until it is completed. It has, however, been necessary to perform a few extractions at the institution.

Diet. A generous diet is provided, with a liberal supply of fresh vegetables and fruit. Fresh fruit is available during the greater part of the year from the orchard and green-houses.

Recreation. Suitable cases are taken for nature study walks by the school teachers. In their absence the children are taken for walks by the nursing staff.

During the summer months picnics are arranged for those well enough to go. During the winter, films are hired from the Kodak Library and shown weekly. There is wireless installation in all the wards and staff quarters.

Staff. During the year we lost a number of our nursing staff who had been with us for several years. It has been difficult to fill their places adequately. Fortunately the acute shortage of nurses has not been felt so much as at Dagenham Sanatorium.

V. MATERNITY AND CHILD WELFARE.

MATERNITY AND CHILD WELFARE.

INTRODUCTION.

The scheme which is administered by the County Borough Council for the care of the mother and her infant has been officially recognised as giving excellent results. The extent of the scheme and the nature of the results may be appreciated from the information which is given in the following pages. In this sectnon I have confined the text to information relating to the practical aspects of the service, and I have dealt with the statistical aspect of the diseases of infancy and of motherhood—expectant or realized—in another section. In this way the data which are of interest to the statistician appear together in one section, but those who are concerned mainly with maternity and child welfare work should refer also to the appropriate tables in the section on Vital Statistics.

Where so much is good, the indication of certain chinks in the armour might appear to savour of an act of derogation. Yet no service can be perfect, and those who are familiar with this service will understand that any suggestions for improvement must be taken as guides for future progress rather than admissions of present weaknesses. My predecessor, the late Dr. F. Garland Collins, set out in an excellent report certain improvements which could be effected in the maternity service. I have recently attempted to give effect—though in a slightly different manner—to certain of these suggestions, and other aspects of this service will have my attention in the near future. With reference to the care of the child, there does appear to be a gap between the end of infancy and the beginning of school life. The health of the toddler is a matter which deserves the attention of a large and progressive authority, and at a later date I hope to put forward certain suggestions for the improvement of this service.

In the preparation of this part of the report I have to acknowledge my indebtedness to Dr. Helen Campbell, Senior

Table I.

Distribution of all births occurring in the Borough.

Place of confinement.	Residence of mother.				Total
	West Ham.	East Ham.	Essex County	Other areas	
I. Births in patients' homes					
(*a*) Attended by doctor ..	298	—	—	—	298
(*b*) Attended by midwife ..	2,069	3	6	7	2,085
(*c*) Others	—	—	—	—	—
Total in home ..	2,367	3	6	7	2,383
II. Births in Council's hospitals					
(*a*) Forest Gate Hospital ..	445	261	212	1	919
(*b*) Other institutions ..	—	—	—	—	—
Total in Council's hospitals ..	445	261	212	1	919
III. Births in voluntary hospitals					
(*a*) Plaistow Maternity Hospital ..	804	294	96	11	1,205
(*b*) Queen Mary's Hospital	320	131	538	15	1,004
(*c*) Other voluntary hospitals ..	—	—	—	—	—
Total in voluntary hospitals ..	1,124	425	634	26	2,209
IV. Private nursing homes ..	6	6	2	3	17
V. Other institutions	—	—	—	—	—
VI. Other births	—	—	—	—	—
Grand total ..	3,942	695	854	37	5,528

Assistant Medical Officer for Maternity and Child Welfare, who is responsible for the administration of this section.

DISTRIBUTION OF ALL BIRTHS.

In an area such as West Ham, surrounded as it is by other urban areas, it is inevitable that many of the births which take place in homes and hospitals are to mothers whose ordinary place of residence is outside the area of the County Borough. The distribution of all the births—whether to West Ham residents or not—which occurred in the area during 1937 are given in Table I. It should be noted that the figures relate to the number of children born—both live and still births—and not to the number of confinements.

This table brings out the fact that, of the 2,383 births which occurred in private houses, 99.3 per cent. related to mothers ordinarily resident in West Ham. Of the births which occurred in the hospitals belonging to the local authority, 48.4 per cent. were to mothers residing in West Ham, 28.4 per cent. to mothers residing in East Ham, and 23.1 per cent. to mothers resident in the County of Essex. The corresponding figures for voluntary institutions are: West Ham residents, 50.9 per cent.; East Ham residents, 19.2 per cent.; Essex County residents, 28.7 per cent. The relative proportion of West Ham residents who are confined in the Council's hospitals is therefore approximately the same as the proportion confined in voluntary hospitals. Of the patients resident outside the Borough area, the proportion resident in East Ham is higher in the case of the municipal hospitals than in the case of the voluntary hospitals. Taking the figures in the last line of this table, it is seen that of the 5,528 births which took place in the area of the County Borough, 71.3 per cent. were to mothers ordinarily resident in the West Ham area, 12.6 per cent. to East Ham women, and 15.5 per cent. to women resident in the County of Essex.

MATERNITY SERVICE.

Midwives. The total number of midwives on the register on 31st December, 1936, was 54. During 1937 the number of midwives who gave notice of their intention to practise was 103. The total number of midwives on the register on 31st December, 1937, was 60. The apparent discrepancy between the figures 103 and 60 is accounted for by the fact that a certain number of mid-

wives practise from their training schools in the borough for a short period after passing the examination of the Central Midwives' Board.

Of the 60 midwives, only 9 were in private practice; 46 were employed by the various voluntary associations, and 5 by the local authority in Forest Gate Hospital maternity unit. Five of the private midwives resided in the borough; the remaining four midwives lived in adjoining areas, and conducted respectively a varying number of cases in West Ham.

Plaistow Maternity Hospital. This hospital is situated in the centre of a densely populated district, and it has for many years carried out excellent work in obstetrics. Further notes upon this institution appear on page 225. During the year 1937 the number of births of West Ham residents in this institution was 804. In addition, nurses from this hospital attended 1,242 mothers whose confinement took place in their own homes. The number of midwives employed by this institution at any one time varies, but at the end of the year the number was 11 in hospital and 15 on the district. During the course of the year 54 different midwives were in residence.

Queen Mary's Hospital. This hospital—further notes on which appear on page 255—has 50 beds for maternity purposes, 10 of which are subsidised by the Borough Council. The number of births of West Ham residents which took place in this hospital during the year was 320. The average number of midwives in residence at any one time is 7.

Forest Gate Hospital. Maternity unit. The number of beds in this unit varies according to the demand, but in general it may be said that the average number of patients in residence is about 70. The number of births which took place in the hospital during the year was 919. This number has been increasing progressively during the last few years, and the time has now arrived for a complete re-organisation of the unit. A report dealing with this matter was recently presented to the appropriate committee.

In addition to the midwives employed by the above institutions, midwives belonging to certain other organisations practise in the borough. These are clearly detailed in Table II.

Analysis of cases attended by midwives. Table II. gives an analysis of the cases attended by midwives during 1937.

Fifteen midwives from the Plaistow Maternity Hospital

Table II.

Analysis of cases attended by midwives.

Classification of midwives.	Average number of midwives throughout the year.	Attended as		Total cases.	Percent. of local births.
		Midwife.	Maternity nurse.		
I. Births in the homes.					
(1) *Midwives in practice.*					
(a) Private midwives (resident in West Ham)	3	140	23	163	3.07
(b) Private midwives (resident outside West Ham).	3	27	2	29	0.55
(c) Certificated and on register but did not work.	2	—	—	—	—
(2) *Midwives employed by nursing associations.*					
(a) Plaistow Maternity Hospital and District Nurses' Home.	15	1,242	173	1,415	26.67
(b) Queen Mary's Hospital.	2	202	2	204	3.85
(c) Mothers' Hospital Branch Home, 19, Chandler Road, E.16.	2	163	11	174	3.28
(d) Essex County Nursing Association.	8	69	32	101	1.90
(e) Silvertown and North Woolwich District Nursing Assoc.	2	66	1	67	1.26
Total in homes	37	1,909	244	2,153	40.58
II. Births in institution					
(1) *Private nursing homes*	2	—	17	17	0.32
(2) *Maternity hospitals*					
(a) Forest Gate Hospital.	5	855	52	907	17.11
(b) Plaistow Maternity.	11	1,117	88	1,205	22.72
(c) Queen Mary's	5	890	106	996	18.77
Total in institutions	23	2,862	263	3,125	58.92
Grand total	60	4,771	507	5,278	99.50

and two midwives from Queen Mary's Hospital are always reserved for practise as district midwives. The above numbers include also those who practised partly in hospital and partly on the district during the year 1937.

The local births—5,305 in number—are those actually returned by the Registrar General as having been registered in the borough. They include the births of non-residents which occurred within the borough.

The number of cases attended by midwives (excluding cases delivered in hospitals or nursing homes by midwives) during the year was 2,153. Of these, 1,909 were attended as midwives, and 244 as maternity nurses. This number is a decrease of 57 cases as compared with the figures for 1936.

Records of calling in medical aid. Medical aid was summoned by midwives under section 14(1) of the Midwives Act, 1918, in 628 cases. Details for the summoning of medical aid are shown in Table III.

Table III.

Midwives practice.

Reasons for medical aid being summoned.

Pregnancy.		
Unsatisfactory condition of patient	4	
Toxaemia, albuminuria	4	
Varicose veins	1	
Abdominal pains	5	
Threatened miscarriage	10	
Ante-partum haemorrhage	4	
Prolapsus uteri	1	
Miscarriage	11	
		40
Labour.		
Prolonged labour	100	
Abnormal presentation	34	
Retained products	17	
Prolapsed cervix	2	
Ante-partum haemorrhage	34	
Post-partum haemorrhage	9	
Unsatisfactory condition	16	

Ruptured perineum	131	
Foetal distress	3	
	——	346
Puerperium.		
Rise of temperature	53	
Phlebitis, varicose ulcer, etc.	14	
Breast conditions	8	
General condition unsatisfactory	13	
Secondary post-partum haemorrhage	3	
Sub-involution	2	
Vaginal tear	1	
	——	94
Infants.		
Birth injury	1	
Congenital deformity or defect	14	
Prematurity, feebleness	25	
Asphyxia, cyanosis	14	
Discharging eyes	30	
Skin eruptions	15	
Unsatisfactory condition	32	
Stillbirth	7	
Death of baby	7	
Circumcision	3	
	——	148
Total ..		628

Number of medical aid forms sent by independent midwives	56
Number of medical aid forms sent by midwives practising from hospitals or nursing associations	572
Total ..	628

During 1937 application was made to the local supervising authority in 510 instances by medical practitioners for payment of fees under the Midwives Act, 1918. Table IV. gives particulars of the extent to which these records were sent, and the number of applications for payment.

Table IV.

Records of medical aid.

No. of midwives cases.	No. of records sent.	Records per 100 cases.	No. of applications for payment.	Application per 100 cases.
2,153	628	29.2	510	23.7

Inspection of midwives. Routine supervision and inspection of the homes and work of the midwives is carried out by the senior assistant medical officer for maternity and child welfare, who is also the supervisor of midwives. No disciplinary action was necessary in this connection during 1937.

Nursing in the home. The Council has no arrangement for the provision of district nurses other than midwives to undertake nursing in the homes. District nursing is carried out by nurses attached to several nursing associations working from homes in or adjacent to this area, viz. Plaistow District Nurses' Homes, The Silvertown and North Woolwich District Nursing Association, and the Essex County Nursing Association.

Table V.

Infectious diseases in mothers and infants.

	Puerperal fever.	Puerperal pyrexia.	Ophthalmia neonatorum.	Pemphigus neonatorum.
Number of cases notified ..	4	75*	10	—
Number of cases removed	—	73	9	—
Number of cases who died	—	2	1	—
Number occurring in doctors' practice	2	8	—	—
Number occurring in midwives' practice ..	—	38	5	—
Number occurring in institutions	2	29	5	—
Number nursed in hospital	4	55	5	—

* 23 of these 75 patients were women who were not ordinarily resident in West Ham.

Table VI.

Notified cases of puerperal pyrexia and puerperal fever. West Ham residents.

	No. of cases.	Stage of pregnancy.			Where delivered.		Nature of delivery.			Where treated.		Result.	
		Abortion	Premature.	Full-term.	Home.	Hospital	Normal.	Difficult	Instrumental.	Home.	Hospital	Recovered.	Died.
Puerperal fever	4	—	—	4	3	1	2	—	2	—	4	4	—
Puerperal pyrexia	52	1	7	44	37	15	36	5	11	24	28	49	3*

* The cause of death of the three patients who died was pulmonary tuberculos's, 2; meningitis, 1.

Infectious diseases in mothers and infants. The statistics of puerperal fever and puerperal pyrexia are dealt with more fully in the section on Vital Statistics, and notes on ophthalmia neonatorum appear in the section on Infectious Diseases. Table V. gives in brief the main particulars regarding these conditions during the year 1937.

In Table VI. an analysis is given of the notified cases of puerperal pyrexia and of puerperal fever which occurred in West Ham residents in 1937. It will be appreciated that in the case of puerperal pyrexia the cause of the fever was not ascertained in each instance. The following were the results in the 26 cases in which the cause of the pyrexia was known:—Mastitis, 6 cases; influenza, 4 cases; phlebitis, 3 cases; tuberculosis, 2 cases; tonsillitis, 2 cases; bronchitis, 2 cases; septic perineal tear, 2 cases; pneumonia, 1 case; pyelitis, 1 case; rheumatism, 1 case; meningitis, 1 case; retained products, 1 case.

Home Helps. The number of cases in which home helps were provided during 1937 was 566.

The home help is a woman chosen by the patient, subject to the approval of the health visitor, who attends daily in the home of the patient for fourteen days from and including the day of confinement. As the duties of such a woman are purely domestic she may be employed where required whether the patient is confined at home or in hospital.

The home help is supervised by the health visitor, and, subject to a satisfactory report of her work, payment is granted by the local authority. The Council do not re-claim from the applicant any part of this grant. Only those persons whose income falls within the limits of a prescribed scale are eligible for the services of these home helps.

This scheme is satisfactory on the whole. To the mother herself it is of great benefit to have a known friend in the home rather than a stranger appointed specially for the work. There is not only the knowledge that her home and children are being cared for, but there is greater peace of mind from the fact that the home help knows intimately her home and her children. Minor difficulties arise from time to time, but it is seldom that these cannot be adjusted by the health visitor to the satisfaction of all concerned.

The Midwives Act, 1936. Municipal Midwifery.

The Midwives Act, 1936, placed the responsibility upon the local authority "to secure that the number of certified midwives so employed who are available in its area for attendance on women in their own homes as midwives or as maternity nurses during childbirth and from time to time thereafter during a period of not less than the lying-in period, is adequate for the need of the area."

For many years domiciliary midwifery in West Ham had been undertaken chiefly by midwives working under the ægis of various voluntary organisations in the borough, viz:—

(*a*) Plaistow Maternity Hospital.
(*b*) Queen Mary's Hospital.
(*c*) Silvertown and North Woolwich District Nursing Association.
(*d*) Mothers' Hospital, Clapton—Branch Home.
(*e*) Essex County Nursing Association, Leytonstone.

In addition a varying number of private midwives practised in the borough, of whom three only were resident in West Ham.

The Midwives' Act, 1936, did not come into force in West Ham until the 1st April, 1938. All the above-named associations except those referred to under (*e*) are in the borough and have been utilised in the arrangements for the provision of domiciliary midwives under the Midwives' Act, 1936. Pupil midwives are trained in district midwifery by these hospitals and associations, so that their methods and practice are up-to-date and efficient, and the results eminently satisfactory.

The number of midwives employed by these associations in pursuance of their agreements with the Council under the Act are:—

Plaistow Maternity Hospital	15
Queen Mary's Hospital	2
Mothers' Hospital (Salvation Army)	2
North Woolwich and Silvertown district Nursing Association	1

It is anticipated that each of these midwives will be capable of undertaking 100 cases per year.

In addition the Council have appointed, as full-time officers, four municipal midwives, whose districts have been so arranged

that they may work in close co-operation with the medical officers and health visitors of Grange Road and Maybury Road maternity and child welfare clinics respectively. Each of these midwives will be allowed to attend 80 cases per year. The scheme came into force on 1st April, 1938, and the municipal midwives started their duties on the same day. The work of this section will be dealt with more fully in my next annual report.

ANTE-NATAL WORK.

The ante-natal work which is carried out under the control of the Council may be divided broadly into three sections:—

(*a*) Home visiting by the health visitors.

(*b*) Medical examinations and supervision at ante-natal clinics at the Council's welfare centres.

(*c*) Medical examinations and supervision at ante-natal clinics conducted by voluntary associations with grants from the Council.

(*a*) *Home Visiting*. This is carried out by the health visitors employed by the Council, of whom there are eighteen, and by twenty-eight nurses employed by the Plaistow Maternity Hospital for the purpose of health visiting. The health visitors "follow up" in their homes all expectant mothers who attend the clinics. As a result of home visiting mothers are brought into touch with the services of the Council available for them at such a time, e.g. home help, dried milk, free meals. In addition, since 1st April, 1938, any woman who has engaged one of the municipal midwives to attend her at confinement is visited by the midwife during her pregnancy. This work is shown in Table VII.

TABLE VII.

WORK OF THE HEALTH VISITORS.

Employing organisation.	First visits.	Total visits.
Municipal health visitors	1,828	3,560
Plaistow Maternity Hospital nurses ..	3,140	13,207

(*b*) *and* (*c*) *Medical examination at clinics*. There are five municipal maternity and child welfare clinics in the borough, each of which is so situated as to be easily accessible to the women of the

surrounding area. Six sessions for expectant mothers are held weekly at these clinics, a doctor and health visitor being present at each session. At Grange Road and Maybury Road clinics the municipal midwife also attends, and is present with the doctor at the examination of her cases. Pupil midwives from Forest Gate Hospital attend West Ham Lane and Forest Gate ante-natal clinics.

Ante-natal sessions are held at three of the voluntary clinics, a doctor being present at four sessions per week at these clinics. Ante-natal sessions are held weekly at Queen Mary's Hospital for the examination of women who intend to be confined in the hospital or at home by the hospital midwives.

During 1937 a total of 6,117 expectant mothers attended at the ante-natal clinics, and 28,808 attendances were made. The average attendance per individual in 1937 was 4.7. Table VIII. shows particulars of the ante-natal attendances for a period of six years.

TABLE VIII.

ATTENDANCES AT ANTE-NATAL CLINICS.

Year.	First visits by expectant mothers.	Total attendances.	Average attendance per individual.
1932	8,871	29,867	3·5
1933	7,864	28,589	3.6
1934	7,890	28,807	3·7
1935	8,137	31,230	3·9
1936	7,024	29,055	4·1
1937	6,117	28,808	4·7

Abnormal cases are referred for advice to the local maternity hospitals, viz. Forest Gate Hospital, Queen Mary's Hospital, and Plaistow Maternity Hospital. There is no difficulty in obtaining immediate admission of a case to the ante-natal ward of Forest Gate Hospital, when in-patient treatment and observation is considered advisable, and there is close co-operation between the medical officers of the clinics and the medical superintendent of Forest Gate Hospital in regard to patients who have attended the municipal clinics and are later admitted to that hospital for confinement or treatment.

Consultants. Three consultants are available in respect of puerperal fever cases. During 1937 their services were called upon on three occasions.

NATAL WORK.

Notification of Births Act, 1907. As from October 1st, 1937, notification was carried out under sec. 203 of the Public Health Act, 1936. A few particulars of the notifications of births received during the year, and of the patients to which they referred, are given in the following statement. It should be noted that the figures for notifications do not agree very closely with the figures for births given in the section of this report which deals with vital statistics. The discrepancy is due partly to the fact that many notifications referred to women who were not ordinarily resident in West Ham, and partly to other factors. For accurate work the figures for births registered should be used.

Total number of births notified during 1937 ..		5,809
Total number of livebirths notified during 1937 ..		5,605
Total number of stillbirths notified during 1937 ..		204
Number of birth notified by midwives ..	4,510	
Number of births notified by doctors and parents	1,299	
		5,809
Total number of births occurring in maternity hospitals in the borough	3,128	
Total number of births in nursing homes in the borough	17	
Total number of births occurring at home ..	2,383	
Total number of births notified by outside authorities	281	
		5,809

There are three large maternity hospitals in West Ham admitting patients from West Ham and adjacent areas, viz., Queen Mary's Hospital for the East End, Stratford, E.15; Plaistow Maternity Hospital, Howards Road, Plaistow, E.13; and the maternity wards of Forest Gate Hospital, Forest Lane, E.7. Subsidies are granted by the Council to the two voluntary maternity hospitals in respect of the treatment at confinement of approved cases.

There is one nursing home in the borough which admits maternity cases; 17 women were confined in this home during 1937.

An ambulance is available for the transfer of women in labour to the maternity hospitals, for which no charge is made to the patient. During 1937 the ambulance was used for this purpose in 207 cases.

Maternal mortality.

The statistics of maternal mortality for the year 1937 and previous years are given on page 93.

In 1928 the Maternal Mortality Committee of the Ministry of Health issued a form of enquiry to be completed in respect of every maternal death. As a result of the enquiries into the maternal deaths for the year 1937, it was found that, of the nine deaths in, or in consequence of, childbirth, seven took place in institutions and two at home. Six of the patients who died in hospital were admitted as emergency cases, the remaining patient having been under treatment in hospital.

Table IX. gives details of the conditions which caused death.

Table IX.

Class 1. Deaths directly due to child-bearing.

(*a*) Puerperal sepsis	0
(*b*) Toxaemia, including eclampsia	2
(*c*) Other causes, e.g. haemorrhage, difficult labour, etc.	7
Total ..	9

Details of the maternal deaths. The following brief summary will give some indication of the conditions which were present in the fatal cases, and of the degree to which death might have been prevented:—

(1) Age, 32 years. Married. General health satisfactory, poor home circumstances. Had not had supervision during pregnancy. Labour—premature (28 weeks) at home. Patient died suddenly on the 7th day. *Cause of death*—pulmonary embolism.

(2) Age 40 years. Married. General health good, home circumstances fairly good, but patient worked daily in charge of a vegetable stall. Was under hospital clinic during pregnancy for treatment for chronic nephritis complicating pregnancy. She suffered from albuminuria, with excessively high blood pressure,

but she refused to enter the medical ward for treatment. In the twenty-eighth week of pregnancy this patient suddenly developed symptoms of uraemia, and was admitted immediately to hospital where she died two days after admission. *Cause of death*: (*a*) coma, (*b*) uraemia, (*c*) nephritis, (*d*) pregnancy, about 28 weeks.

(3) Age, 42 years. Married. General health not good, home conditions comfortable. Ante-natal care during pregnancy satisfactory. At sixth month of pregnancy patient developed marked œdema of arms, legs, and abdominal wall, for which she was admitted to hospital. On the day of admission she had a slight vaginal haemorrhage; the urine was loaded with albumen. Within twenty-four hours of admission to hospital, patient had a severe ante-partum haemorrhage, and died 12 hours later. *Cause of death*: (*a*) chronic parenchymatous nephritis; (*b*) ante-partum haemorrhage.

(4) Age, 29 years. Married. General health poor, patient being very stout; subject to asthma and gastric symptoms. Home circumstances poor. The patient had received satisfactory ante-natal supervision. In the thirty-sixth week of pregnancy the patient had ante-partum haemorrhage due to central placenta praevia. She was admitted at once to a maternity hospital, where Caesarian section was performed on the following day. The result was a living child. On the third day after the operation the patient developed symptoms of paralytic obstruction, from which she died four days later. A post-mortem examination was not performed. *Cause of death*: (*a*) cardiac failure; (*b*) paralytic intestinal obstructions; (*c*) Caesarian section for placenta praevia.

(5) Age, 25 years. Married. General health unsatisfactory, home conditions poor. Ante-natal supervision adequate from the third month of pregnancy. At four-and-a-half months she began to have slight jaundice, with irritation of the skin. One month later there was slight albuminuria, but normal blood pressure. The patient felt well and was kept under observation at home. At six-and-a-half months she was admitted to hospital for further treatment for persistent jaundice. Five days later labour commenced, and during it she had an eclamptic fit. After delivery she had six fits, and she died twelve hours later. *Cause of death*: (*a*) eclampsia; (*b*) toxaemia of pregnancy; (*c*) acute yellow atrophy of liver.

(6) Age, 40 years. Married. General health good, home conditions

poor. Ante-natal supervision unsatisfactory, in that the patient refused to attend an ante-natal clinic or to co-operate in any way with those in charge of her case. Full-time pregnancy when labour commenced at home. The midwife sent for a doctor owing to delay in the second stage. After two unsuccessful attempts to deliver with forceps at home, the patient was admitted to a maternity hospital and delivered by forceps two hours later. Her condition on admission was very poor, with symptoms of shock. Death occurred on the third day. Post-mortem examination showed rupture of the uterus and early peritonitis. *Cause of death*: (*a*) ileus paralyticus; (*b*) obstructed labour; (*c*) rupture of uterus.

TABLE X.

Year.	Live births notified.	Stillbirths notified.	Total notified births.	Percent. of stillbirths to total notified births.
1927	6,297	219	6,516	3.4
1928	6,671	189	6,860	2.8
1929	6,316	210	6,526	3.2
1930	6,428	195	6,623	2.9
1931	6,194	190	6,384	3.0
1932	6,223	192	6,415	3.0
1933	5,662	173	5,835	3.0
1934	5,576	207	5,783	3.6
1935	5,158	156	5,314	2.9
1936	5,689	214	5,903	3.6
1937	5,605	204	5,809	3.5

(7) Age, 32 years. Married. General health good, home conditions poor. Adequate ante-natal supervision. She had slight ante-partum haemorrhage at the third month. At the eighth month the patient had concealed ante-partum haemorrhage, which caused collapse due to a marginal placenta praevia. She was seen and treated by a doctor at home, and delivered of a stillborn premature baby four hours after the onset of the haemorrhage. She died two hours later. *Cause of death*: (*a*) shock and syncope; (*b*) concealed accidental haemorrhage; (*c*) pregnancy—stillbirth of foetus.

(8) Age, 32 years. Married. General health and home circumstances satisfactory. Early pregnancy, hence no ante-natal supervision was obtained. She was admitted to hospital for treatment of haemorrhage. Operation revealed extra-uterine gestation. She died soon after operation. *Cause of death*: ruptured ectopic gestation.

(9) Age, 40 years. Married. General health and home conditions poor. Adequate ante-natal supervision. At the eighth month the patient was admitted to hospital in labour with a history of slight vaginal haemorrhage. Delivery of a stillborn foetus occurred some hours after admission. There had been constant slight loss of blood throughout labour. This persisted after the delivery of the child, and the placenta was not expelled. The patient died two hours after delivery. Post-mortem examination revealed accidental haemorrhage. *Cause of death*: (*a*) obstetric shock; (*b*) accidental haemorrhage.

STILLBIRTHS. Table X. gives a comparison between notified live and stillbirths.

PEMPHIGUS. No case of this disease occurred in the borough during the year.

POST-NATAL SUPERVISION. At present there is no separate clinic for the supervision of the condition of mothers after their confinement, but mothers are referred in special instances for post-natal examination and advice to the medical officers of the ante-natal clinics. It is anticipated that separate sessions will be established in the near future so that all women may be urged to attend for routine examination after confinement in order to prevent or relieve later suffering and ill health.

CHILD WELFARE.

There are eleven maternity and child welfare clinics in the borough, of which five are municipal and six are voluntary but subsidised by the Council.

Municipal clinics. These clinics are situated in different areas of the borough; West Ham Lane and Forest Gate clinics on the north side; Grange Road, Maybury Road and Silvertown clinics on the south side. With the exception of Silvertown clinic, the buildings belong to the Council and are used only for the purpose of maternity and child welfare. The clinic at Silvertown was

Table XI.

Work of the clinics. Attendances.

Name of Clinic.	First attendances.		Total attendances.		Medical consultations Total attendances.	
	Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.
(*a*) *Municipal.*						
West Ham Lane	522	255	4,342	3,067	2,786	2,274
Grange Road	247	144	1,917	1,904	1,498	1,431
Forest Gate	387	163	4,582	2,713	2,797	1,922
Maybury Road	311	123	2,536	2,756	1,880	2,063
Silvertown	74	23	763	975	670	891
(*b*) *Voluntary.*						
Chesterton House	1,314	277	10,490	3,121	1,218	582
Docks Centre	1,039	133	7,363	3,819	1,194	793
Lees Hall Clinic	305	82	3,055	2,349	948	602
Trinity Mission Clinic	165	40	2,100	2,887	1,513	1,548
Stratford Day Nursery Clinic	194	91	2,505	1,184	1,015	781
Given-Wilson Clinic	80	21	996	825	626	483
Total ..	4,638	1,352	40,653	25,600	16,145	13,370

established in 1920 as the first Council clinic. The work there is carried on in suitable premises belonging to St. Barnabas Church, West Silvertown. Grange Road, Forest Gate, and Maybury Road clinics are modern buildings erected for the purpose, being fully equipped for all maternity and child welfare work, including dental treatment.

Voluntary clinics. There are six voluntary clinics situated in areas of the borough not served by the Council clinics. Three of these clinics are buildings used for maternity and child welfare work only, the other three being held in rooms adapted for the purpose. A municipal health visitor attends at two of the clinics, so that the clinic work is carried on in close co-operation with the district visiting. It is important to note this inter-relation between the two services. Twenty-three sessions are held weekly. A table in the Appendix gives the days and times of the clinics, both municipal and voluntary. At the municipal clinics the rule is that every new case, infant or toddler, should be examined by the doctor on the first visit and afterwards at regular intervals, for example, monthly, until the child attains one year of age; thereafter it should attend quarterly. Special cases are seen more frequently according to the wishes of the doctor and the needs of the child. "Absentee" post cards are sent in respect of every child who is not brought to the clinic within three months from the date of the previous visit. The health visitors who staff the clinics work in the districts immediately adjoining their respective clinics. This arrangement is of material assistance to the clinic medical officers and to the health visitors. Of the total notified live births in 1937, it was found that 79.8 per cent. attended the infant welfare centres throughout the year.

Table XI. gives details of the work carried out at the clinics during the course of the year.

Special facilities.

Dental treatment. Dental treatment is provided for expectant and nursing mothers and for the pre-school child through attendance at the various clinics in the borough. The dental scheme for mothers includes the provision of dentures in cases selected by the dental surgeon. There is no charge for dental treatment, but payment is claimed from the patient for dentures supplied, according to a scale approved by the Council.

A child referred to the Council's dental clinic for treatment is supervised thereafter at regular intervals until he goes to school, and every effort is made by those who deal with young children and their parents to encourage the preservation of the temporary teeth. Extractions are done under local anaesthetics for mothers, but in the case of children, de Trey's apparatus is used for the administration of gas and oxygen.

TABLE XII.

WORK OF THE DENTAL CLINICS.

Year.	Mothers.			Children under 5 years.			
						Attendances.	
	1st attend-ances.	Total attend-ances.	No. of dentures supplied.	1st attend-ances.	Total attend-ances.	Extrac-tions.	Fillings.
1933	404	1,258	—	840	3,134	621	1,611
1934	353	1,299	—	694	2,732	651	1,406
1935	468	1,679	73	708	2,531	839	1,176
1936	580	2,739	434	657	2,351	747	958
1937	534	2,699	870	678	2,231	763	883

ARTIFICIAL SUNLIGHT TREATMENT. Artificial sunlight treatment is provided for selected cases by agreement with the Committee of the Stratford Day Nursery. The children are referred from the various child welfare clinics in the borough. Treatment is provided twice weekly, under the supervision of Dr. Eva Morton assisted by a municipal health visitor. In addition, the centre is open three times weekly for the treatment of children not eligible under the Council's scheme.

Attendances at the sunlight clinic.

(1) *Municipal clinic (2 sessions per week).*

Total number of new cases	83
Total attendances for treatment	1,634

(2) *Day Nursery clinic.*

Total number of new cases	72
Total attendances for treatment	2,423

The children are referred for such conditions as persistent anaemia, malnutrition, bronchial catarrh, or for nervous manifestation, e.g. restlessness, excitability. Attendances are fairly regular,

but it is always necessary to impress on the mothers when such treatment is first suggested, that rapid improvement cannot follow after a few attendances. Without the co-operation and interest of the mothers it is impossible to obtain any benefit from this treatment.

Institutions.

Hospitals for children under 5 years. Children under five years of age who require hospital treatment can be admitted to St. Mary's Hospital, Plaistow, or to the Children's Hospital, Balaam Street, Plaistow. The admissions to St. Mary's Hospital are chiefly of acute medical and surgical cases.

At the Children's Hospital the Council retain a ward of 16 cots, which is supervised by the Senior Assistant Medical Officer for maternity and child welfare. Cases are admitted to this ward from the various infant welfare centres, those admitted mainly requiring prolonged treatment for such conditions as marasmus, rickets, and the dietetic disturbances of infancy. In addition, at this hospital four beds are reserved for young children who require in-patient orthopaedic treatment, while there are also facilities in the out-patient department of the hospital for the treatment of less serious deformities common to this age, viz. torticollis, bow-legs, knock-knees, and slight talipes.

Arrangements for dealing with children requiring treatment for nose and throat or ear conditions, are in force at Queen Mary's Hospital and St. Mary's Hospital.

The number of admissions to these institutions are shown in Table XIII.

Table XIII.

Admissions of children to voluntary hospitals. 1937.

Hospital.	No. of beds.	No. of admissions.	Throat and nose operations
St. Mary's Hospital ..	10	277	43
Children's Hospital:—			
(*a*) Babies' ward ..	16	189	—
(*b*) Orthopaedic ward ..	4	18	—
Queen Mary's Hospital ..	—	—	98

Particulars of the cases admitted to these hospitals, and of the deaths which occurred, are given in Tables XIV. to XVIII.

Table XIV.

St. Mary's Hospital, Plaistow. Admissions, 1937.

Condition for which admitted.	Under one year.		One to five years.		Total.
	Male	Female	Male	Female	
Tonsils and adenoids ..	—	—	33	27	60
Otitis media, mastoid, etc.	1	2	8	10	21
Pneumonia and empyema	8	5	10	5	28
Bronchitis and asthma	5	1	4	2	12
Gastro-enteritis, diarrhoea, constipation	13	6	3	4	26
Appendicitis	1	—	—	—	1
Pyloric stenosis	3	—	—	—	3
Intussusception, rectal prolapse, etc.	4	2	1	3	10
Jaundice	—	—	2	2	4
Hernia, hydrocoele ..	4	—	7	2	13
Burns and scalds	2	—	8	2	12
Skin conditions	2	2	3	5	12
Osteomyelitis, abscesses, etc.	2	3	6	4	15
Rheumatism	—	—	1	—	1
Diseases of brain, etc.	1	1	6	3	11
Injury	—	2	5	1	8
Cervical adenitis	1	—	6	1	8
Surgical tuberculosis ..	—	—	2	1	3
Circumcision	3	—	4	—	7
Improper feeding	2	1	—	—	3
Malnutrition	1	1	1	4	7
Other diseases	4	5	11	9	29
Totals ..	57	31	121	85	294

Table XV.

St. Mary's Hospital, Plaistow. Deaths under 5 years, 1937.

Cause of death.	Under one year.		One to five years.		Total.
	Male	Female	Male	Female	
Pneumonia	6	1	1	1	9
Burns	—	—	1	—	1
Hydrocephalus	—	1	—	1	2
Osteomyelitis	—	—	1	—	1
Tuberculous meningitis	—	—	1	—	1
Intussusception	1	—	—	—	1
Marasmus	1	—	—	—	1
Bronchitis, rickets ..	—	1	—	—	1
Totals ..	8	3	4	2	17

Table XVI.

Children's Hospital, Balaam Street, Babies' Ward.
Admissions, 1937.

Condition for which admitted.	Under one year.		Over one year.		Total.
	Male	Female	Male	Female	
Pneumonia	1	2	3	5	11
Gastro-enteritis, gastritis, constipation	12	3	4	7	26
Malnutrition and marasmus	15	12	5	7	39
Skin conditions	4	3	6	3	16
Otorrhoea, mastoid, etc.	—	—	—	3	3
Convulsions, epilepsy ..	1	—	2	—	3
Anaemia and debility ..	1	—	3	1	5
Bronchitis	8	3	1	2	14
Abscess	—	—	—	3	3
Adenitis	—	—	4	4	8
Burns	—	—	—	1	1
Dentition	2	1	1	1	5
Observation	5	6	9	5	25
Pyloric stenosis	1	—	—	—	1
Rickets	1	—	7	6	14
Tonsillectomy	—	—	1	1	2
Umbilical hernia	—	1	1	—	2
Other diseases	6	—	3	2	11
Totals ..	57	31	50	51	189

TABLE XVII.

CHILDREN'S HOSPITAL, BALAAM STREET, PLAISTOW. BABIES' WARD.

DEATHS 1937.

Cause of death.	Under one year.	Over one year.	Total.
Pneumonia	4	1	5
Bronchitis	3	—	3
Gastro-enteritis	9	—	9
Marasmus	9	—	9
Eczema	1	—	1
Diabetes	1	—	1
Prematurity	1	—	1
Pyloric stenosis	1	—	1
Tuberculous meningitis	1	—	1
Totals ..	30	1	31

CONVALESCENCE OF MOTHERS, CHILDREN AND INFANTS.

(*a*) *Mothers.* Four beds are reserved by the Council for the use of nursing mothers with their young infants, three at "Child Haven," Brentwood, Essex, by agreement with the West Ham Central Mission, and one at "The London Mothers' Convalescent Home," Sunningdale, Berks. The mothers are admitted throughout the whole year, each mother having a period of two weeks' convalescence.

The majority of the mothers are recommended for this treatment by the medical officers of the clinics, or by the health visitors. A detailed report is received from the matron of the home on the discharge of each mother. This report gives information regarding the progress of both mother and infant while they were in residence.

During 1937 it was possible to send away under this scheme 90 mothers with their infants, of whom 69 went to "Child Haven," and 21 to Sunningdale.

(*b*) *Children.* Children under five years of age are referred for convalescence through the Medical Officer of Health to the Invalid Children's Aid Association, and the Invalid and Crippled Children's Society, by whom the children are admitted to approved convalescent homes. In addition the Council retains 20 beds at

Table XVIII.

Children's Hospital, Balaam Street, Plaistow.

Orthopaedic and surgical cases. Admissions, 1937.

Condition for which admitted.	Under one year.		Over one year.		Total.
	Male	Female	Male	Female	
Tuberculosis of bones and joints	—	—	4	4	8
Tuberculous glands ..	—	1	3	—	4
Injury	—	—	1	4	5
Burns and scalds ..	—	—	—	1	1
Congenital dislocation of hip	—	—	—	2	2
Bow legs	—	—	2	—	2
Flat feet	—	—	1	—	1
Arthrodesis	—	—	3	—	3
Metatarsal valgus	—	—	—	1	1
Talipes varus	—	—	2	3	5
Osteomyelitis	—	—	1	1	2
Torticollis	—	—	1	2	3
Tenotomy and tendon stretching	—	—	1	2	3
Traumatic synovitis ..	—	—	—	2	2
Anterior poliomyelitis ..	—	—	3	1	4
Erbs paralysis	—	—	—	1	1
Facial paralysis	—	—	—	1	1
Diplegia	—	—	—	1	1
Rickets	—	—	1	1	2
Phimosis	6	—	12	—	18
Hernia	2	1	7	5	15
Observation	—	—	—	1	1
Others	1	—	5	2	8
Totals ..	9	2	47	35	93

"Child Haven," Brentwood; these are reserved mainly for young children. The number of children under school age who were sent to various homes during 1937 was 282.

The duration of convalescence varies from four to twelve weeks, the children being recommended by private doctors, from clinics and hospitals, for debility after acute illness, or for those more chronic conditions such as rickets, persistent bronchial catarrh, or failure to gain weight. Great benefit is derived from a holiday under the ideal conditions which prevail in these homes.

Table XIX. gives particulars of the number of mothers and children sent to convalescent homes during a number of years.

TABLE XIX.

ADMISSIONS TO CONVALESCENT HOMES.

	1929	1930	1931	1932	1933	1934	1935	1936	1937
Mothers	18	32	33	26	44	44	85	96	90
Children	82	68	97	219	262	228	336	248	282

It will be evident from this table that the demand for these facilities still remains high.

Stratford Day Nursery.

The Stratford Day Nursery is controlled by a voluntary association, but subsidised by the Council. It provides daily accommodation for 50 infants and small children whose mothers are obliged to go to work, and it is the only institution of its kind in the borough.

The number of children admitted to the nursery in 1937 was 194. These children made 8,568 attendances. The average daily attendance was 35 children. The parents pay 8d. per day per child, which charge includes three meals.

WORK OF THE HEALTH VISITORS.

Routine visiting of infants, pre-school children, expectant and nursing mothers in their homes, is carried out by:—

(*a*) 18 municipal health visitors, who are engaged solely on this work.

(*b*) 28 nurses employed by the Plaistow Maternity Hospital.

The latter nurses undertake visiting of the majority of women attended at confinement by midwives from that institution.

In addition, a certain amount of supervision of special cases attending voluntary clinics is carried out by the superintendent nurses of these clinics.

ROUTINE VISITS BY MUNICIPAL HEALTH VISITORS.

Children. Up to two years of age the young child is visited quarterly; thereafter half-yearly until he goes to school. Premature infants and special or sick babies are visited each month or more frequently until their condition is satisfactory.

Expectant mothers. Visits are paid to supplement the supervision and advice given at the clinics. In addition the health visitors visit women who fail to keep their appointments for examination, and many visits are paid in connection with the arrangements for home helps, admission to hospital for confinement, and for similar reasons.

Infant Life Protection. Foster children are visited at least every two months by the municipal health visitors of their respective districts.

Special investigation visits. All notified cases of puerperal pyrexia, ophthalmia neonatorum, and pemphigus neonatorum, are visited and reported upon at regular intervals until the patient's condition is satisfactory.

Infant deaths, stillbirths, and maternal deaths are investigated by the health visitors.

CO-OPERATION WITH SCHOOL MEDICAL SERVICE. Immediately a child attends school (including the two nursery schools provided by the Council) a summary card is completed for transfer to the school medical section of the department. This card contains the history of the child from birth to school age with reference to home conditions, method of feeding in infancy and early childhood, development of the child physically and mentally, and any illnesses from which he may have suffered. These cards are available for use by the assistant school medical officers when these children first attend for medical examination.

VISITS OF HEALTH VISITORS. Some details of the work of the health visitors are set out in Table XX., and particulars of special visits are given below.

Table XX.

Work of the health visitors.

Employing body.	Expectant mothers.		Infants.		Children up to school age.		Total.
	First visits.	Revisits.	First visits.	Revisits.	First visits.	Revisits.	
Local authority	1,828	3,568	2,841	12,232	835	21,205	42,509
Voluntary organisations	3,142	13,270	2,364	22,573	511	22,016	63,876
Totals	4,970	16,838	5,205	34,805	1,346	43,221	106,385

Special visits (Municipal health visitors only):—

Home helps, investigations into special cases ..	10,877
Infant life protection visits	
Number of first visits	40
Total number of visits	349

Total visits.

(a) Municipal health visitors	53,735
(b) Other health visitors	63,876
Total number	117,611

Infant life protection.

Under the Children Act, 1908, Part I., as amended by the Children and Young Persons Act, 1932, and after 1st October, 1937, by Part VII. of the Public Health Act, 1936, the supervision of foster children and of the homes in which they reside is carried out by the municipal health visitors on their respective districts. Application for registration as a foster mother is sanctioned by the Council on the recommendation of the Maternity and Child Welfare Committee. Only in exceptional circumstances is a foster mother allowed to have more than one foster child in her care at any one time.

Before a foster mother's application is approved, a detailed report is received from the health visitor, and from the relieving officer of the district when the applicant is known to him. The

register of patients notified as suffering from tuberculosis is consulted in order to eliminate any possibility of introducing a child into an infected family.

The foster mother must comply with all rules of the Act, and with the regulations of the Council, such as the provision of a fire-guard, separate and suitable sleeping accommodation, and regular attendance at an infant welfare centre until the child goes to school. The homes are visited at least once every two months by the health visitor, and any difficulty is reported at once to the senior assistant medical officer for maternity and child welfare.

During 1937 the number of visits paid by health visitors, acting as infant life protection visitors under this Act, was 349 The number includes 40 first visits.

Number of foster mothers on register at beginning of 1937	44
Number of fosters mothers on register at end of 1937 ..	34
Number of foster children on register at beginning of 1937	44
Number of foster children placed on register during 1937 ..	21
Number of foster children who ceased to come under the provisions of the Act during 1937	28
Number of foster children on register at end of 1937 ..	39
Number of deaths occurring in foster children during 1937	—

Those children who ceased to come under the provisions of the Act had either reached the age of nine years, or had been legally adopted by the foster parent, or returned to the care of their own parent or a near relative.

In most cases the parent or parents of the child pay the weekly charge direct to the foster mother; the amount varies on an average from five shillings to twelve-and-six per week. The local authority accepts no responsibility for the regular weekly payment or for the amount charged to the child's parent.

Free meals for expectant and nursing mothers.

This scheme, which commenced in January, 1936, provides for a free dinner daily, including Sundays and public holidays, to necessitous expectant mothers from the time when their condition is diagnosed, and to necessitous nursing mothers. Application for this help can only be made to the medical officers of the maternity and child welfare clinics, who are required to sign the medical certificates accompanying the applications sent to the medical officer of health.

There are thirteen dining centres in the borough, and by agreement with the Education Committee the mothers attend these for dinners. Mothers and children attend at different times. The menus are varied and suitable for the mothers. Special diet can be arranged when such a recommendation is made by the doctor at the clinic. The number of dinners provided in 1937 was 16,506, as compared with 15,971 in 1936.

Birth control.

There has been no alteration in the arrangements commenced in December, 1936, for the provision of this facility to selected cases. Those women for whom further pregnancy would be detrimental to health are referred by the clinic medical officers to the East London Women's Welfare Centre, Burdett Road, E.3, where they receive, free of charge, all necessary advice and treatment. During 1937 the number of women who attended the clinic under the Council's scheme was 41.

DRIED MILK.

Under the Milk (Mothers and Children) Order, 1919, the Council were empowered to grant milk to mothers and children, and in January, 1920, they commenced to distribute liquid milk through local purveyors. This scheme was operated on an income basis, and the milk was supplied on voucher to expectant and nursing mothers, and to children from one to five years. In August, 1920, dried milk was substituted for liquid milk. The supply was obtainable at the various centres, in accordance with a scale of income approved by the Council.

In 1921 the Milk (Mothers and Children) Order, 1919, was revoked by the Ministry of Health Circular 185, and any scheme for the supply of milk had to receive the sanction of the Minister under the Maternity and Child Welfare Act, 1918. This circular stated that milk could only be supplied at less than cost price in necessitous cases to:—

(*a*) Nursing mothers.
(*b*) Expectant mothers in the last three months of pregnancy.
(*c*) Children up to 3 years of age, and exceptionally to children between 3 and 5 years of age.

The dried milk is obtained in bulk and packed in 1 lb. packets at the centre in West Ham Lane, and the milk has to be a full-cream dried milk with a guaranteed fat content of 26 per

cent. It is distributed free or at a cheap rate to the mothers. It is packed in special cartons, each carton bearing directions for mixing and the quantities to be used in infant feeding. Samples from each consignment of milk have been submitted for bacteriological and chemical examination with satisfactory results. This large and important health measure is run at a comparatively low cost to the Council, details of which are set out in Table XXI.

TABLE XXI.

COST OF MILK SCHEME, 1937.

Expenditure	£	s.	d.
Cost of dried milk	8,527	18	10
Cartons and packing	357	8	10
Wages	902	19	2
Rent of offices and packing rooms	131	18	3
Cartage	67	11	5
Printing, stationery and sundries	6	9	10
Total ..	9,994	6	4

Income	£	s.	d.
Milk sales	8,266	8	6
Sale of empty tins and cartons	3	7	4
Balance (being net cost of service)	1,724	10	6
Total ..	9,994	6	4

During 1937, dried milk was supplied from the various centres as set out in Table XXII.

TABLE XXII.

DISTRIBUTION OF MILK (ASSISTED ONLY).

Centre.	Number of persons receiving dried milk			Total.
	Antenatal.	Under one year.	One to three years.	
West Ham Lane ..	194	660	647	1,501
Forest Gate	36	132	128	296
Public Hall	229	515	888	1,632
Silvertown	12	20	50	82
Howards Road ..	3	8	5	16
Total ..	474	1,335	1,718	3,527

Table XXIV.

No. of packets of dried milk issued. 1937.

Centre.	Full price.	Half price.	Free.	Total packets.*
West Ham Lane.				
1st quarter ..	24,446	434	9,819	
2nd ,, ..	21,073	394	9,001	
3rd ,, ..	21,490	406	8,328	
4th ,, ..	24,332	458	8,432	
	91,341	1,692	35,580	128,613
Public Hall.				
1st quarter ..	23,685	408	13,358	
2nd ,, ..	20,173	418	11,979	
3rd ,, ..	19,984	394	10,292	
4th ,, ..	23,217	420	10,668	
	87,059	1,640	46,297	134,996
Forest Gate.				
1st quarter ..	2,191	42	1,743	
2nd ,, ..	1,851	28	1,598	
3rd ,, ..	1,858	40	1,519	
4th ,, ..	2,520	6	1,776	
	8,420	116	6,636	15,172
Howards Road.				
1st quarter ..	814	—	93	
2nd ,, ..	796	—	103	
3rd ,, ..	792	—	113	
4th ,, ..	698	2	91	
	3,100	2	400	3,502
Silvertown.				
1st quarter ..	593	25	698	
2nd ,, ..	369	38	652	
3rd ,, ..	342	42	492	
4th ,, ..	431	50	486	
	1,735	155	2,328	4,218
Other services.				286,501
1st quarter ..	840			
2nd ,, ..	840			
3rd ,, ..	896			
4th ,, ..	896			
	3,472			3,472
	195,127	3,605	91,241	289,973

* Each packet is approximately 1 lb. in weight.

Particulars of the number of applications for dried milk at less than cost price received during the year are set out in Table XXIII.

TABLE XXIII.

APPLICATIONS FOR DRIED MILK AT REDUCED COST.

	First quarter.	Second quarter.	Third quarter.	Fourth. quarter.	Whole year.
New applications: (granted).					
(*a*) Free	824	652	725	744	2,945
(*b*) Half-price ..	30	25	37	27	119
Total assisted ..	854	677	762	771	3,064
New applications: (refused)	30	57	42	44	173
Total applications ..	884	734	804	815	3,237

Details of the number of packets of dried milk distributed at the various centres is set out in Table XXIV.

Table XXV. shows the amount of dried milk distributed during the past eight years.

TABLE XXV.

Year.	Milk distributed in tons (approximate)
1930	87
1931	101
1932	102
1933	102
1934	105
1935	108
1936	128
1937	129

VI. HOSPITALS.

HOSPITALS.

General statement. The institutions owned and controlled by the County Borough Council are the following:—(1) Whipps Cross Hospital; (2) Forest Gate Hospital; (3) Central Home; (4) Forest House; (5) Harold Wood Hospital; (6) Isolation Hospital, Plaistow; (7) Dagenham Sanatorium; (8) Langdon Hill Sanatorium; (9) South Ockendon Colony. Of these (1) to (5) are controlled by the Public Assistance Committee, and a proportion of the beds are allocated on a User-agreement with the Essex County Council and the East Ham County Borough Council. The proportions are 34.00 per cent. for Essex and 16.00 per cent. for East Ham respectively. Nos. (6) to (8) are controlled by the Hospitals Committee, and are for the use of West Ham residents only. No. (9) is controlled by the Committee for the Care of the Mentally Defective, and a proportion of the beds are allocated for the use of East Ham residents.

All these institutions are under the administrative control of the medical officer of health. This section of the report deals with all these institutions except the isolation hospital, the two sanatoria, and South Ockendon Colony, which are more completely dealt with in the sections devoted to infectious diseases, tuberculosis, and mental deficiency.

A complete statement of the available hospital beds in the borough is given in Table I. This table includes the voluntary hospitals in the borough, since the facilities for treatment can only be properly considered by taking these institutions into consideration. It should be understood that large voluntary hospitals in the County of London, more especially the London Hospital, Poplar Hospital, Princess Elizabeth of York Hospital, and the Hospital for Sick Children, Great Ormond Street, also contribute their quota to available facilities. Further details of the beds available for West Ham residents are contained in the general statement on hospitals on page 42.

TABLE I.

BED ACCOMMODATION. MUNICIPAL AND VOLUNTARY HOSPITALS.

Institution.	No. of beds.	Remarks.
(1) Whipps Cross Hospital ..	744	Including 64 maternity beds, excluding cots in maternity wards
(2) Forest Gate Hospital	723	
(3) Central Home	951	
(4) Forest House	95	Including 20 beds for children convalescing after infectious diseases
(5) Harold Wood Hospital	180	
(6) Infectious Diseases Hospital, Plaistow	210	
(7) Dagenham Sanatorium	128	
(8) Langdon Hill Sanatorium ..	40	
(9) South Ockendon Colony ..	134	
(10) Queen Mary's Hospital	216	Including 50 maternity beds
(11) St. Mary's Hospital	71	
(12) Children's Hospital, Balaam Street	36	
(13) Albert Dock Hospital	47	
(14) Plaistow Maternity Hospital ..	60	
Total ..	3,635	

MUNICIPAL HOSPITALS AND INSTITUTIONS.

Institutions (1) to (4) in Table I were transferred from the West Ham Board of Guardians in 1930, under the powers of the Local Government Act, 1929. In the sense that these hospitals are still controlled by the Public Assistance Committee and that the admissions are governed largely by the relieving officers, appropriation has not yet been carried out. The first hospital on the list is, however, to all intents and purposes a general hospital, and there is ample evidence of the increasing use to which these institutions are being put by the general population.

General summary of buildings and services.

(*a*) *Capital expenditure*:—During the year a residence

was erected and furnished for the Medical Superintendent, Forest Gate Hospital, at a cost of approximately £1,836. At the Central Home a residence was erected and furnished for the Senior Medical Officer, at an approximate cost of £1,187. At Whipps Cross Hospital the new nurses' home and maids' quarters were completed and furnished at a cost of approximately £52,000. The roadway to the nurses' home and the approach to the incinerator were constructed at a cost of £600, and two new tennis courts were laid down at a cost of £443. These last two items are part of the scheme for the new extension.

(*b*) *Whipps Cross Hospital extension.* It was hoped that the extension to Whipps Cross Hospital would have been commenced during 1937, but various matters held up the project. At the time of writing, however, the building is in course of erection. The extension will be dealt with more fully in my next annual report.

(*c*) *Notes on any alterations contemplated immediately.* At Forest Gate Hospital it is proposed to extend the laundry and reconstruct the nurses' dining and recreation rooms, and the sanction of the Ministry of Health for the necessary loan is awaited.

(*d*) *Hospital report.* In the present period of transition it is highly desirable that consideration should be given to all aspects of the hospital question before any further extensions to the existing services are contemplated. I have been requested to furnish a complete report on this matter. The present section on the work carried out in the hospitals serves as a basis for this investigation, and at a later date I hope to put before the authority a scheme dealing with the hospital question.

(*e*) *Nursing services.* The number of different grades of nurses in municipal hospitals and institutions are as follows:—

Whipps Cross Hospital. One matron, one assistant matron; one sister-tutor; one assistant sister-tutor; one home sister; one assistant home sister; 3 massage sisters; 3 night sisters; 26 ward sisters; 35 staff nurses; 113 probationers; 7 private nurses; 3 male nurses; one masseur (male); 2 male head attendants; 11 male attendants.

Forest Gate Hospital. One matron; one assistant matron; one home sister; 2 night sisters; 7 ward sisters; 5 midwifery sisters; 8 pupil-midwives; 109 assistant nurses; 16 male attendants.

Central Home. One matron; 2 assistant matrons; one super-

intendent nurse; one assistant superintendent nurse; 15 ward sisters; one head female attendant; one female charge attendant; 23 female attendants; 167 assistant nurses (female); one head male nurse; 2 male charge nurses; 54 male nurses; one head male attendant; 14 male attendants.

Forest House. One matron; one female attendant; one head male attendant; one charge sick attendant (male); 12 male attendants.

Harold Wood Hospital. One matron; 6 ward sisters; two female staff nurses; 37 assistant nurses; 5 male nurses.

SHORTAGE OF NURSES. The national problem of the shortage of nurses is very acute in West Ham owing to the large number of beds available for sick cases, viz:—5.9 per 1,000 of the population. Various reasons have been given for this shortage, but the main reasons may be briefly grouped under four headings:—

(*a*) *Pre-hospital training*. The gap between the age of leaving school and entering hospital for training is probably the cause of many suitable candidates not taking up nursing as a career. This is especially true of the girl who leaves school at 14 years of age and is compelled to earn her living immediately. While engaged on other work she is probably earning a fair wage, usually more than she would obtain as a probationer nurse, and the desire to take up nursing as a profession is soon lost in many instances.

(*b*) *Scale of salaries*. The salary paid to nurses is not attractive in comparison with that which may be obtained in other types of employment, even in factories.

(*c*) *Hours of work*. Long working hours are the cause of much dissatisfaction amongst nurses.

(*d*) *Conditions of service*. In many hospitals nurses are unduly burdened with the performance of unskilled domestic work, and in the nurses' home her personal affairs are often subjected to a degree of interference which would not be tolerated elsewhere.

The Council are, however, endeavouring to overcome this very difficult problem in hospitals and institutions under their control. The above difficulties are being dealt with as follows.

(*a*) The Education Committee are formulating a scheme in which selected girls who are desirous of entering the nursing profession may continue their education and take various subjects to cover the syllabus of the Preliminary State Examination for proba-

tioner nurses, and a graduated maintenance grant may be made in certain cases. At the appropriate age, the student will commence her work at one of the hospitals owned by the Council.

(*b*) The scale of salaries has been revised in certain Council hospitals, and the London County Council scale of salaries has been adopted.

(*c*) This matter has been fully dealt with by the Council, and most of the nursing staff work a forty-eight hour week. Although it is not always possible to apportion the work within rigid limits, considerable progress has been made in this direction.

(*d*) The appointment of ward orderlies and assistant nurses in various hospitals tends to relieve the trained nurse of certain unskilled domestic work.

ASSISTANT NURSES. A considerable number of assistant nurses are engaged in the Council's institutions, more especially at the Central Home and Forest Gate Hospital, at which institutions, owing to the type of patients, only a small number of fully trained nursing staff is essential. They work under the supervision of the trained staff.

WARD ORDERLIES. During the year it was found necessary to appoint non-resident ward orderlies at Plaistow Hospital and Dagenham Sanatorium. At Plaistow Hospital, owing to the institution of a forty-eight hour working week for the nursing staff, six ward orderlies had to be appointed. At Dagenham Sanatorium six were appointed owing to the shortage of nursing staff. The salary of an orderly is £2 3s. 4d. per week, less 10s. per week in respect of meals supplied.

WHIPPS CROSS HOSPITAL.

BUILDINGS AND STAFF.

This hospital is situated at Whipps Cross in the Borough of Leyton, and is contained within an area of approximately 46 acres. The buildings are comparatively modern, having been built in 1903. The main building consists of a central administrative block and four three-storey blocks, each with two wings leading from a main corridor. These blocks contain 24 wards for the accommodation of acute medical and surgical cases, two observation wards for mental cases, and a well-equipped operating theatre. The hospital was built to accommodate 744 patients, but it is rarely that the number of patients falls below 800, and there are

often over 1,000 patients in residence.

New extension. A new extension to the hospital is now in course of erection, and it is connected to the existing building by the main corridor. It is a two-storey building with four blocks, each with two wings, and it contains sixteen 24 bed wards, thirty-two two bed wards, and thirty-two one bed wards. In addition there is a separate isolation block containing 24 single wards, bringing the total additional accommodation to 504 beds. Included in the scheme is also a new operating theatre, a new receiving block, residence for five medical officers, and extensions to the kitchens, laundry, boiler house and mortuary.

New accommodation for nurses and maids. The new accommodation for nurses and maids is now completed. The nurses' home, which is connected to the existing nurses' home, is a four-storey building, and has accommodation for 135 nurses and 8 sisters. The bedrooms are fitted with hand-basins and hot and cold water, radiators, and built-in wardrobes. Each is furnished with dressing table, bedstead, easy chair, linen basket, and rug. Each floor has ample bathroom and lavatory accommodation. On the ground floor is a class-room, a lecture-room, and a demonstration room, and these rooms can be opened to form a recreation room measuring 29 feet by 82 feet. The maids' home is adjacent to the nurses' home and is of similar type. It contains 51 bedrooms for maids and 4 bed-sitting rooms for sisters. The bedrooms are furnished and fitted in a manner similar to the nurses' bedrooms, but they have no hand-basins, and a wash-stand is provided in place of running water. On the ground floor is a recreation room measuring 28 feet by 45 feet.

Medical staff. The staff of the hospital consists of one medical superintendent; one deputy medical superintendent; and 6 resident medical officers. In addition there is a visiting staff of 7 consultants; one dentist; and one anaesthetist; whose names will be found on page 14 of this report.

During the year one additional resident medical officer was appointed.

Nursing staff. The full complement of the nursing staff was 196, the daily average number of patients in 1937 was 905.23, which gives an average of 4.62 beds per nurse. The average daily strength of nurses was approximately 136.

Admissions.

During the year 1937, the number of patients admitted to the hospital was 10,717, the number who died was 1,592, and 9,107 were discharged. On 31st December, 1937, the number of patients in residence was 975. Of the admissions, 4,396

Table II.

Whipps Cross Hospital. Admissions, 1931-1937.

	1931	1932	1933	1934	1935	1936	1937	Per cent. increase (+) or decrease (−) on 1931 figures.
Admissions:								
Males	3,278	3,269	3,906	3,676	3,613	4,018	4,396	+ 34.11
Females	3,336	3,386	3,833	3,722	3,825	4,155	4,299	+ 28.87
Children	1,980	1,961	2,055	2,204	1,680	1,978	2,022	+ 2.12
Total	8,594	8,616	9,794	9,602	9,118	10,151	10,717	+ 24.70
Admitted by:								
District medical officer & relieving officer ...	856	775	951	862	878	622	575	− 32.83
General practitioner and relieving officer ..	6,743	6,743	7,753	7,549	7,151	8,381	8,819	+ 30.79
Transferred from voluntary hospitals and Council institutions ...	520	563	480	482	480	504	454	− 12.69
Medical officer of health ...	—	2	2	17	20	15	12	—
Medical superintendent ...	54	108	164	177	187	173	180	+233.33
Accidents ...	287	305	285	319	211	275	471	+ 64.11
Police cases ...	120	108	141	175	174	170	194	+ 61.67
Others	14	12	18	21	17	11	12	− 14.29
Number of operations	1,591	1,747	1,764	1,815	1,665	1,844	2,011	+ 26.40

were adult males, 4,299 adult females, and 2,022 children. Of the adult males admitted 4,330 were acute cases and 66 chronic. Of the adult females admitted 4,237 were acute cases and 62 chronic. Of the children admitted 2,021 were acute cases and one was a chronic case. The number of cases seen as out-patients but not

admitted were 601 men, 250 women, and 186 children. These figures show an increase of 566 admissions over the corresponding figures for 1936, viz., 10,151.

The hospital was transferred to the County Borough Council in 1930. In a period of transition such as the present it is necessary to have a clear idea of the increasing use to which this hospital is being put, and of the changes in the methods of admission. Table II gives the numbers of admissions and the route by which the patients entered the hospital since 1931. The table also

TABLE III.

WHIPPS CROSS HOSPITAL. PATIENTS SEEN BY CONSULTANTS, 1937.

Consultant.	1931	1932	1933	1934	1935	1936	1937	Per cent. increase (+) or decrease (−) on 1931 figures.
Dermatologist ...	No record prior to May, 1936.					422	684	—
Ophthalmologist .	316	347	329	389	521	595	517	+ 63.6
Aural Surgeon ...	461	500	550	475	445	390	447	− 3.0
Light treatment	1,208	1,240	1,475	1,879	1,971	1,933	1,815	+ 50.2
Gynæcologist ...	28	42	75	125	117	77	77	+175.0
Orthopaedic Surgeon ...	233	183	259	347	287	353	426	+ 82.8
Neurologist ...	228	240	231	217	194	177	317	+ 39.0
Urologist ...	177	202	190	187	257	249	290	+ 63.8
Totals	2,651	2,754	3,109	3,619	3,792	4,196	4,573	+ 72.5

shows the number of operations performed. Table III shows the number of cases seen by the various consultants.

One of the most obvious features of these tables is the progressive increase in the amount of work carried out in the hospital. The admissions increased from 8,594 in 1931 to 10,717 in 1937—an increase of 24.7 per cent. Despite this, there has been an apparent decrease of 32.8 per cent. in the number of patients admitted by the district medical officers through the relieving officers, and taking into account the large increase in the

number of admissions, the actual decrease in the number of patients admitted through the mechanism of the poor law is very much greater. On the other hand, there has been an increase of 30.8 per cent. in the number of patients who were admitted by general practitioners through the relieving officers during the period 1931-1937. It is obvious that under the present constitution the relieving officers must be directly involved in all admissions. These figures mean that the institution is yearly developing more as a first class general hospital, and that every year the "poor law case" is becoming less in evidence. In 1937 this type of case constituted only 5.4 per cent. of the total admissions.

From the data which are set out in Table III it is evident that there has been a considerable increase in the work of the consultants who are attached to the hospital. In the case of consultations for ear disorders there has been no change since 1931. In all the other departments the increases have been very marked, even when allowance is made for the increase in the number of admissions. The following percentage increases for the patients seen in 1937 over those seen in 1931 in the different departments are illuminating: ophthalmic, 63.6; light, 50.2; gynaecological, 175.0; orthopaedic, 82.8; neurology, 39.0; urology, 63.8.

The conclusion which must be reached after examination of these figures is that the hospital is yearly being used to a greater degree by those members of the community who, as a result of acute illness, are placed in the position of requiring the services of specialists in a large general hospital. The admissions are yearly becoming even more representative of that section of the community which is prepared to contribute to a first-class voluntary hospital for the services which it can render.

Anaesthetics. During 1937, the number of anaesthetics given by the visiting anaesthetist was 627.

Dentist. The number of cases seen by the visiting dentist was 265.

Diseases treated.

Table IV gives in tabular form a classification by disease groups of the diseases for which patients were discharged from or died in the hospital during the year.

A particularly noteworthy feature of Table IV is the large proportion of admissions of patients whose illnesses were due to violence. This indicates the facilities which are available for the

Table IV.

Classification by disease groups of patients discharged from or dying in Whipps Cross Hospital during 1937.

Disease classification.	Men.		Women.		Children.		Total.	
	Discharged.	Died.	Discharged.	Died	Discharged.	Died	Discharged.	Died.
1. Infectious diseases ...	30	6	37	3	115	14	182	23
2. Cancer and other tumours	79	101	66	78	—	2	145	181
3. Diseases of circulatory system...	192	129	272	120	95	11	559	260
4. Diseases of the respiratory system (excluding tuberculosis)	565	170	377	84	407	74	1,349	328
5. Pulmonary tuberculosis	89	63	73	34	5	6	167	103
6. Diseases of digestive system...	764	74	564	49	358	20	1,686	143
7. Diseases of the nervous system and sense organs	221	82	302	77	203	7	726	166
8. Diseases of the skin ...	91	2	50	1	148	—	289	3
9. Rheumatic diseases—acute and chronic ...	84	—	151	—	76	1	311	1
10. Diseases of nutrition ...	7	—	7	4	—	—	14	4
11. Diseases of blood and blood-forming organs	14	—	11	3	1	—	26	3
12. Diseases of genito-urinary system...	223	67	225	24	36	—	484	91
13. Non-tuberculous disease of bones, etc. ...	12	—	3	1	13	—	28	1
14. Non-pulmonary tuberculosis	10	7	16	8	4	13	30	28
15. Disease of pregnancy, childbirth and the puerperium	—	—	512	13	—	—	512	13
16. Diabetes	34	6	54	10	7	1	95	17
17. Old age, senility and senile decay	7	5	31	9	—	—	38	14
18. Congenital malformations	—	—	—	—	—	4	—	4
19. Diseases of early infancy	—	—	—	—	86	40	86	40
20. Violence	676	32	380	38	267	2	1,323	72
21. Ill-defined causes ...	128	58	136	4	14	—	278	62
22. Convalescence	—	—	—	—	—	—	—	—
23. Mental	328	28	450	7	1	—	779	35
Totals	3,554	830	3,717	567	1,836	195	9,107	1,592

treatment of this type of case, which is often admitted to the large voluntary hospitals. Apart from this feature, the major emphasis in the table is on non-tuberculous diseases of the respiratory tract, and on diseases of the digestive, nervous, and genito-urinary systems respectively.

Deaths.

The number of deaths which occurred in the hospital was 1,592. This was an increase of 90 over the number for the previous year, viz. 1,502. The number of deaths which occurred within twenty-four hours of admission was 251, and a further 148 took place within the second twenty-four hours after admission. The corresponding figures for 1936 were 211 and 111.

Table V shows the age groups in which deaths occurred in the seven years since the transfer of the hospital.

Table V.

Whipps Cross Hospital. Deaths by ages.

Ages.	1931	1932	1933	1934	1935	1936	1937
Under 1	73	85	59	80	51	72	96
1—	54	58	51	55	23	26	37
2—	23	28	21	27	17	19	19
5—	51	45	34	53	26	37	42
15—	91	94	118	82	63	80	77
25—	117	114	126	104	93	104	98
35—	150	99	157	90	108	124	135
45—	189	183	220	210	172	216	225
55—	244	241	304	279	282	330	367
65—	173	165	215	248	240	324	340
75—	71	64	125	109	115	150	137
85—	15	23	16	9	22	20	19
Totals	1,251	1,199	1,446	1,346	1,212	1,502	1,592

In Table VI the deaths at different ages are expressed as percentages of all deaths in the hospital for that year. This table shows that during the last six years there has been only

a slight change in the age distribution of the deaths. For ages under 15 years—that is, the period of childhood—the percentage has fallen, and the same feature is found in the age group 15-35 years. During middle adult life—35-55 years—there has been little change in the percentage, but in late adult life—over 55 years—the percentage has increased from 40.2 in 1931 to 54.2 in 1937. Without further analysis of more detailed data it is difficult to say what these figures mean. It is possible that there is here again an expression of the fact that advances in medical treatment have rendered it possible for death to be postponed to the later ages of life.

Consideration of Table IV will show the high proportion of deaths which were due to malignant diseases, diseases of the circulatory system, and diseases of the nervous system respectively.

TABLE VI.

WHIPPS CROSS HOSPITAL. PERCENTAGE DISTRIBUTION OF DEATHS BY AGES.

Ages.	1931	1932	1933	1934	1935	1936	1937
Under 1	5.84	7.09	4.08	5.94	4.21	4.79	6.03
1—	4.32	4.84	3.53	4.09	1.90	1.73	2.32
2—	1.84	2.34	1.45	2.01	1.40	1.26	1.19
5—	4.08	3.75	2.35	3.94	2.15	2.46	2.64
15—	7.27	7.84	8.17	6.09	5.20	5.33	4.84
25—	9.35	9.50	8.71	7.73	7.67	6.92	6.16
35—	12.00	8.26	10.86	6.68	8.90	8.26	8.48
45—	15.10	15.26	15.21	15.60	14.19	14.39	14.13
55—	19.50	20.10	21.02	20.73	23.27	21.97	23.05
65—	13.82	13.76	14.87	18.42	19.80	21.57	21.36
75—	5.68	5.34	8.64	8.10	9.49	9.99	8.61
85—	1.20	1.92	1.11	0.67	1.82	1.33	1.19
	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Many of these conditions are especially fatal in elderly persons, and it is probable that they were largely responsible for the increased mortality in the later years.

Table VII.

Whipps Cross Hospital. Operations performed, 1937.

Operations performed.		Operations performed.	
Abdominal operations:—		**Eye, ear, nose and throat operations:—**	
Appendix—emergency	299	Operations on eyes	20
,, —interval	67	Mastoid operation	79
,, —abscess	1	Myringotomy	2
Perforated gastric ulcer	25	Operations on nose	9
,, pyloric ulcer	10	,, on sinuses	10
,, duodenal ulcer	19	,, on ear	1
Gastro-enterostomy	5	For tonsils and adenoids	54
,, -jejunostomy	4		175
Other gastric	4		
Small gut obstruction	9	**Chest operations:—**	
Colostomy	26	For empyema	28
Caecostomy	6		28
Closure of caecostomy	2		
Intussusception	6	**Operations for abscesses:—**	
Volvulus	4	Pelvic	2
Diverticulitis	5	Breast	31
Gall bladder operations	16	Bartholin's	5
Acute pancreatitis	4	Ischio-rectal	18
Other laparotomy:—		Retro-pharyngeal	3
emergency	47	Scrotal	1
interval	27		60
	586		
Hernia operations:—		**Rectal operations:—**	
Femoral hernia	32	For haemorrhoids	20
Strangulated femoral hernia	2	Other rectal	5
Inguinal hernia	25		25
Strangulated inguinal hernia	45		
Incisional hernia	2	**Amputations:—**	
Ventral hernia	5	Of thigh	4
	111	,, leg	14
		,, finger	7
Genito-urinary operations:—			25
Exploration of kidneys	3		
Nephrectomy	5	**Orthopaedic operations:—**	
Perinephric abscess	4	Application of plaster	145
Lithotomy	2	Wiring	24
Lithotrity	1	Removal of wiring	2
Cystotomy	3	Plating	2
Cystoscopy	1	For compound fractures	21
Prostatectomy	17	,, correction of talipes	1
Orchidectomy	1	,, dislocations	26
Circumcision	7	,, exostoses	1
For hydrocele	1	,, hallux valgus	1
,, ectopic pregnancy	9	,, osteomyelitis	9
,, tubal pregnancy	1	,, removal of nails	13
,, salpingitis	2	,, removal of patella	2
Caesarean section	8	,, removal of head of radius	2
Hysterectomy—total	15	,, slipped epiphysis	1
,, —sub total	12		
Uterine curettage	29		
Other uterine operations	4		
Colporraphy	6		
Colpo-perineorraphy	2		
Ovarian operations:—			
deliberate	7		
emergency	5		
Other operations	9		
	154		

TABLE VII. (CONTD.).

WHIPPS CROSS HOSPITAL. OPERATIONS PERFORMED, 1937.

Operations performed.		Operations performed.	
Excision of head of femur	2	Electro-cautery	1
,, of semi-lunar cartilage	11	Exploring hip	1
Arthrodeses	4	Dental operations	3
Drilling of tibia	1	Diathermy	1
Insertion of Watson-Jones nail	3	For burns and scalds	12
,, of Smith-Peterson pin	4	,, hydatidiform mole	1
Osteotomy	1	,, tumours and cysts	16
Sequestrotomy	13	Foreign bodies	5
Manipulations	42	Inflammation of cellular tissue	271
	331	Lumbar puncture	1
		Minor operations	29
Operations on skull, brain and nerves:—		Oesophagoscopy	6
Cerebral abscess	5	Removal of bone-clavicle	1
,, compression	3	,, of glands of neck	2
Trephine	1	Resections	9
Lateral sinus thrombosis	2	Sections	1
Nerve stretching	1	Skin graft	5
	12	Suturing	68
		Removal of sutures	1
Miscellaneous operations:—		Tendon freeing	1
Blood transfusions	2	Tendon sutures	5
Breast—biopsy	4	Thyroidectomy	3
,, —radical	5	Tracheotomy	2
		Weil's disease	3
		Dressings	10
		Ward anaesthetics	27
		Examinations	8
			504
		Total	2011

OPERATIONS.

During the year 2,011 operations were performed under general anaesthetics in the hospital. Of these 119 were performed by visiting consultants, and 1,892 by the resident staff of the hospital. Table VII gives a classification of these operations. In addition, 425 operations were performed under local anaesthetics by the consultants.

DIAGNOSTIC FACILITIES.

Radiology. The present radiological department is a very complete unit which is staffed by one radiographer and an assistant radiographer. It consists of a 10 K.V.A. four-valve X-ray plant, a separate screening room and a modern shock-proof ward plant. Table VIII shows the number of X-ray examinations and treatments carried out during the last seven years. The marked increase in the number of X-ray examinations in 1937 should be noted.

Table VIII.

Whipps Cross Hospital. Radiological department.

Year.	No. of X-ray examinations.	No. of treatments.
1931	4,014	65
1932	3,977	93
1933	4,557	82
1934	4,499	102
1935	4,160	63
1936	4,226	90
1937	5,460	94

Pathological services.

Number of post-mortems during 1937: (*a*) complete .. 89
" " " " " (*b*) partial .. 97
Number of histological examinations carried out during 1937: (*a*) post-mortems 15
(*b*) operations 51
Number of specimens sent to the Clinical Research Association 4,181

Ultra-violet ray treatment. The light department consists of 2 Westminster arc lamps; 3 mercury vapour lamps; 3 infra-red lamps; 1 Kromayer lamp; 2 sun lamps; and 2 alpine arc lamps.

During the year 1937 the total number of patients seen by the consultants was 2,499. Of this number 684 were seen for diagnostic purposes; these consisted largely of patients suffering from skin conditions.

The cases treated in the light department are mainly the following:—General debility and anaemia; skin cases; chronic sinuses, by the Kromayer lamp; compounds fractures; chronic rheumatism, sciatica, lumbago, by the infra-red rays; rickets.

Treatment of fractures.

During the year, 470 patients were admitted suffering from fractures of various bones. These fractures are grouped according to site in Table IX.

Table IX.

Treatment of fractures.

Site of fracture.	Cases.	Deaths.
Femur	77	29
Tibia and (or) fibula	119	2
Ankle or foot	26	—
Humerus	33	3
Radius and (or) ulna	53	—
Wrist or hand	6	—
Ribs	31	—
Spine	16	—
Skull	30	6
Pelvis	12	—
Scapula and (or) clavicle ..	33	—
Patella	19	—
Jaw, face, etc.	15	—
Totals	470	40

Medical notes on the treatment of fractures. The treatment of fractures is on the most modern lines, and is re-inforced by the use of the Joseph frame, the Zimmer appartus, and the Hawley table.

Intra-capsular fractures of the hip are treated by the use of the Smith-Peterson pin and the Watson-Jones nail, thus reducing the mortality and enabling the patient to become ambulant in a few weeks, irrespective of the advanced age of many patients with this injury.

Excision of the patella for fracture is being performed with good results.

Mental wards.

Two wards, one for males and one for females, are reserved for the observation of patients under the Lunacy Act, 1890. The medical care of these patients is carried out by the medical superintendent or by the deputy medical superintendent, and a justice usually attends on three occasions weekly for the purpose of this Act. The staff of these two wards consists of 9 male nurses and 9 female nurses.

During the year 1937 the number of patients admitted to these wards was 814, of whom 356 were males and 458 females. These patients were dealt with as shown in Table X.

TABLE X.

METHOD OF DISPOSAL OF MENTAL OBSERVATION CASES.

	Males.	Females.	Total.
Certified and transferred to mental hospitals	59	66	125
Transferred as temporary patients	35	82	117
Transferred as voluntary patients	115	110	225
Transferred for further observation	—	—	—
Transferred to other institutions ..	52	101	153
Discharged	67	92	159
Died	28	7	35
Total	356	458	814

The duration of residence of these patients in the observation wards is shown in Table XI.

TABLE XI.

DURATION OF RESIDENCE OF MENTAL CASES.

	Weeks.								Total.
	—1	—2	—3	—4	—5	—6	—7	—8	
Patients certified before transfer	61	57	4	—	1	—	—	2	125
Patients transferred as temporary or voluntary patients	248	89	5	—	—	—	—	—	342
Patients discharged ...	104	47	6	1	1	—	—	—	159
Transferred to institutions other than mental hospitals	61	66	23	2	1	—	—	—	153
Died	25	10	—	—	—	—	—	—	35

There is no doubt that the administration of these observation wards, and the amount of time which the clinical supervision of the patients demands, is a serious drain on the energy of the officials concerned. There appears to be no incontravertible argument in favour of the retention of these wards at Whipps Cross Hospital. This type of ward is much better left to an alienist of experience. In the past much good work has been carried out in these wards, but it should be remembered that each year the general administration of the hospital increases, and the time which the medical superintendent must give to this work in the observation wards is therefore more and more an impediment to the general running of the hospital.

In December, 1937, a meeting of the Visiting Committee of the Mental Hospital was held to consider the transfer of these observation patients to Goodmayes Mental Hospital. The general concensus of opinion was that the transfer was desirable, but difficulties in dealing with certain types of cases made it necessary to delay any effective measures. The position will be reconsidered at a later date.

FOREST GATE HOSPITAL.

Buildings and staff.

This is a comparatively old building which was transferred in 1930. The institution consists essentially of a central administrative block which is surrounded by three-storey buildings for the accommodation of mental defectives and epileptics. Behind these main buildings is a maternity unit, which consists of two blocks with a nominal accommodation for 64 lying-in beds. At the rear of the institution there is a considerable area of unbuilt land, and in 1931 four additional wards of a temporary nature were erected for the accommodation of the chronic sick. The whole institution now has accommodation for 723 patients.

Medical staff. The staff consists of the medical superintendent, two assistant resident medical officers, and one visiting psychiatrist.

Nursing staff. The nursing staff of the hospital as a whole is 24 trained nurses, 109 assistant nurses, and 16 male attendants. The nursing staff of the maternity unit is 5 midwives, 8 pupil midwives, and 4 assistant nurses.

Admissions.

During the year 1937, 2,127 patients, including 876 infants born in the hospital, were admitted, 1,997 were discharged, and 94 died. On December 31st, 1937, the number of patients in residence was 793 (including 62 infants under 3 years of age). Of the admissions, 56 were adult males, 1,146 adult females, and 49 children. Of the adult males admitted, 56 were mental defectives or epileptics. Of the adult females admitted, 68 were chronic sick, 47 mental defectives or epileptics, 24 nursing mothers, and 1,007 maternity cases. Of the children, 24 were admitted with nursing mothers, and 25 were mental defectives or epileptics.

These figures show an increase of 167 admissions over the corresponding figures for 1936, viz., 1,084.

Table XII gives the number of admissions and an analysis of the routes by which they entered the hospital.

Table XII.

Forest Gate Hospital.

Admissions:—	
Males	56
Females	1,146
Children admitted	49
Children born in the hospital (live births) ..	876
Total ..	2,127
Admitted by means of:—	
Relieving Officer and district medical officer	53
General practitioner and relieving officer ..	46
Medical officer of health and relieving officer..	444
Relieving officer	250
Transferred from institutions	190
Medical superintendent	268
Total ..	1,251

Diseases treated.

Table XIII gives in tabular form a classification by disease groups of the diseases for which patients were discharged from or died in the hospital during the year.

Table XIII.

Classification of disease groups of patients discharged from or dying in Forest Gate Hospital during 1937.

Disease classification.	Men.		Women.		Children.		Total.	
	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.
1. Acute infectious disease	—	1	—	—	—	1	—	2
2. Influenza	—	—	—	1	—	—	—	1
3. Malignant disease ...	—	—	—	3	—	—	—	3
4. Puerperal pyrexia ...	—	—	15	—	—	—	15	—
5. Puerperal fever (women confined in hospital) ...	—	—	2	—	—	—	2	—
6. Other diseases and accidents connected with pregnancy and childbirth ...	—	—	—	1	—	22	—	23
7. Mental diseases (mental defectives and epileptics) ...	67	1	40	2	20	1	127	4
8. Senile decay ...	—	—	11	38	—	—	11	38
9. Diseases of the nervous system and sense organs	—	1	—	5	—	—	—	6
10. Diseases of the respiratory system	—	—	—	9	—	2	—	11
11. Diseases of the circulatory system	—	—	—	5	—	—	—	5
12. Diseases of the digestive system ...	—	—	—	1	—	—	—	1
Totals ...	67	3	68	65	20	26	155	94
13. Nursing mothers and infants	—	—	41	—	37	—	78	—
14. Mothers and infants from maternity wards	—	—	945	—	819	—	1,764	—
Grand totals	67	3	1,054	65	876	26	1,997	94

Deaths.

The number of deaths which occurred in the hospital was 94. This was an increase of 14 over the number for the previous year, viz., 80. The number of deaths which occurred within 24 hours of admission was one; the corresponding figure for 1936 was two.

Table XIV shows the age groups in which deaths occurred in the seven complete years since the transfer of the hospital.

Table XIV.

Forest Gate Hospital. Deaths by ages.

Age.	1931	1932	1933	1934	1935	1936	1937
Under 1	21	26	24	23	20	18	23
1—	—	—	—	—	—	—	—
2—	—	—	—	—	—	1	1
5—	4	1	1	1	—	2	2
15—	1	—	3	3	1	1	3
25—	4	1	2	4	1	2	1
35—	3	2	4	4	5	1	3
45—	2	1	2	4	2	1	3
55—	12	6	9	5	10	3	4
65—	23	10	18	14	13	15	8
75—	29	16	18	26	26	26	29
85—	10	9	10	13	15	10	17
Totals	109	72	91	97	93	80	94

Mental defectives and epileptics.

The number of mental defectives admitted during 1937 was 50, of whom 19 were adult males, 14 adult females, and 17 children. The number of discharges was 72, of which 33 were of adult males, 20 of adult females, and 19 of children. The number of deaths was 7, of which 3 were of adult males, 2 of adult females, and 2 of children.

The corresponding figures for epileptics were: admissions 77, of which 35 were of adult males, 34 of adult females, and 8 of children. The number of discharges was 55, of which 34 were of adult males, 20 of adult females, and one child. There were 4 deaths—3 adult females and one child.

Notes on the clinical features of these cases will be found in the section on mental deficiency.

The maternity unit.

This unit, as above mentioned, is housed in two separate blocks. Each block is provided with a properly equipped labour ward, but the nursing accommodation is far from being adequate. The lying-in wards are larger than is dictated by modern practice, and the general lay-out of the two sections of the unit render administration difficult. There is no satisfactory accommodation for the isolation of patients who show pyrexia. As a result of the great expansion of this part of the work of the hospital, the

Table XV.

Forest Gate Hospital. Admissions to the maternity unit.

	1931	1932	1933	1934	1935	1936	1937
Total number of admissions (including infants born in the hospital)	967	1,049	1,081	1,218	1,343	1,601	1,883
Number of women confined in the hospital	480	512	523	590	640	779	907
Number of live births	434	476	489	560	615	740	876
Number of stillbirths	46	36	34	42	34	51	43
Number of deaths of babies under four weeks, born in the hospital	19	25	23	21	14	16	15
Number of deaths of women confined in the hospital ...	5	2	1	5	2	1	1
Total deaths	24	27	24	26	16	17	16
Total number of discharges (including infants born in the hospital)	976	956	1,060	1,162	1,298	1,513	1,764
Average number of days residence of women confined in the hospital	21	23	22	19	17	17	17

maternity wards have gradually become more overcrowded, and the lack of accommodation is always sufficient to tax the resources of the resident staff.

Admissions.

The great increase in the work of the unit is well shown in Table XV.

The number of twin births during 1937 was 12.

Abnormal births. The following were the major causes of abnormality in the patients confined in the hospital during the year:—Ante-partum haemorrhage, 12; post-partum haemorrhage, 6; eclampsia, 1.

Apart from these conditions the following abnormal presentations were noted:—Breech, 40; transverse, 3; prolapse of cord, 1. There were no face presentations during the year.

Induction of labour had to be performed in 105 cases, 6 by surgical and 99 by medical means. Forceps were applied in 45 cases. Patients who required major surgical measures were transferred to Whipps Cross Hospital, and in 1937 the number of patients so transferred was 7. In all of these cases Caesarian section was carried out. The indication for this operation in these cases was the disproportion between the size of the foetus and the size of the pelvis.

The number of premature births was 42. Peurperal pyrexia was notified in 15 cases, and puerperal fever in 2 cases. Both patients were treated in Forest Gate Hospital and made a complete recovery.

One maternal death occurred during the year. The following are brief particulars of this case:—The chief cause of difficulty was prolonged labour in the first and second stages which lasted over 72 hours, and slow dilation of the os. The method employed was slow forceps delivery under general anaesthesia with anti-shock treatment consisting of intravenous gum glucose saline (300 c.c.), electric hot blanket and cardiac stimulants. The patient was delivered at 5.10 p.m. The shock increased from 7 p.m. and she died at 4.40 a.m. The interval between admission and death was thirteen and three-quarter hours.

The causes of the 43 stillbirths are classified as follows:—

Breech (of which 5 were "extended") ..	6
Toxaemia in mother	10

Ante-partum haemorrhage (placenta praevia)	4
Foetal deformities	2
Impacted shoulders	1
Transverse lie	1
Prolapsed cord	1
Prematurity	8
Cause not ascertained	9
Obstructed labour	1
Total	43

The number of children who died within ten days of birth was 15 (all born in the hospital).

The number of cases of ophthalmia neonatorum was one. This case was transferred to Whipps Cross Hospital.

No case of pemphigus occurred during the year.

Pupil midwives. These pupils are generally obtained from Whipps Cross Hospital where they have received their general training. During 1937 the number of pupils who passed through the wards of the maternity unit was 16.

Further developments. It has been recognised for some time that the maternity unit is inadequate for its purpose, and that a scheme of expansion will have to be formulated in the near future. At the time of writing a temporary scheme for the improvement and expansion of the existing accommodation, together with a scheme for increasing the staff, and the improvement of administrative methods and teaching facilities are under consideration.

CENTRAL HOME.

This institution, situated in the Borough of Leyton, was built in 1840, and consists of a series of blocks of buildings, some separate and some adjoining each other, which are used as administrative buildings and for housing chronic sick, mental, and able-bodied persons. The blocks used for the chronic sick are mainly two-storey buildings containing 22 wards, and have accommodation for 951 patients. Many of the wards are unsuitable for the treatment of chronic sick. The able-bodied section of the institution has accommodation for approximately 1,000 men and women.

Medical staff. The staff of the institution consists of one senior medical officer and two assistant resident medical officers. During the year there was one change in the medical staff, and one additional assistant resident medical officer was also appointed.

Nursing staff. The nursing staff consists of 15 trained nurses, 138 assistant nurses, and 50 male attendants.

Admissions.

During the year 1937, the number of patients admitted to the institution was 1,935. The number who died was 964, and 911 were discharged. On December 31st, 1937, the number of patients in residence was 924. Of the patients admitted, 874 were adult males, 1,054 adult females, and 7 children. Of the adult males admitted, 854 were chronic sick, 4 mental cases, and 16 epileptic cases. Of the adult females admitted, 1,039 were chronic sick, 5 mental cases, and 10 epileptic cases. Of the children admitted, 2 were chronic sick, 3 mental and 2 epileptic. The figures show an increase of 95 admissions over the corresponding figures for 1936, viz., 1,840.

Table XVI gives the number of admissions and analysis of the routes by which they entered the institution.

Table XVI.

Central Home. 1937.

Admissions:—	
Male	874
Female	1,054
Children	7
Total ..	1,935
Admitted by means of:—	
Relieving officer and district medical officer ..	164
General practitioner and relieving officer	1,276
Medical officer of health	1
Transferred from other institutions	425
Otherwise	69
Total ..	1,935

Table XVII.

Classification by disease groups of patients discharged from or dying in Central Home during 1937.

	Men.		Women.		Children.		Total.	
	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.
1. Infectious diseases ...	—	—	—	—	—	—	—	—
2. Cancer and other tumours ...	20	76	28	96	—	—	48	172
3. Diseases of circulatory system	42	73	58	95	—	—	100	168
4. Diseases of the respiratory system excluding tuberculosis	257	84	293	96	—	—	550	180
5. Pulmonary tuberculosis	—	—	—	—	—	—	—	—
6. Diseases of digestive system	18	8	12	8	—	—	30	16
7. Diseases of nervous system and sense organs	27	20	13	12	—	—	40	32
8. Diseases of skin ...	—	—	—	—	—	—	—	—
9. Rheumatic diseases, acute and chronic	—	—	—	—	—	—	—	—
10. Diseases of nutrition	—	—	—	—	—	—	—	—
11. Diseases of blood and blood - forming organs	—	—	—	—	—	—	—	—
12. Diseases of genito-urinary system ...	15	24	5	9	—	—	20	33
13. Non-tuberculous disease of bones, etc.	—	—	—	—	—	—	—	—
14. Non-pulmonary tuberculosis	—	—	—	—	—	—	—	—
15. Diseases of pregnancy, childbirth and the puerperium ...	—	—	—	—	—	—	—	—
16. Diabetes	—	—	—	—	—	—	—	—
17. Old age, senility and senile decay ...	89	212	34	151	—	—	123	363
18. Congenital malformations	—	—	—	—	—	—	—	—
19. Diseases of early infancy	—	—	—	—	—	—	—	—
20. Violence	—	—	—	—	—	—	—	—
21. Ill-defined causes ...	—	—	—	—	—	—	—	—
22. Convalescence ...	—	—	—	—	—	—	—	—
Totals ...	468	497	443	467	—	—	911	964

Diseases treated.

Table XVII gives in tabular form a classification by disease groups of the diseases for which patients were discharged from or died in the hospital during the year.

Deaths.

The number of deaths which occurred in the hospital was 964. This was an increase of 37 over the number for the previous year, viz., 927.

Table XVIII shows the age groups in which deaths occurred in the seven years since the transfer of the hospital.

Table XVIII.

Central Home. Deaths by ages.

Ages.	1931	1932	1933	1934	1935	1936	1937
Under 1	—	—	—	—		—	—
1—	—	—	—	—	—	—	—
2—	—	—	—	—	—	—	—
5—	—	1	—	—	—	—	—
15—	1	3	1	3	2	1	—
25—	9	5	7	6	4	3	9
35—	17	9	8	11	8	8	8
45—	34	41	32	36	35	33	29
55—	134	144	104	139	110	113	99
65—	307	377	313	333	324	310	317
75—	323	351	315	375	378	354	367
85—	104	91	105	95	99	105	135
Totals	929	1,022	885	998	960	927	964

FOREST HOUSE.

This institution is situated in the same grounds as Whipps Cross Hospital. It consists of a large centre building—originally an old mansion—surrounded by a series of out-buildings which serve as day rooms and dormitories. There are 13 wards and 396 beds. The accommodation provides mainly for aged men, but there is in addition accommodation for 38 epileptics, 22 cases under Section 24 of the Lunacy Act, and 35 mental patients not

certified. Forest House Cottages, which form an annexe to Forest House, have accommodation for 90 aged women.

This combined institution is under the charge of the Master of Forest House, and the Medical Superintendent of Whipps Cross Hospital acts as medical advisor to the inmates.

The nursing staff consists of 14 male attendants and 7 female attendants.

During 1937 the number of patients admitted to the institution was 22, and the number discharged was 12. These admissions and discharges are shown in Table XIX.

TABLE XIX.

FOREST HOUSE. ADMISSIONS AND DISCHARGES, 1937.

	Males.		Total.
	Mental.	Epileptic.	
Admissions ..	17	5	22
Discharges ..	4	8	12

Of the patients admitted, 17 were transferred from other institutions, and of those discharged, 9 were sent to other hospitals. There were no deaths. On December 31st, 1937, the total number of sick in this institution was 81.

HAROLD WOOD HOSPITAL.

The hospital is situated at Harold Wood, Essex, and consists of an administrative block and four large single-storey buildings. It has accommodation for 160 chronic sick patients and 20 children convalescing after infectious diseases. The hospital was originally used as a convalescent home for cases recovering from scarlet fever or diphtheria, but in March, 1933, owing to the overcrowding at the Central Home, the Ministry of Health sanctioned the temporary use of the hospital for public assistance purposes.

Staff. The staff consists of one visiting medical officer, one matron, 6 sisters, 3 staff nurses, 36 assistant nurses, and 5 male nurses.

During the year, 75 adults were admitted from the Central Home. The number of deaths was 39, and 37 were discharged. On December 31st, 1937, the number of patients in residence was 171 adults and 20 children. Of the adult patients admitted, 46 were males and 29 females. These figures show a decrease of 3 over the corresponding figure for 1936, viz., 78. The number of children admitted from Plaistow Hospital was 198; 197 were discharged and one died. Of the admissions, 105 were males and 93 females. These figures show an increase of 6 over the corresponding figure for 1936, viz., 192.

Diseases treated.

Table XX gives in tabular form a classification by disease groups of the diseases for which patients were discharged from or died in the hospital during the year.

Deaths.

The number of deaths which occurred in the hospital was 40. This was an increase of 7 over the number for the previous year, viz., 33. No deaths occurred within 48 hours of admission. Table XXI shows the age groups in which deaths occurred during the year.

Table XXI.

Harold Wood Hospital. Deaths by ages, 1937.

Age.	Deaths.
Under 1	—
1—	—
2—	—
5—	1
15—	—
25—	—
35—	1
45—	—
55—	3
65—	11
75—	19
85—	5
Total	40

Table XX.

Harold Wood Hospital.

Classification by disease groups of patients discharged from or dying in the hospital during 1937.

	Men.		Women.		Children.		Total.	
	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.	Discharged.	Died.
1. Infectious diseases ...	—	—	—	—	197	—	197	—
2. Cancer and other tumours ...	—	2	—	1	—	—	—	3
3. Diseases of circulatory system	5	6	2	8	—	—	7	14
4. Diseases of the respiratory system excluding tuberculosis	3	2	—	4	—	—	3	6
5. Pulmonary tuberculosis	—	—	—	—	—	—	—	—
6. Diseases of digestive system	—	1	—	—	—	—	—	1
7. Diseases of nervous system and sense organs	1	1	—	1	—	—	1	2
8. Diseases of skin ...	—	—	—	—	—	—	—	—
9. Rheumatic diseases, acute and chronic	1	—	—	—	—	1	1	1
10. Diseases of nutrition	—	—	—	—	—	—	—	—
11. Diseases of blood and blood - forming organs	—	—	—	1	—	—	—	1
12. Diseases of genito-urinary system ...	—	—	—	2	—	—	—	2
13. Non-tuberculous disease of bones ...	—	—	—	—	—	—	—	—
14. Non-pulmonary tuberculosis	—	—	—	—	—	—	—	—
15. Diseases of pregnancy, childbirth and the puerperium ...	—	—	—	—	—	—	—	—
16. Diabetes	—	—	—	—	—	—	—	—
17. Old age, senility and senile decay ...	3	4	—	6	—	—	3	10
18. Congenital malformations	1	—	—	—	—	—	1	—
19. Diseases of early infancy	—	—	—	—	—	—	—	—
20. Violence	—	—	—	—	—	—	—	—
21. Ill-defined causes ...	—	—	—	—	—	—	—	—
22. Convalescence ...	—	—	—	—	—	—	—	—
23. To other institutions	17	—	4	—	—	—	21	—
Totals ...	31	16	6	23	197	1	234	40

ALLOCATION OF BEDS.

It has been mentioned in previous sections that 34 per cent. of the beds in Whipps Cross Hospital, Forest Gate Hospital, Forest House, and Central Home are allocated to the Essex County Council, and 16 per cent. to East Ham County Borough Council.

This arrangement was entered into in 1930, and is on the basis of a user-agreement for 25 years.

Table XXII shows the number of West Ham cases and the cases from the other two authorities who participate in the user-agreement, which were admitted to the various municipal hospitals.

TABLE XXII.

MUNICIPAL HOSPITALS. TOTAL ADMISSIONS, INCLUDING LIVE BIRTHS IN THE HOSPITALS, 1937.

Hospital.	West Ham.	Essex.	East Ham.	Total.
Whipps Cross Hospital	4,588	4,464	1,665	10,717
Forest Gate Hospital				
(*a*) cases admitted	618	317	316	1,251
(*b*) births	430	248	198	876
Central Home	864	741	330	1,935
Forest House	13	7	2	22
Totals	6,513	5,777	2,511	14,801

VII. INSPECTION AND SUPERVISION OF FOOD.

INSPECTION AND SUPERVISION OF FOOD.

Staff. The inspector under the Food and Drugs Acts is responsible for the work in connection with the sampling of milk and other foods, and the veterinary officers and the meat inspector for the inspection of meat in slaughter-houses. The sanitary inspectors are responsible for the general supervision of foods in the shops, on stalls, and in factories, and for the disposal of condemned foodstuffs. In the preparation of this section I have had the active support of the officers responsible. In addition, as a matter of interest, I include in this section a report from the veterinary officer on that part of his duties for which he is responsible to the Public Health Committee, and also the report of the public analyst.

CONTROL OF MILK SUPPLY.

Milk Shops and Dairies.

Milk and Dairies (Consolidation) Act, 1915.
Milk and Dairies (Amendment) Act, 1922.
Milk and Dairies Order, 1926.

During the year the number of inspections of dairies and milk purveyors' permises was 381. There are now 112 premises registered as dairies and their occupiers as dairymen, and 660 persons registered as purveyors of bottled milk only.

The bulk of the milk sold in this borough is pasteurised and sold under licence; some is heat treated, bottled and sold as sterilised, but a certain quantity of raw milk is being bottled by retailers. In these cases steam sterilisers for the treatment of the bottles are insisted upon in compliance with Article 21 of the Milk and Dairies Order, 1926.

Examination of milk for tubercule. During the year 55 samples of milk were examined for the presence of the tubercule bacillus. Of this number three samples gave a positive result (see later).

Table I.

Persons and Premises Registered under the above Acts and Orders.

Number of registered dairies on 31st December, 1936 ..	109
Number of registered dairies on 31st December, 1937 ..	112
Number of persons registered as purveyors of bottled milk on 31st December, 1936	649
Number of persons registered as purveyors of bottle milk on 31st December, 1937	660
Number of persons removed from the register	—
Number of dairies removed from the register	—
Number of applications for registration refused	—

Table II.

Action taken in respect of the above Premises.

Number of visits by inspectors	381
Number of premises found satisfactory	366
Number of premises found dirty	11
Number of premises found with dirty milk vessels ..	4
Number of premises found with unsatisfactory washing facilities	—
Number of prosecutions for selling without being registered	—
Number of prosecutions for neglecting precautions to prevent contamination	—

Table III.

Biological Tests.

Type of milk.	No. Examined.	Result.	
		Positive.	Negative.
Raw.			
Delivered at institutions	14	3	11
Purveyors	8	—	8
Producers on delivery	10	—	10
Pasteurised.			
Delivered at institutions	10	—	10
Delivered at schools (third-pint bottles) ..	13	—	13
Totals ..	55	3	52

MILK (SPECIAL DESIGNATIONS) ORDER, 1936. This Order became operative on 1st June, 1936, and displaces the previous Orders of 1923 and 1924. It transfers from the Minister of Health to local authorities the duty of granting licences to producers of certain designated milks, and simplifies the designations of milk. There are now only three grades:—" Tuberculin Tested," " Accredited " and " Pasteurised."

"Tuberculin Tested" replaces "Certified" and "Grade A (Tuberculin Tested)" and is raw milk from tuberculin tested cows. It may be pasteurised, subject to certain conditions, and sold as "Tuberculin Tested (Pasteurised)," and when bottled on the farm it may be described as "Tuberculin Tested (Certified)."

"Accredited" replaces "Grade A" and is raw milk from cows which are regularly inspected by a veterinary surgeon, but are not tuberculin tested.

"Pasteurised" retains its title, which indicates that the treatment affords protection against all forms of milk-borne disease.

TABLE IV.

LICENCES ISSUED UNDER THE MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

Description of licences.	No. in force on 31st December, 1937.
"Tuberculin Tested" milk	
(*a*) To produce and bottle ..	0
(*b*) To produce, but not bottle	0
(*c*) To sell by retail	13
"Accredited"	
(*a*) To produce, bottle and sell	1
(*b*) To produce, but not bottle	0
(*c*) To sell by retail	4
"Pasteurised"	
(*a*) Pasteuriser's licence ..	0
(*b*) To sell by retail	20

EXAMINATION OF GRADED MILK SAMPLES. Under this Order new tests as to the standard for graded milks were introduced. The Order came into force on 1st June, 1936, but the coliform count

test for the new grades of "tuberculin tested" and "accredited" milk was not replaced by the methylene blue reduction test until 1st June, 1937. This new test replaces the plate-count method, and is now the main bacteriological test used; but in addition it is permissible to apply the test for the presence of coliform organisms, the standard being that these grades of milk should not contain such organisms in one-hundredth of a millilitre. The Memorandum 139/Foods, January, 1937, states that it is not necessary for both tests to be performed on every sample.

"Tuberculin Tested" milk. The number of samples which were submitted to the methylene blue reduction test was 14. Of these 13 were satisfactory and one failed to pass the test. The time taken to decolorize in the sample which failed to pass was two and a half hours. These samples were also submitted to the test for coliform organisms. Of these, 12 passed the test and 2 failed, one of which also failed to pass the methylene blue test. Of the samples which failed to satisfy the test, coliform bacilli were

TABLE V.

BIOLOGICAL TESTS IN MILK SINCE 1928.

Year.	No. of samples.	No. positive.	Per cent. positive.
1928	15	1	6.66
1929	16	4	25.00
1930	28	2	7.14
1931	32	2	6.25
1932	65	11	16.92
1933	65	9	13.85
1934	59	11	18.64
1935	60	1	1.66
1936	54	4	7.41
1937	55	3	5.45

present in one hundredth of a millilitre in three tubes in one sample and in two tubes in the other.

"Tuberculin Tested (Certified)" milk. The number of samples which were submitted to the methylene blue reduction test was 25. Of these 23 were satisfactory and two failed to pass the test. The time taken to decolorize in the samples which failed was four hours.

These samples were also submitted to the test for coliform organisms. Of these, the same two samples failed to pass the test, coliform bacilli being present in one hundredth of a millilitre in three tubes in each case.

"Accredited" milk. The number of samples which were submitted to the methylene blue reduction test was five. All of these samples passed the test. These samples were also submitted to the coliform bacillus test, one of which failed to pass on account of the presence of the coliform bacillus in one hundredth of a millilitre.

"Tuberculin Tested (Pasteurised)" milk. Of two samples of this grade of milk submitted for examination, one passed the test and one failed owing to the presence of excessive bacteria.

"Pasteurised" milk. During the year, 61 samples were obtained, one of which failed to pass the prescribed test owing to the presence of excessive bacteria.

Table V shows the results of biological tests in milk samples over a period of ten years.

Table VI.

Bacteriological examination of milk.

Type of milk.	Bacterial content per millilitre.						Total.
	1—	50,000—	100,000—	200,000—	500,000	1 million and over.	
Raw :							
Producer on delivery ...	9	—	—	—	1	—	10
Purveyor ...	9	—	—	—	—	—	9
Institution ...	10	1	2	1	—	—	14
Pasteurised :							
Bottles ...	51	4	1	—	—	—	56
Institution ...	10	—	—	—	—	—	10
Schools (one-third pint)	44	3	2	1	1	2	53
Tuberculin Tested : (Pasteurised)	1	—	1	—	—	—	2
Total samples	134	8	6	2	2	2	154

BACTERIOLOGICAL EXAMINATION OF MILK. The bacteriological examination of milk is carried out locally at the laboratory of Queen Mary's Hospital. The close proximity of this laboratory facilitates despatch, as samples can be delivered from any part of the borough within twenty minutes. Table VI. gives the result of examination of the samples submitted during the year.

Especial interest attaches to four samples which were taken from the supply provided for Harold Wood Hospital. These samples were examined biologically and bacteriologically and the results showed that in three of the four samples tubercule bacilli, and in addition the coliform bacillus in one tenth of a millilitre, were present. These facts were reported to the medical officer of health of the supplying area. Subsequently one animal was dealt with under the Tuberculosis Order, 1925. Pasteurised milk is now being supplied to this institution.

Table VII shows the result of examination of samples of milk submitted for examination for the presence of the coliform bacillus.

TABLE VII.

COLIFORM BACILLUS CONTENT.

Type of milk.	Coliform bacilli present				absent in 1 millilitre.	Total.
	1/10th millilitre.	1/100th millilitre.	1/1,000th millilitre.	1 millilitre.		
Raw :						
(*a*) Delivered at institutions outside this area ...	4	3	3	2	2	14
(*b*) Purveyor	2	—	—	—	7	9
(*c*) Outside producer on delivery at retailers	—	2	—	—	8	10
Total samples	6	5	3	2	17	33

(*a*) Supply discontinued and pasteurised milk now being supplied.
(*b*) Letter of warning.
(*c*) Facts reported to the medical officer of the producing area.

ANALYSIS OF MILK SAMPLES. During the year 1937 the number of samples submitted to the public analyst for examination was 417. Of this number 30 were graded milks; all were satisfactory. Of the other 387, 10 were unsatisfactory.

Further particulars of the examination of these milk samples are given on pages 311 and 312.

Table VIII shows, for a number of years, the percentage of milk samples found to be adulterated, as compared with all food samples.

TABLE VIII.

ADULTERATION OF MILK AND OTHER FOODS.

Year.	Percentage of samples adulterated.			
	Milk.		All foods and drugs.	
	West Ham.	Average for England and Wales.	West Ham.	Average for England and Wales.
1928	2.5	8.2	3.0	5.8
1929	3.1	7.8	3.4	5.4
1930	3.9	6.6	4.8	4.8
1931	1.3	6.4	2.2	4.6
1932	3.9	7.3	3.8	5.1
1933	6.6	7.7	4.3	5.5
1934	2.0	7.2	2.4	5.3
1935	2.1	7.4	3.1	5.5
1936	1.9	7.1	1.3	5.3
1937	2.4	—	2.5	—

The variation in the fat content of milk at different seasons is shown in Table IX, which gives the average monthly and quarterly composition of milk samples during 1937.

No pasteurisation has been carried out in this area since 1930, when a large company transferred their plant to a neighbouring borough.

CONDENSED MILK REGULATIONS.

During the year, 38 samples of condensed milk were examined. Of 26 samples of condensed machine skimmed milk sweetened, 19 were submitted for the purpose of testing the "equivalent." This test determines whether the contents of the tin will, when converted, give the amount of milk which is declared on the label. Of these, three proved unsatisfactory and appropriate action was taken. The remainder were satisfactory.

Table IX.

Monthly composition of milk samples.

Average composition.					Average composition.				
(1937) Month.	No. of samples.	Fatty solids per cent.	Non-fatty solids per cent.	Total solids per cent.	Quarter.	No. of samples.	Fatty solids per cent.	Non-fatty solids per cent.	Total solids per cent.
January	43	3·45	8.87	12.32					
February	29	3·44	8.83	12.27	I.	117	3·43	8.83	12.26
March	45	3·39	8.80	12.19					
April	52	3·33	8.80	12.13					
May	35	3·36	9.08	12.44	II.	119	3·32	8.91	12.23
June	32	3·27	8.84	12.11					
July	42	3·39	8.78	12.17					
August	15	3·42	8.80	12.22	III.	93	3·41	8.90	12.31
September	36	3·43	9.12	12.55					
October	22	3.62	8.79	12.41					
November	40	3·52	8.86	12.39	IV.	78	3·52	8 86	12.38
December	16	3·41	8.93	12.34					
Whole year	407	3·42	8.87	12.29					

All 26 samples were tested for milk solids and proved satisfactory. The number of samples of condensed full cream sweetened milk submitted for examination was five. Of these one was examined for the equivalent and proved satisfactory. In addition, this sample and the other four were tested for the fat and milk solids content. All proved satisfactory. Of seven samples of condensed full cream milk unsweetened submitted for the purpose of testing the equivalent, all proved satisfactory.

Ice Cream.

During the year, 26 samples of ice cream were obtained from shopkeepers and itinerent vendors and submitted for bacteriological examination. Table X gives the results of these examinations.

Table X.

Bacteriological examination of ice cream.

Source of sample.	Bacterial content per millilitre.						Total.
	1—	50,000—	100,000—	200,000—	500,000—	1 million and over.	
Shopkeeper	1	3	2	2	1	1	10
Itinerant vendor	1	4	1	3	2	5	16
Totals	2	7	3	5	3	6	26

In all cases of unsatisfactory results, letters of warning were sent and the premises inspected generally, special attention being given to the utensils. In every case subsequent samples proved satisfactory.

Late in the year the West Ham Corporation Act, 1937, became operative, section 67 of which requires all premises used for the purpose of the sale or manufacture of ice cream to be registered. One hundred and forty-nine applications for this purpose have been dealt with and in one case the application was refused.

Upon receipt of an application for registration, the premises are inspected by the sanitary inspectors, who give all possible assistance and advice regarding the suitability of the premises.

MEAT INSPECTION.

SLAUGHTER-HOUSES. No change occurred in the number of slaughter-houses during the year. The number in use over a period of years is shown in Table XI.

TABLE XI.

SLAUGHTER-HOUSES IN WEST HAM.

Type of premises.	No. in use at 31st December.						
	1920	1932	1933	1934	1935	1936	1937
Private slaughter-houses (registered)	7	6	6	6	6	5	5
Private slaughter-houses (licensed)	17	10	10	10	10	10	10
Knackers'-yards	3	3	3	2	2	2	2

In addition there are three registered slaughter-houses in the occupation of butchers; for a number of years these have been used for purposes other than slaughtering. One registered knacker's yard, not shown above, is not now used for knackering but for storage purposes.

The licensed slaughter-houses are visited annually, and any defects observed are brought to the notice of the occupier for attention before the renewal of the licence is recommended. Defects in the premises noticed during visits for meat inspection are brought to the notice of the licencees for action as they are observed.

The slaughter-houses generally have been kept in a reasonably clean state, but the more frequent removal of refuse material has had to be stressed on a number of occasions.

Slaughter of Animals, Act, 1933. Fifty-three licences were renewed for 1937 and five new licences were issued. It was not found necessary to suspend or revoke any of these licences or to institute any proceedings for slaughtering without stunning with a mechanically operated instrument.

Times of slaughtering. Slaughtering occurred on all days of the week, including Sunday, and took place at all times of the

day. Thus the work of inspection frequently had to be continued until a late hour, and to be carried out on Sundays and public holidays.

MEAT INSPECTION. The system of meat inspection adopted conforms with Memo. 62/Foods of the Ministry of Health.

(1) *Ante-mortem inspections.* The object of ante-mortem inspection is to ascertain that the animals which it is intended to slaughter are in a satisfactory state of health. During the year ante-mortem inspections involving 6,939 animals were made by the veterinary officers.

(2) *Post-mortem inspections.* The general principles of post-mortem inspection set out in the memorandum require that:—

(*a*) all organs comprising the viscera shall be examined by the eye and by palpation, and by an efficient examination of the lmyph glands where necessary.

(*b*) the carcase shall be examined for (i) condition of nutrition; (ii) evidence of bruising, haemorrhage or discoloration; (iii) local or general dropsy; (iv) the efficiency of bleeding; and (v) swellings or deformities of bones or joints or swellings or other abnormality in the musculature.

(*c*) the serous membranes, and after the carcase is split, the sternum, ribs, vertebrae and spinal cord are to be examined.

Further detailed instructions for the routine inspection of bovines and porcines indicate the method of examining each organ and the lymphatic glands to be incised.

Where evidence of tuberculosis is discovered in bovines or swine, additional inspection is required and further lymphatic glands must be examined.

The action to be taken in the event of evidence of other disease such as actinomycosis, bruising, dropsy, emaciation, etc., being found is also indicated.

Meat condemned as unsound. Table XII shows in compact form the work of this section during the year 1937. Tables XIII to XVII enumerate the meat condemned for diseases other than tuberculosis, and Table XVIII the tuberculous meat condemned.

All meat condemned for disease was voluntarily surrendered.

Table XII.

Carcases Inspected and Condemned.

	Cattle, excluding cows.	Cows.	Calves.	Sheep and lambs.	Pigs.
Number killed	1,086	878	110	8,432	7,007
Number inspected	1,086	878	110	8,432	7,007
All diseases except tuberculosis					
Whole carcases condemned ...	—	—	—	2	6
Carcases of which some part or organ was condemned ...	128	107	—	335	1,112
Percentage of the number inspected affected with disease other than tuberculosis ...	11.78	12.18	—	3.99	15.95
Tuberculosis only :—					
Whole carcases condemned ...	3	8	—	—	10
Carcases of which some part or organ was condemned ...	141	521	—	—	1,030
Percentage of the number inspected affected with tuberculosis	13.25	60.25	—	—	14.84

Table XIII.

Meat condemned. diseases other than tuberculosis.

(a) Bovines (bulls, bullocks and heifers only).

Disease.	Extent of condemnation.								
	Head.	Tongue.	Heart.	Lung.	Diaphragm.	Mesentery	Liver.	Spleen.	Kidney.
Actinomycosis	2	3	—	1	—	1	1	1	—
Echinococcus veterinorum cysts	—	—	—	2	—	—	2	—	—
Distomatosis	—	—	—	—	—	—	87	—	—
Parasitic conditions ...	—	—	—	—	—	2	—	—	—
Pleurisy	—	—	—	5	—	—	—	—	—
Nephritis	—	—	—	—	—	—	—	—	2
Endocarditis	—	—	1	—	—	—	—	—	—
Abscesses	—	—	—	1	1	—	7	—	2
Total	2	3	1	9	1	3	97	1	4

Table XIV.

MEAT CONDEMNED. DISEASES OTHER THAN TUBERCULOSIS.

(*b*) *Bovines* (*cows only*).

Disease.	Extent of condemnation.						
	Head.	Tongue.	Lung.	Liver.	Spleen.	Kidney.	Mammary Gland.
Actinomycosis... ...	2	2	—	—	—	—	—
Echinococcus veterinorum cysts	—	—	1	2	—	—	—
Cystic conditions ...	—	—	—	—	1	2	—
Parasitic conditions ...	—	—	—	1	—	—	—
Distomatosis	—	—	—	127	—	—	—
Pleurisy	—	—	4	—	—	—	—
Hepatitis	—	—	—	1	—	—	—
Mastitis	—	—	—	—	—	—	271
Nephritis	—	—	—	—	—	32	—
Abscesses	—	—	—	5	—	—	—
Fatty degeneration ...	—	—	—	1	—	—	—
Cavernous angioma ...	—	—	—	6	—	—	—
Emphysema	—	—	1	—	—	—	—
Œdema	1	1	—	—	—	—	—
Total ...	3	3	6	143	1	34	271

Table XV.

MEAT CONDEMNED. DISEASES OTHER THAN TUBERCULOSIS.

(*c*) *Bovines* (*calves only*).

No meat from calves was condemned during the year.

Table XVI.

Meat condemned. diseases other than tuberculosis.

Porcines (boars, sows and porkers).

Disease.	Extent of condemnation.										
	Entire carcase and viscera	Belly.	Leg.	Heart.	Lung.	Stomach.	Intestine.	Mesentery	Liver.	Spleen.	Kidney.
Œdema	1	—	—	—	—	—	—	—	—	—	—
Toxœmia	2	—	—	—	—	—	—	—	—	—	—
Pyrexia	1	—	—	—	—	—	—	—	—	—	—
Echinococcus veterinorum cysts ...	—	—	—	—	—	—	—	—	1	—	—
Cystic conditions	—	—	—	—	—	—	—	—	1	—	10
Cavernous angioma	—	—	—	—	—	—	—	—	2	—	—
Pneumonia ...	—	—	—	—	680	—	—	—	—	—	—
Pleurisy	—	—	—	—	106	—	—	—	—	—	—
Pericarditis ...	—	—	—	111	—	—	—	—	—	—	—
Peritonitis ...	—	—	—	—	—	12	5	5	16	9	—
Nephritis	—	—	—	—	—	—	—	—	—	—	49
Mastitis	—	1	—	—	—	—	—	—	—	—	—
Cirrhosis	—	—	—	—	—	—	—	—	250	—	—
Emaciation ...	1	—	—	—	—	—	—	—	—	—	—
Hæmorrhage ...	—	—	—	—	36	—	—	—	—	—	—
Bruises and fractures	1	—	2	—	—	—	—	—	—	—	—
Fatty degeneration	—	—	—	—	—	—	—	—	1	—	—
Total ...	6	1	2	111	822	12	5	5	271	9	59

Table XVII.

Meat condemned. diseases other than tuberculosis.

Ovines (sheep and lambs only).

Disease.	Extent of condemnation.						
	Entire carcase and viscera	Breast.	Heart.	Lung.	Liver.	Spleen.	Kidney.
Distomatosis	—	—	—	—	223	—	—
Echinococcus veterinorum cysts	—	—	4	4	4	—	—
Strongylosis	—	—	—	56	—	—	—
Parasitic conditions ...	—	—	1	5	24	—	—
Pneumonia	—	—	—	2	—	—	—
Pleurisy	—	—	—	29	—	—	—
Pericarditis	—	—	1	—	—	—	—
Nephritis ...	—	—	—	—	—	—	6
Hepatitis	—	—	—	—	2	—	—
Splenitis	—	—	—	—	—	1	—
Cirrhosis	—	—	—	—	2	—	—
Necrosis	—	—	—	—	1	—	—
Abscesses	—	1	—	1	2	—	—
Bruises and fractures	1	—	—	—	—	—	—
Asphyxia	1	—	—	—	—	—	—
Total ...	2	1	6	97	258	1	6

Table XVIII.

Tuberculous meat condemned.

Extent of condemnation.	Bovines.			Porcines.
	Bulls, bullocks and heifers.	Cows.	Calves.	Boars, sows and porkers.
Entire carcase and viscera ...	3	8	—	10
Heart	5	11	—	190
Lung	89	452	—	300
Liver	49	94	—	321
Pancreas ...	5	12	—	—
Spleen	4	11	—	9
Kidney	1	4	—	—
Mammary gland	—	6	—	—
Stomach ...	2	5	—	13
Intestine ...	2	2	—	7
Head	43	147	—	—
Tongue	43	147	—	—
Head and collar	—	—	—	299
Forequarter ...	2	7	—	—
Brisket	1	1	—	—
Flank	—	2	—	—
Rib	—	1	—	—
Top piece ...	—	1	—	—
Diaphragm ...	1	4	—	—
Kidney knob ...	—	2	—	—
Mesentery ...	47	167	—	797
Omentum ...	4	9	—	—
Total ...	301	1,093	—	1,946

TUBERCULOSIS. Tables XIX and XX show the deposition of tuberculous lesions observed in (*a*) the lymphatic system and (*b*) the bones, organs, etc., respectively.

TABLE XIX.

DEPOSITION OF TUBERCULOUS LESIONS.

(a) Lymphatic system.

	Bovines.					Porcines.		
	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Boars.	Sows.	Porkers.
Animals affected ...	1	119	529	24	—	4	23	1,013
Glands affected :—								
Sub-maxillary ...	—	3	18	2	—	2	12	292
Retro-pharyngeal ...	—	31	129	9	—	—	—	—
Parotid	—	3	19	1	—	—	—	—
Pre-scapular ...	—	—	—	—	—	—	—	—
Pre-pectoral	—	—	2	—	—	—	—	—
Pre-sternal ...	—	—	2	—	—	—	—	—
Supra-sternal ...	—	1	—	—	—	—	—	—
Sub-dorsal	—	—	—	—	—	—	—	—
Renal	—	—	1	—	—	—	—	—
Lumbar	—	—	1	—	—	—	—	—
Iliac	—	—	1	—	—	—	—	—
Pre-crural	—	—	—	—	—	—	—	—
Sub-mammary or sub-inguinal	—	—	—	1	—	—	—	—
Ischiatic	—	—	—	—	—	—	—	—
Popliteal	—	—	1	—	—	—	—	—
Xiphoid	—	1	10	1	—	—	—	—
Bronchial	1	59	447	20	—	1	4	248
Anterior mediastinal	1	37	228	9	—	—	—	4
Posterior mediastinal	1	37	214	11	—	—	—	3
Gastric	—	—	7	11	—	1	—	—
Splenic	—	—	9	1	—	—	—	2
Hepatic ...	—	20	68	5	—	1	1	197
Pancreatic	—	2	11	1	—	—	—	—
Mesenteric	—	44	163	9	—	2	9	789

The proportion of carcases showing tuberculous or other lesions over a period of years is set out in Table XXI.

It should be noted that this table is not in itself sufficient to warrant definite conclusions. Reference should be made to

Table XX.

Deposition of tuberculous lesions.

(*b*) *Bones, Organs, etc.*

	Bovines.					Porcines.		
	Bulls.	Bullocks.	Cows.	Heifers.	Calves.	Boars.	Sows.	Porkers.
Animals affected	1	119	529	24	—	4	23	1,013
Parts affected :—								
Vertebra	—	—	—	—	—	—	—	—
Adrenal body	—	—	—	—	—	—	—	—
Kidney	—	2	10	—	—	—	1	4
Mammary gland ...	—	—	7	—	—	—	—	—
Pleura	—	3	17	—	—	—	—	4
Peritoneum	—	2	15	1	—	—	—	1
Heart :—								
(*a*) Pericardium ...	—	4	19	—	—	—	—	—
(*b*) Epicardium ...	—	—	—	—	—	—	—	—
(*c*) Myocardium ...	—	—	—	—	—	—	—	—
(*d*) Endocardium...	—	—	—	—	—	—	—	—
Lung :—								
(*a*) Pleura	—	3	17	—	—	—	—	3
(*b*) Parenchyma ...	—	5	37	3	—	—	—	38
Liver :—								
(*a*) Capsule	—	2	14	—	—	—	—	1
(*b*) Substance ...	—	4	16	1	—	1	3	122
Pancreas :—								
(*a*) Capsule	—	2	10	—	—	—	—	—
(*b*) Substance ...	—	—	—	—	—	—	—	—
Stomach :—								
(*a*) Outer surface...	—	2	13	1	—	—	—	—
(*b*) Inner surface...	—	—	—	—	—	—	—	—
Omentum	—	2	15	1	—	—	—	—
Spleen :—								
(*a*) Capsule	—	2	14	1	—	—	—	—
(*b*) Substance ...	—	—	—	—	—	—	—	9
Intestine :—								
(*a*) Outer surface...	—	2	11	1	—	—	—	—
(*b*) Inner surface	—	—	—	—	—	—	—	—
Mesentery	—	2	11	—	—	—	—	—
Uterus and Ovaries :—								
(*a*) Capsule	—	—	9	—	—	—	—	—
(*b*) Substance	—	—	—	—	—	—	—	—
Testicles and penis ...	—	—	—	—	—	—	—	—

TABLE XXI.

PERCENTAGE OF THE NUMBER INSPECTED IN EACH YEAR SHOWING (*a*) TUBERCULOSIS, (*b*) OTHER DISEASES.

Year.	(*a*) Tuberculosis.				(*b*) Other diseases.				
	Cattle excluding cows.	Cows.	Calves.	Pigs.	Cattle excluding cows.	Cows.	Calves.	Sheep and lambs.	Pigs.
1930	9.89	60.98	0.98	5.01	18.14	18.43	0.98	3.46	6.13
1931	8.38	64.45	5.45	6.96	10.14	14.41	1.81	1.82	3.82
1932	6.34	61.71	—	7.10	11.23	15.16	—	3.06	6.40
1933	7.85	57.83	2.43	9.08	9.71	13.00	1.21	3.62	6.92
1934	7.66	58.36	—	9.46	10.72	15.50	—	5.22	6.48
1935	12.24	52.31	1.38	9.62	7.04	12.06	—	4.32	9.51
1936	15.09	50.59	0.52	13.60	5.53	9.55	0.91	3.24	11.14
1937	13.25	60.25	—	14.84	11.78	12.18	—	3.99	15.95

the actual numbers of animals in the different classes. These figures will be found in previous reports.

DISPOSAL OF DISEASED MEAT. Diseased meat surrendered as unfit for human food was released for industrial purposes after a dye or disinfectant had been sprinkled over it.

LEGAL PROCEEDINGS. No infringements of the meat regulations or of the bye-laws for slaughter-houses and knacker's yards warranting the institution of legal proceedings were observed.

DISEASES OF ANIMALS ACTS.

BY H. E. BYWATER, M.R.C.V.S.,

Veterinary Officer.

These Acts, and the Orders made thereunder by the Minister of Agriculture and Fisheries, are designed to control infectious diseases of animals, including poultry, on grounds of national economy, but there are also regulations for the prevention of

suffering of animals during transit, on land and sea, and whilst exposed in markets.

Although not primarily intended as public health measures some of these Acts and Orders serve as useful corollaries.

The Diseases of Animals Acts are administered by the Veterinary Officer who reports to the Public Health Committee, acting as the Diseases of Animals Sub-Committee of the Council.

The following account of the work performed under these enactments during 1937 must not be regarded as a report of the proceedings under the Diseases of Animals Acts, but as comments on aspects which have a bearing on public health or are of epidemiological or general interest.

Anthrax Order of 1928. Owners of animals which have died or are suffering from suspected anthrax are required to report the facts. The information is then transmitted to the medical officer of health in order that he may take any measures which he may consider necessary with respect to persons who have been in contact with the animal.

Reports were received on two occasions that material from, or in contact with, animals which had died from confirmed anthrax, in the areas of other authorities, had been brought into the borough. Visits were made in order to trace the material, and in one case the vendors of cats' meat in the borough were warned not to sell any such meat pending investigations. Following upon this latter case a report was received that a cat, which had previously received such meat, had died. It was not possible, or expedient, to recover the body since it had been removed by the cleansing department and had been deeply buried, under several feet of refuse, at one of the Council's dust shoots.

Epizoötic Abortion Order of 1922. Epizoötic or contagious abortion (Bang's disease) is not a notifiable disease, but this Order aims at lessening the spread of the disease amongst cattle by prohibiting the exposure of cows which have prematurely calved within the preceding two months. It also prohibits the sale or service of such animals without written notice of the fact being previously given to the buyer or the owner of the bull used for such service. There are great difficulties in administering this Order and it would appear that its provisions are, in the main, ignored.

The Order does not aim at protecting the public from the

infection of Bang's disease, which is very prevalent in cattle and has of recent years been recorded in human beings and investigated by the Ministry of Health. The incidence in man, however, is very small indeed as compared with cattle, in spite of the widespread dissemination of the infective agent.

Foot and Mouth Disease. No case of foot and mouth disease occurred in the borough, but on the 9th November, 1937, owing to the rapid spread of foot and mouth disease in the surrounding areas, the Minister of Agriculture and Fisheries made the Foot and Mouth Disease (Regulation of Movement) Order of 1937, which prohibited the movement of susceptible animals in the eastern and south-eastern counties.

The spread of the disease was so effectually controlled by this measure that it was found possible to revoke the Order as from the 9th December, 1937.

Licences were issued under this Order authorising the movement in this area of 365 cattle, 833 sheep, and 1,440 pigs, whilst 123 permits were issued for the collection in the controlled area of slaughter-house refuse for treatment at approved premises, to which frequent visits of inspection were made.

Foot and Mouth Disease (Boiling of Animal Foodstuffs) Order of 1932.
Foot and Mouth Disease (Packing Materials) Orders of 1925-26.
Importation (Raw Tongues) Order of 1913.
Importation of Meat, etc. (Wrapping Materials) Order of 1922.
Movement of Animals (Records) Order of 1925.
Importation of Carcases (Prohibition) Orders of 1926 and 1927.
Foreign Hay and Straw Orders of 1912-1937.
Disease of Animals (Disinfection) Order of 1936.
Various Orders with respect to importation of animals.

These Orders are designed to prevent the introduction and spread of foot and mouth and other diseases. Visits of inspection were frequently made to shops, slaughter-houses, railway sidings, docks, piggeries, food and other factories, and fat and bone collectors' premises under these Orders.

In connection with the first of these Orders it is of interest to record that all swill and waste food from hotels, hospitals, etc., must be boiled for one hour before being fed to pigs and, since fat is detrimental to pigs, care is taken by pig feeders to remove as much fat as possible from the swill after cooking. This process

is not dissimilar, in some ways, to that of bone and fat melting and may on rare occasions give rise to an offensive odour which cannot be controlled by the powers conferred by the Public Health Acts with respect to " offensive trades."

Rabies Order of 1919. No case of rabies has occurred in this country for some years past, but owners of animals suffering from so-called specific hysteria, or fits, occasionally report illness and death in dogs as suspected rabies. This is largely due to the notice drawing attention to the Rabies Order which appears on all dog licences and is commendable, for if a case of rabies remained unreported this disease might once again become established in this country.

Tuberculosis Order of 1925. This Order makes it obligatory for owners to notify any bovine animal which is affected with tuberculous emaciation, or with chronic cough- accompanied by definite clinical signs of tuberculosis, or with tuberculosis of the udden, indurated udder or other chronic disease of the udder, or which is giving tuberculous milk.

There are many cattle affected with other forms of tuberculosis which are not amenable to the provisions of this Order, and it is regrettable that, in spite of the experience gained as a result of routine inspection of dairy cattle and work under this Order (it was first introduced in 1913 but was suspended during the late war), the provisions of the Order have not been extended. Cows which have been proved to be affected with tuberculosis as a result of the tuberculin test, are allowed to be used in milking herds and may be sold in the open market without notification of the fact having been made.

The Tuberculosis Order is worked in conjunction with the Milk and Dairies (Consolidation) Act 1915, the Milk and Dairies (Amendment) Act 1922, and the Milk and Dairies Order 1926.

All dairy cattle and cowsheds were inspected monthly and as other occasions required, and at the same time the hygienic conditions governing the production of milk were supervised. During the year 1,282 examinations of dairy cattle were made and, as a check on the clinical examinations, herd samples of milk were taken at each visit for microscopical and biological examination; 29 samples were submitted for examination during the year, all of which were certified negative for tuberculosis.

Several cows were removed for slaughter by the owners

following advice given at the time of inspection. One cow was found to have lost condition and to be affected with a chronic cough. A microscopical examination of a sample of sputum from this cow showed that the animal was affected with tuberculosis. This animal was forthwith slaughtered under the provision of the above Order, and a post-mortem examination showed the diagnosis to be correct—the disease not being advanced within the meaning of the Order.

Incidentally it may be mentioned that measures were similarly taken in respect of the three milking herds maintained at the farms attached to the Council's institutions. All samples taken from the Council's farms were negative for tuberculosis.

FOOD INSPECTION.

(*Excluding the inspection of meat in slaughter-houses.*)

The sanitary inspectors have, during the year, made 3,968 visits of inspection to food shops, stalls and to food factories, etc.

General speaking, there is remarkably little attempt to sell unsound food in West Ham. This is no doubt partly accounted for by the fact that there is a co-operative arrangement whereby any trader may bring to the office for inspection any food in respect of which he has any doubt, and may surrender and receive a receipt for any found to be unfit for human consumption. This being the case, there can be no excuse for any person who is found to be selling or exposing for sale any unsound or diseased foodstuffs.

A very sharp watch has been maintained during evenings—Saturday afternoons and evenings particularly—over a few traders who are known to deal in job lots of food, especially tinned foods, either damaged at sea or rejected by more reputable traders. Such foods present a constant danger to the health of the consumer. One such trader has on two occasions, when warned verbally, produced copies of certificates which he stated had been granted by other authorities. These certificates vouched for the fitness for sale of a definite number of tins. The certification of fitness of unidentifiable tins is a very dangerous practice, and it should be obvious to any officer that the mere release of the tins after sorting is in itself a dangerous practice, so long as a certificate of fitness can be used, and in fact has been used, by unscrupulous traders to cover the sale of quite different tins in huge

quantities. This certificate of fitness must not be confused with the certificate of release, for technical purposes, of unsound foods despatched to approved fat melters and fertiliser makers, by mutual arrangement between authorities.

An interesting point was raised by the defence in a prosecution for selling from a street stall an unlabelled tin of milk which was alleged to be unsound and unfit.

A person purchased the tin of milk late on a Saturday evening and handed it to the Chief Sanitary Inspector on the following Monday morning. As the tin was obviously unfit, it was then submitted to a justice who condemned it and ordered it to be destroyed. In case the blown condition was due to metallic absorption, the tin was not opened before it was condemned by the Justice, as it was intended to submit it to analysis to ascertain precisely the extent of the metallic content.

Submitted by the defence:—

(*a*) That the Justice had no right to condemn tinned food without seeing the food concerned.

(*b*) That the tin was not seen by the Chief Inspector or the Justice until 36 hours after purchase, and that although the milk was unsound on the Monday, it was not necessarily so at the time of purchase on the Saturday evening.

Held by the Stipendiary:—

(*a*) That the Justice acted properly in condemning a badly blown tin of food although it had not been opened.

(*b*) That tinned food must be dealt with by a Justice as soon as practicable after purchase or seizure.

The case was dismissed but no order was made as to costs.

Disposal of condemned foodstuffs.

(1) *Foodstuffs condemned within West Ham.* The usual procedure adopted by the sanitary inspector is set out as follows:—
(*a*) *Meat.* After seizure and condemnation by a justice or after voluntary surrender of meat, the practice is to permit delivery to a selected fat melter within the borough after treatment by colour, paraffin, chloride of lime or heavy coal tar disinfectant, and to supervise its breaking down to liquid fat and a residual meal.
(*b*) *Fish.* In this case the practice is for the owner of the fish to deliver it to a fish meal factory situated in the Borough.

The owner is required to obtain and produce a receipt for the fish from the firm before he is provided with a certificate of condemnation. The fish is broken down to a fish meal.

(*c*) *Poultry*. Similar to fish.

(*d*) *Tinned foods* (fruit, fish, milk and meat paste). It is sometimes difficult to dispose of this class of goods. The cans are emptied, or at least thoroughly punctured, and delivered by the refuse disposal section of the Borough Engineer's department to one of the tips. They are thoroughly covered.

(*e*) *Fruit pulp* (usually in casks or barrels). Usually treated with poisonous disinfectant and burnt in the boiler furnace of the firm in whose premises it is discovered. This process has, on occasion, occupied several days.

(2) *Imported foodstuffs*. Condemned at the port of entry and released for destruction or for use other than for human consumption.

As the Imported Food Regulations provide for the release of condemned food under guarantee by the consignee that it will not be used for human consumption, it is possible to keep an efficient check on consignments, particularly as arrangements have been made whereby the Port Sanitary Authority permit release to West Ham only on approval by their own officers. Carcases of meat are dealt with as described under paragraph (1)(*a*).

At one time, considerable quantities of condemned tinned milks were released to West Ham under guarantee that they would be used for the manufacture of confectionery, but after a period of suspicion, it was found that some tins were being re-labelled by the consignee in such a way as to give strong grounds for the belief that the intention was to pass them into the retail trade for human food. The Port Authorities were requested to stop the release of such milk to West Ham, and they did so. This led to the reciprocal arrangement already referred to.

(3) *Foods condemned by other authorities*. Quantities of meat and other foodstuffs condemned by a number of other local authorities are released to West Ham for destruction by treatment at local fat melters. Arrangements exist in all these cases whereby the inspectors concerned communicate by telephone with the West Ham inspectors. Information is given regarding the time of release and the description of the foods, and these consignments are checked at the premises of the local fat melter or the fish

Table XXII.

Samples analysed by Borough Analyst during 1937.

Article.	Analysed		Genuine		Adulterated	
	Official.	Unofficial	Official.	Unofficial	Official.	Unofficial.
Milk	411	6	402	5	9	1
,, condensed	12	26	10	25	2	1
,, dried ...	32	—	32	—	—	—
Butter	63	48	60	47	3	1
Margarine ...	20	—	20	—	—	—
Cheese	5	3	5	3	—	—
Lard	18	—	18	—	—	—
Dripping ...	6	5	6	5	—	—
Cooking fats ...	7	1	6	1	1	—
Pepper ...	25	15	25	15	—	—
Pickles ...	3	—	3	—	—	—
Sauce	1	2	1	2	—	—
Vinegar ...	28	1	26	1	2	—
Cocoa	10	—	10	—	—	—
Coffee	7	—	7	—	—	—
Tea	25	—	25	—	—	—
Flour	48	1	48	1	—	—
Bread	6	—	6	—	—	—
Cakes	10	—	10	—	—	—
Pearl barley ...	4	2	4	2	—	—
Rice	9	2	9	2	—	—
Sago	2	—	2	—	—	—
Baking powder	1	1	1	1	—	—
Jams	12	8	10	5	2	3
Lemon curd ...	3	—	3	—	—	—
Sugar	13	—	13	—	—	—
Sweets	15	16	14	16	1	—
Dried fruits ...	19	1	19	1	—	—
Peas	5	—	5	—	—	—
Meat	30	39	30	37	—	2
Canned meat ...	1	—	1	—	—	—
Cooked meats	11	—	11	—	—	—
Sausages ...	16	—	16	—	—	—
Bacon	8	—	8	—	—	—
Meat and fish pastes ...	3	1	3	1	—	—
Sardines ...	1	2	1	2	—	—
Camphorated oil	1	7	1	7	—	—
Epsom salts ...	—	3	—	3	—	—
Sulphur ointment	—	2	—	2	—	—
Zinc ointment ...	—	1	—	1	—	—
Cream ...	8	5	8	5	—	—
Suet	2	1	2	1	—	—
French capers	1	—	1	—	—	—
Honey	—	2	—	2	—	—
Carried forward	902	201	882	193	20	8

TABLE XXII.—CONTINUED.

Article.	Analysed		Genuine.		Adulterated.	
	Official.	Unofficial	Official.	Unofficial	Official.	Unofficial
Brought forward	902	201	882	193	20	8
Ground almonds	6	5	6	5	—	—
Cornflour ...	2	—	2	—	—	—
Cordials... ...	7	4	7	4	—	—
Junket crystals	1	—	1	—	—	—
Beer	3	1	1	2	—	—
Whiskey ...	1	2	1	2	—	—
Infants' food ...	1	—	1	—	—	—
Lemonade powder	1	—	1	—	—	—
Ground ginger	2	2	2	2	—	—
Dried herbs ...	3	—	3	—	—	—
Salt	1	—	1	—	—	—
Herb stuffing	—	1	—	1	—	—
Arrowroot ...	4	—	4	—	—	—
Chocolate ...	—	1	—	1	—	—
Table jelly ...	1	1	1	1	—	—
Compound syrup of figs ...	—	1	—	1	—	—
Boric ointment	—	1	—	1	—	—
Olive oil ...	1	—	1	—	—	—
Spices	—	1	—	1	—	—
Macaroni ...	1	—	1	—	—	—
Pudding powder	1	—	1	—	—	—
Mincemeat ...	6	5	6	5	—	—
Table cream ...	1	1	—	—	1	1
Gravylets ...	1	—	1	—	—	—
Lung syrup ...	2	—	2	—	—	—
Witch hazel ...	1	—	1	—	—	—
Totals ...	949	227	928	218	21	9

meal consignees. Meat is treated by indelible colour and in other ways before release.

It may be noted that considerable quantities of condemned frozen and chilled meats, tinned tongues and beef were discovered at a charcoal maker's in West Ham. Representations were made to the local authorities concerned, and such meat is now only released to approved firms who possess plant capable of dealing efficiently and rapidly with it.

SUPERVISION OF FOODS (EXCLUSIVE OF MILK PRODUCTS).

CONDEMNATION OF UNSOUND FOOD. During the year 1937, the following articles of food were condemned: 202 lbs. tinned

meat; 26½ lbs. chestnuts; 92 rabbits; 2 lbs. bacon; 8½ lbs. mutton; 31 lbs. cooked meat; 1 beef kidney; 18 st. skate; 1 ton apples, cauliflowers and onions; 390 pears; 10 boats tomatoes; 1 barrel crabs; 1 pig's head; 53 barrels horse-radish; 7 cwt. gooseberries; 5 tins fish; 4½ tons potatoes; 11 ½-lb. bags currants; 2 st. mackerel; 21 lbs. pork; 1 tin jellied veal; 7 cwt. sweets; 1 6-lb. tin of ox tongue; 3 chickens; 1 tin evaporated milk.

The number of articles submitted to the Borough Analyst for analysis, together with the results of his examination, are shown in Table XXII.

I give below a few remarks upon the action taken in respect of certain articles which proved to be unsatisfactory.

Malt vinegar. A sample of malt vinegar proved to be deficient in acetic acid to the extent of 50 per cent. (equivalent to the addition of at least 50 per cent. of water). An arrangement was made with the vendor for a sample of this commodity to be taken from a fresh barrel "in course of delivery" from his supplier. This sample proving genuine, an information was laid against the vendor in respect of the sample purchased from him, and a fine of forty shillings was imposed.

"Table Cream." An informal sample of a commodity labelled "Table Cream" was found to be a mixture of starch and cocoa powder. An official sample was obtained, and in view of the fact that a purchaser would be inclined to think that the article was a milk product or a cream substitute, whereas it was similar in all respects to custard powder or blanc-mange powder, a letter was addressed to the manufacturers regarding the misleading description applied to the wrapper. A reply was received to the effect that the label complained of was quite inadvertent, and new cartons were already in print with amended wording.

Table vinegar. A sample bottle of table vinegar proved to be 100 per cent. artificial vinegar. A letter of warning was sent to the manufacturer who replied that the label would be amended forthwith.

Cooking fat. Ready packed vegetable cooking fat proved to contain 7.6 per cent. of water. A letter of warning was sent to the vendor, and a reply was received from the manufacturers who stated that the wording on the wrapper would be amended.

Straws. Two samples of straws as used by school children for the drinking of milk gave a satisfactory bacteriological test.

Milk. None of the 417 samples of milk submitted for analysis was reported to contain preservative or colouring matter.

Dried milk—Full cream. All of the 32 samples which were submitted for analysis proved satisfactory.

Butter. Of 111 samples of butter submitted for analysis, 63 were formal and 48 were informal samples. Of the formal samples, 3 were reported upon as containing excessive water. Letters of warning were sent and subsequent samples obtained were found to be genuine. Of the informal samples, one was reported upon as containing excessive water to the extent of 1.0 per cent. Further samples were obtained and proved genuine.

PRESERVATIVES IN FOOD REGULATIONS. There were five contraventions of these regulations. Two informal samples of meat were reported as containing 150 and 120 parts of sulphur dioxide per million respectively. Formal samples were obtained from the same source and these proved satisfactory. Two informal samples of strawberry jam were reported as containing 44 and 37 parts of sulphur dioxide per million respectively. Formal samples were obtained, one of which was found to be satisfactory, whilst the other was proved to contain 30 parts of sulphur dioxide per million. In this case legal proceedings were instituted against the manufacturer, who was fined £4, and in addition £4 for giving a false warranty to the retailer.

PHARMACY AND POISONS ACT, 1933. This Act became operative on 1st May, 1936. It contains 31 sections and is divided into three parts.

Part I. This part deals with the Pharmaceutical Society and its members (registered pharmacists) and their position under the Act, and prohibits the carrying on of the business of a chemist, druggist, or pharmacist except by pharmaceutical chemists.

It explains the conditions to be fulfilled by pharmacists and corporate bodies in order to become "authorised sellers of poisons," and makes provision for the continuation of the business of a pharmacist by representatives in case of death, unsoundness of mind, or bankruptcy.

Part II. This part provides for the establishment of a Poisons Board. The Board was constituted and prepared a list of poisons, which is divided into two parts. Part I of the list consists of those poisons which may be sold only by "authorised sellers of poisons," i.e. registered pharmacists. Part II of the

list consists of those poisons in common use, for example, ammonia, carbolic disinfectants, sulphuric and nitric acids, spirits of salts, salts of lemon, insecticides, and also certain forms of arsenic and mercury used in agriculture. These may be sold only by "authorised sellers of poisons," i.e. registered pharmacists, and also those persons whose names are entered on a list which is to be kept in the prescribed manner by a local authority. This list includes the names of persons who are not entitled to sell those poisons included in Part I of the poisons list, but who are entitled to retail those poisons included in Part II of the poisons list—for example, ironmongers, oilmen, garage keepers, seedsmen, nurserymen, and agriculture merchants. The fee to be paid for

TABLE XXIII.

PHARMACY AND POISONS ACT, 1933.

Number of persons entitled to sell Part II. Poisons at December, 1936		138
Number of persons removed from the list during 1937:—		
(*a*) business closed	9	
(*b*) ceased to sell poison	10	19
		119
Number of persons added to list during 1937 ..		7
Number of persons included in the list on December 31st, 1937		126

the original entry in the local authority's list is 7s. 6d., and for the annual renewal of such entry the fee is 5s.

The Act imposes upon the local authority the duty of enforcing the provisions of Part II and of the rules made under the Act, in so far as they relate to Part II of the Poisons List, and this duty includes the keeping of a list of persons other than "authorised sellers of poisons." Power is given to the local authority to refuse to enter in, or remove from, the list of names, the name of any person provided that the authority has sufficient reason for its action.

Part III. This part deals with the inspector and sampling.

During the year 1937 the number of samples which were taken under this Act was four. All of these proved to be satisfactory. Further details in connection with the working of this Act are shown in Table XXIII.

Fertilisers and Feeding Stuffs Act, 1926. The first Act to impose specific requirements upon sellers of fertilisers and feeding stuffs was the Fertilisers and Feeding Stuffs Act, 1893. This was replaced by the Fertilisers and Feeding Stuffs Act, 1906, which in turn has been superseded by the above-mentioned Act. This Act controls in some measure the sale of fertilisers and feeding stuffs and protects the purchaser against adulteration of these articles.

TABLE XXIV.

FERTILISERS AND FEEDING STUFFS ACT.

Type of sample.	No. of samples taken.	Analysis agreed.	Analysis disagreed.
Fertilisers:			
(*a*) official ..	23	12	11
(*b*) unofficial	15	7	8
Feeding stuffs:			
(*a*) official ..	16	10	6
(*b*) unofficial	13	9	4
Totals	67	38	29

It provides that every person, who sells for use a fertiliser of the soil or a food for cattle or poultry, is required to give to the purchaser a statement (which may form part of the invoice) containing particulars as to the name of the article and its composition, in order that the buyer shall know as much as is necessary and practicable to enable him to judge of the efficacy and value of the article.

The manufacturer having supplied the particulars to the retail seller, he in turn is required to pass them on to his customer.

Unofficial and official samples of these commodities for analysis are obtained from retail sellers for the purpose of testing

the warranty. Visits are also paid to the manufacturers' premises for samples for analysis, and documents and registers are inspected with the object of checking the warranties which are passed on to the merchant and retailer.

Details of samples taken during the year are shown in Table XXIV.

REPORT OF THE PUBLIC ANALYST FOR 1937

BY

ALBERT E. PARKES, F.I.C., F.C.S.

During the year 1937, the number of samples which were examined under the Food and Drugs (Adulteration) Act was 1,176. These were all submitted by the medical officer of health, and no samples were submitted by the public. Of these samples, 30 were found to be adulterated. The adulteration was at the rate of 2.55 per cent. of samples submitted as compared with 3.38 per cent. for the whole of England and Wales in 1936.

The adulteration of the samples submitted during the past ten years is shown in Table XXV.

TABLE XXV.

ADULTERATION OF SAMPLES SUBMITTED.

Year.	No. of samples.			Per cent. adulterated.
	Genuine.	Adulterated.	Total.	
1928	1,414	44	1,458	3.0
1929	1,210	42	1,252	3.4
1930	1,172	54	1,226	4.8
1931	1,268	28	1,296	2.2
1932	1,109	44	1,153	3.8
1933	1,116	50	1,166	4.3
1934	1,145	28	1,173	2.4
1935	1,140	36	1,176	3.1
1936	1,160	15	1,175	1.3
1937	1,146	30	1,176	2.5
Average per year	1,188	37	1,225	3.1

Table XXVI.

Adulterated milk samples.

Year.	Genuine.	Adulterated.	Per cent. adulterated.
1928	541	14	2.5
1929	373	12	3.1
1930	343	14	3.9
1931	443	6	1.3
1932	445	18	3.9
1933	495	34	6.4
1934	481	10	2.0
1935	426	9	2.1
1936	414	8	1.9
1937	407	10	2.4
Average per year	437	13	2.9

The average milk adulteration for the whole of London was at the rate of 2.45 per cent., and for the whole of England and Wales 7.1 per cent. in 1936.

The composition of the adulterated milk samples is shown in Table XXVII.

Table XXVII.

Adulterated milk samples.

No. of sample.	Fat per cent.	Non-fatty solids per cent.	Total solids per cent.	Comments.
12	2.8	8.5	11.3	6.6 per cent. deficient in fat
13	2.8	8.5	11.3	6.6 per cent. deficient in fat
190	3.5	7.9	11.4	7.0 per cent. added water
205	2.8	8.6	11.4	6.6 per cent. deficient in fat
302	3.1	8.2	11.3	3.5 per cent. added water
350	2.7	8.5	11.2	10.0 per cent. deficient in fat
399	2.8	8.6	11.4	6.6 per cent. deficient in fat
617	2.5	8.8	11.3	16.6 per cent. deficient in fat
628	2.5	8.7	11.2	16.6 per cent. deficient in fat
637	2.9	8.5	11.4	3.3 per cent. deficient in fat

The number of samples examined was at the rate of 4.42 per 1,000 of the population, as compared with the 1936 figures of 9.92 per 1,000 for the whole of London, and 3.6 per 1,000 for the whole of England and Wales.

The number of samples of milk which were examined during the year was 417, of these 10, or 2.4 per cent. were reported as adulterated.

The proportion of milk samples found adulterated during the past ten years is shown in Table XXVI.

Condensed milk. Thirty-eight samples of condensed milk were examined, three of which were unsatisfactory, all being deficient in milk solids.

Preservatives. There were four contraventions of the Preservatives Regulations:—

Two samples of jam, both of which contained excess of sulphur dioxide.

Two samples of meat, both of which contained sulphur dioxide.

In addition to the above the following samples were analysed during 1937:—35 samples of rag flock, 8 of which were unsatisfactory; 3 samples of cleansing liquids; 1 sample of water; 5 samples under the Pharmacy and Poisons Act, 1933.

The following were analysed for the Borough Engineer's department:—122 samples of sewage; 4 samples of water; 1 water scale.

VIII. SANITARY CIRCUMSTANCES.

SANITARY CIRCUMSTANCES.

WATER. Except for industrial purposes, such as the supply of condensers, every house in the borough is supplied with water by the Metropolitan Water Board. Unsatisfactory storage cisterns are dealt with as they are discovered. As opportunity offers, services are altered to provide one tap with direct connection to the rising main and the remainder of the supply through a storage cistern.

Several of the Council's institutions are supplied with water from wells. Within recent months I have had occasion to carry out a complete investigation into the condition of these wells and the wholesomeness of the water supplied. The result of the investigation was satisfactory, and certain recommendations which were made were adopted for the conditions concerned. This matter will be referred to in more detail in my next annual report. It is perhaps not a matter of common knowledge that there are in the borough a number of wells owned by private persons and firms. In most instances the water supplied is used for industrial purposes. A close watch is being kept on those wells which are known to the local authority. There is no doubt that the trend of action at the present time is against the use of wells for any purposes excepting those relating to industry. A difficulty which merits consideration arises from the fact that it is sometimes difficult to prevent a few individuals from using such water for drinking purposes. In this connection a case recently dealt with in my department illustrates how difficult it is to ensure that the water supply to houses in connection with factories is, so far as wholesomeness is concerned, beyond reproach. A firm which has large works in the area have on the premises a well, the water from which is used for commercial purposes. Towards the close of 1937 the firm adapted three flats for occupation by their employees. The manufacturing process includes the use of a large supply of water which is obtained from the well, and the firm wished to supply the cottages

from this well. This course appeared to be undesirable and representation was made to the firm requesting them to connect up the cottages with the public mains. This the firm were quite willing to do, but they discovered that if this course was adopted the assessment for water rate would be in respect of the whole factory and not in respect of the few cottages to which the water from the main would be supplied. A representation was made to the Metropolitan Water Board asking them to reconsider the matter of assessment, and at the time of writing negotiations are still proceeding.

SEWERAGE AND SEWAGE DISPOSAL. The water carriage system of sewage removal is almost universal throughout the borough. Houses are provided with properly flushed water-closets, discharging by modern drainage into the public sewers which also convey the surface water. That part of the borough lying south of the Victoria and Albert Docks is drained into a main sewer which passes through portions of East Ham and North Woolwich, and discharges into the London County Council's sewer at North Woolwich.

The whole of the sewage of the borough is water-borne, with the exception of that from a few isolated cottages on the north side. Excepting this comparatively small area, the whole district north of the Victoria and Albert Docks is drained by gravitation sewers to the Corporation's pumping station at Abbey Mills, where it is pumped into the northern outfall sewer which crosses the borough obliquely to the London outfall at Barking. Provision is made for the pumping of storm water into the Channelsea river. Certain storm sewers are provided, and these discharge into the rivers and ditches.

REFUSE COLLECTION AND DISPOSAL. I am indebted to the Borough Engineer, Mr. W. Lionel Jenkins, O.B.E., for the following report:—

"The 'Pagefield' system of refuse collection is made up of a number of complete units, each consisting of one mechanically propelled vehicle and three horse-drawn containers. Each unit operates to a strict time-table on a carefully worked out route. The horse-drawn containers are low-loading, and when filled are hauled mechanically on to the motor driven vehicle for conveyance to the shoot, an empty container being left with the fillers. This process is repeated to each of the three containers in turn,

and by this means the fillers are able to continue at work for the whole of the day, instead of having to await the return of their vehicle from the shoot, as would be the case were self-contained vehicles employed.

The Council are alive to the necessity for keeping the system of refuse collection as up-to-date as possible, and recent replacements of Pagefield vehicles have been made with containers of the latest dustless-loading type.

The total amount of refuse collected annually is approximately 75,000 tons, and the whole of this is disposed of by controlled tipping, either within or immediately outside the borough.

The working faces of the shoots are covered with earth at the close of every working day, in accordance with the regulations suggested by the Ministry of Health, and in this connection I have to report that no complaints were received."

Dustbins. I am indebted to the Borough Engineer for the following information:—

"There are no ash-pits in the borough. The house refuse is collected twice weekly, and under a scheme for the supply and maintenance of standard dustbins by the Corporation which was inaugurated a few years ago by the Highways and Parks Committee, this collection is now carried out under greatly improved conditions. The number of bins at present supplied by the Council under this scheme is 15,700, at a charge of 1s. 6d. per bin per annum."

Closet accommodation. The closet accommodation in the borough is wholly on the water carriage system, and with a few isolated exceptions drainage is to the borough sewerage system.

REPORT OF THE CHIEF SANITARY INSPECTOR

BY

H. G. Clinch, F.S.I.A., M.R.S.I.

District sanitary inspectors. There was one change in the members of the staff of district sanitary inspectors during the year.

As a result of the coming into force of the Public Health Act 1936, it was found that the new powers of appeal given involved considerable extensive work on the part of the staff.

Work of the women sanitary inspectors. There are three women sanitary inspectors on the staff of the public health department. During the year their duties were revised, and they are now

employed almost entirely on work in connection with infectious diseases, café-kitchens, women's workshops, factories in which women are employed, offices, and with outworkers. The work done in these directions is separately dealt with under the appropriate headings.

Work of the district inspectors. Full details of the visits made by the district inspectors during the year are given in Table I, and in Table II special visits are similarly dealt with. An analysis of the work done by the district inspectors is given in Table III.

Table I.

Visits made by inspectors: 1937.

Investigations of cases of notifiable infectious diseases	2,263
Houses inspected following infectious diseases	1,962
Visits to factories	498
,, workshops	259
,, workplaces	176
,, bakehouses	230
,, dairies	381
,, offices (as workplaces), P.H.A. 1936	26
,, outworkers	397
,, common lodging houses	41
,, houses let in lodgings	20
,, cellar dwellings, underground rooms	72
,, slaughter-houses	—
,, scheduled offensive trades	550
,, fish-fryers	191
,, other noxious trades	17
,, knackers' yards	14
,, registered hairdressers and barbers, W.H.C.A.,* section 49	27
,, registered premises wherein food is manufactured, W.H.C.A.,* section 67 ..	127
,, registered premises occupied by vendors of food, W.H.C.A.,* section 66	29
,, café and restaurant kitchens, P.H.A., 1925	522
,, ice cream makers or dealers, W.H.C.A.,* section 66, and P.H.A.	248
,, other food purveyors	3,841

*W.H.C.A. = *West Ham Corporation Act*, 1937.

Exhumation of human remains, Burial Act, 1857, section 25	—
Visits to shops (Shops Act, 1934)	40
,, canal boats	—
Visits re-overcrowding provisions of Housing Acts ..	72
Drainage inspections	5,999
House to house inspections under Public Health or Housing Acts	2,462
Visits under Rats and Mice Destruction Act	198
,, ,, Rent Restriction, etc., Acts	34
,, ,, bye-laws—tents, vans, sheds	97
,, to private houses to investigate complaints ..	5,851
Houses inspected under the Housing Act 1936, re-closing and demolition orders or recon-constructions or re-schedules of evidence ..	590
Smoke observations	122
Visits to factories re smoke	93
,, factories re Steam Whistles Act 1872	—
,, places of public amusement, theatres, music halls, cinemas, etc., Ministry of Health circular 120, 1920	307
,, licensed premises	183
Other visits	859
Re-inspections	33,012
Total visits ..	61,810

Apart from general repairs the most important items dealt with from the numerical point of view were cleansing of walls and ceilings, roofs, gutters, various defects to water-closets, and dampness. During the year the total number of notices served was 6,923, and the number complied with was 5,962.

HOUSES LET IN LODGINGS. It is becoming increasingly common for large houses in better class districts to be let off in separate tenements, no further provision being made for the additional families. Thus in many instances there is a deficiency of suitable and sufficient washing and cooking facilities and of sanitary accommodation. New overcrowding in these houses is being prevented by prosecution.

Rents, over which the department has no control, are frequently excessive in relation to the accommodation provided.

The conditions found in these old houses which have been split up into tenements are often far from satisfactory, and some amelioration can only be effected by means of bye-laws, which have not yet been adopted.

Common lodging houses. There are now eight common lodging houses in the borough, containing a total number of 419 beds, all of which are for males.

Table II.

Special visits by inspectors. 1937.

Samples taken under Rag Flock Act	35
Samples of domestic water supplies taken for analysis or bacteriological examination	—
Number of notices served	6,923
Warning letters sent re-matters not dealt with by notice	70
Defective houses dealt with	6,818
Other defective or insanitary conditions dealt with ..	6
Drain tests carried out	312
Certificates granted under Rent Restrictions, etc. Acts	16
Number of notices complied with (1) by owner ..	6,381
(2) by occupier ..	20
Summonses issued	863

These premises are all old buildings adapted for the purpose of receiving lodgers. No application was received for registration of new premises, and the number of lodgers continues to fall. The keepers were changed in two instances.

During the year 41 visits were paid by the sanitary inspectors to these premises and minor defects were dealt with verbally.

One common lodging house was closed during the year, following proceedings at court for infringement of bye-laws. A fine of 10s. was imposed in respect of each of five summonses. Further proceedings were taken later for a continued offence after notice. At the second hearing the defendant stated that he had an average of only 22 lodgers at 9d. per night each, and that he would prefer to close the house rather than be compelled to comply with the bye-laws. The chief sanitary inspector, conducting the prosecution, applied for an adjournment on an undertaking to close, and as the business was duly discontinued, the case was eventually withdrawn on payment of costs.

Table III.

Analysis of work done by district inspectors in the various wards, 1937.

Type of work.	Beckton Road.	Bemersyde.	Broadway.	Canning Town and Grange.	Custom House and Silvertown.	Forest Gate.	High Street.	Hudsons.	New Town.	Ordnance.	Park.	Plashet Road.	Plaistow.	Tidal Basin.	Upton.	West Ham.	Totals.
Drainage and sanitary arrangements:—																	
W.C's, general repairs to	53	56	20	65	26	39	38	45	30	48	20	18	69	64	15	18	624
,, apartments cleansed	44	45	56	80	27	40	51	45	45	60	12	18	82	60	21	35	731
,, flushing apparatus repaired ...	45	12	28	51	18	27	20	15	39	33	22	12	45	36	18	30	451
,, pedestals renewed	—	—	—	—	2	1	—	—	—	—	3	—	—	—	7	1	14
,, provide and fix pan and trap ...	50	14	19	40	9	32	15	24	52	25	12	15	30	23	14	25	339
,, additional acc. provided ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New sinks and waste pipes provided ...	43	38	19	84	30	24	52	60	45	66	30	30	60	60	20	38	699
Vent shafts repaired or renewed... ...	—	—	—	—	—	7	—	2	—	3	—	—	—	—	3	—	15
Defective gutters and down pipes ...	63	77	60	180	92	93	90	122	114	75	65	69	111	117	31	100	1,459
Public sewers repaired or improved ...	5	—	1	—	—	—	—	—	—	2	2	2	8	—	—	—	20
Repairs to water fittings	18	12	11	22	15	6	14	12	14	14	9	4	24	16	21	11	223
Drains repaired, amended, or renewed ...	51	8	3	36	20	22	15	17	8	14	18	12	24	33	14	4	299
Rainwater pipes disconnected	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Soil pipes repaired or renewed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dustbins renewed	39	20	30	46	33	20	21	26	41	42	11	11	80	36	8	23	487
Urinals, cleansed, amended, or screened	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	3
,, remodelled	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
,, provision of new	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dwelling-houses:—																	
Houses or parts cleansed or limewashed	301	136	181	435	194	185	309	176	213	303	117	114	400	314	78	219	3,775
General repairs executed	106	107	64	378	90	50	90	64	95	186	48	54	243	276	80	96	2,027
Roofs	128	98	203	467	150	156	240	129	186	270	90	95	273	366	56	171	3,108
Dampness excluded	76	68	32	144	120	90	54	60	46	105	54	40	135	144	44	66	1,278
																Carried forward	15,612

TABLE III (CONTINUED).

Type of work.	Beckton Road.	Bemersyde.	Broadway.	Canning Town and Grange.	Custom House and Silvertown.	Forest Gate.	High Street.	Hudsons.	New Town.	Ordnance.	Park.	Plashet Road.	Plaistow.	Tidal Basin.	Upton.	West Ham.	Totals
Brought forward																	15,612
Dwelling-houses—*contd.*																	
Window frames, sills and sashes, repaired or renewed	51	24	18	180	40	52	36	30	48	80	38	23	106	131	23	42	1,022
Sash-lines repaired and renewed... ...	60	33	43	165	68	52	81	42	75	67	23	45	90	92	14	54	1,004
Staircases repaired	27	4	6	48	9	9	18	15	4	18	3	2	17	22	8	10	220
Hand-rails repaired and renewed ...	3	9	—	63	18	3	4	15	4	23	12	3	11	38	8	3	217
Chimney stacks repaired	30	18	10	32	11	6	15	34	9	15	9	12	45	21	5	8	280
Sub-floor ventilation	21	33	9	96	7	38	30	36	20	20	18	14	27	8	20	30	427
Ventilation improved	15	6	3	12	—	4	2	3	8	6	—	15	3	2	3	3	85
Kitchen ranges repaired or renewed ...	48	40	30	123	50	57	87	45	54	42	26	21	159	75	20	60	937
Washing coppers repaired and renewed	48	12	23	56	21	6	22	16	34	30	6	12	54	45	13	45	443
Walls rebuilt	3	3	5	21	—	13	30	—	2	9	3	4	7	4	5	—	109
Walls repointed	21	16	9	63	27	30	24	12	33	12	20	11	24	36	9	21	368
Fire-grates repaired or renewed	36	10	16	54	7	3	3	3	24	25	18	18	51	39	22	37	362
Floors repaired or renewed	66	18	6	153	33	41	69	25	36	57	18	30	57	105	12	48	776
Flues repaired	6	3	4	12	—	10	—	6	10	—	9	—	12	6	4	7	89
Rats	9	2	2	30	2	—	—	10	3	9	3	3	3	10	4	2	92
Verminous houses dealt with	2	—	2	3	3	—	—	—	4	15	—	2	6	6	2	3	48
Lighting improved	2	—	—	2	—	—	—	—	2	—	2	—	—	3	—	—	11
Houses supplied with water	2	—	2	2	—	—	—	4	—	2	2	—	2	4	2	3	25
Cellar areas cleansed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Courts, backyards, stables, etc.:—																	
Forecourt and yard paving repaired or renewed	40	30	45	154	52	48	21	32	53	99	24	24	96	96	27	40	882
Yards cleansed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manure pits repaired or provided ...	—	—	—	2	—	—	—	2	—	4	—	—	—	—	—	—	8
																Carried forward	23,006

TABLE III (CONTINUED).

Type of work.	Beckton Road.	Bemersyde.	Broadway.	Canning Town and Grange.	Custom House and Silvertown.	Forest Gate.	High Street.	Hudsons.	New Town.	Ordnance.	Park.	Plaistow Road.	Plaistow.	Tidal Basin.	Upton.	West Ham.	Totals.
Brought forward																	23,006
Courts, backyards, stables, etc.—*contd.*																	
Manure pits emptied	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2
Accumulation of rubbish removed ...	15	4	9	28	6	9	4	3	2	9	4	6	6	22	8	7	142
Keeping of animals:—																	
Improper keeping of animals	—	—	—	4	—	—	—	2	—	—	—	—	—	—	—	—	6
Accumulation of offensive matter removed	—	—	—	2	2	3	—	3	—	3	—	—	—	—	—	2	15
Miscellaneous:—																	
Smoke nuisance abated	—	1	6	3	—	—	—	—	2	—	—	—	2	—	—	—	14
Vacant land cleared	1	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	4
,, ,, enclosed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Caravans removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Stables cleansed	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2
Overcrowding abated	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	4
Bakehouses, cleansing, (F.&W. Act 1901)	—	—	—	3	—	—	1	2	—	—	—	—	—	—	—	—	6
Temperatures in shops	—	4	—	—	—	2	—	2	—	4	—	2	—	—	—	—	14
Food shops, cleansing, etc.	—	—	—	—	—	2	—	—	—	—	—	—	2	—	—	—	4
Shops Acts, 1912-36	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	4
Provide sanitary accommodation for shop employees	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Common lodging-houses, cleansed or repaired	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
																Total	23,225

TENTS, VANS AND SHEDS. Apart from the provisions of the Public Health Act 1936 dealing with these premises, bye-laws have been made under the powers conferred by the Municipal Corporations Act, 1882.

There are no approved fair-grounds or licensed camping grounds within the borough. The chief difficulty arises from travelling showmen occupying sites in contravention of the bye-law prohibiting such action within two hundred yards of any street or dwelling house. This chiefly occurs during the winter off-season. During the year 97 visits were made. Legal proceedings were taken in 8 cases for breaches of the bye-laws. It has been generally found that the conditions of the van dwellings and of the sites they occupy are exceptionally good, and no offence has arisen apart from the breach of the bye-laws.

UNDERGROUND ROOMS. The number of such rooms in the borough is not large, and very few of those existing are occupied apart from the rooms above. They vary so much in character and facilities that it is impossible to generalise about their conditions; but it can be said that by action under the Housing Act, by means of which many have been diverted from use for living purposes, the standard has been considerably raised. Every effort is made to secure their closure, or failing that, to ensure that such rooms are not used for sleeping purposes.

During the year 72 special inspections of basement dwellings were made, resulting in 39 Closing Orders being made under section 12 of the Housing Act, 1936.

NUISANCES. During the year 6,923 notices were served for the abatement of nuisances, in addition to which many defects were remedied after verbal representations. In respect of such notices it was found necessary to institute proceedings in 809 cases.

Many people are under the impression that the department can deal with noises arising from the keeping of animals, running machinery, or loud speakers, and many complaints—verbal and written—were received of such nuisances. This department has no power to deal with any of these conditions.

VERMINOUS HOUSES. During the year it was found necessary to serve 48 notices in respect of verminous houses, and in every case the action taken was successful.

Rent and Mortgage Interest Restrictions Acts, 1920-1933. During the year the number of certificates applied for and granted was 16.

Offensive trades. There are 27 premises in the borough in which offensive trades or trades analogous thereto are carried on. These are shown in Table IV.

Table IV.

Offensive trades.

Nature of trade.	No.
Fat melters and bone boilers ..	17
Chemical fertiliser manufacturers	1
Soap boilers	2
Gut scrapers	2
Fish meal makers	1
Tripe dressers	1
Animal charcoal makers	1
Glue makers	1
Fellmongers	1
Total	27

Supervision. All these premises are visited very frequently by the sanitary inspectors, not merely to ensure compliance with the bye-laws, but by friendly co-operation to prevent the occurrence of carelessness during the collection and handling of raw materials. The employees are encouraged to exercise care at each stage of the process. The attitude of coercion has been abandoned, and although these trades, which are usually considered very offensive, are carried on in a comparatively small area of the borough, it is now quite customary to find an entire absence of offensive odour or smoke pollution. These results were not achieved by a policy of restricting the action of the inspectors to a rigid enforcement of the bye-laws.

All such factories, except one, have adopted the vacuum system of cooking. The time factor is considerably reduced by this process and it is now seldom necessary to store new material. The great benefit derived is the lessening of the fly nuisance, and it is

Table V.

Workshops on the register. 1937.

Amusement arcade	1	Laundry receiving office	17
Artificial manures	1	Leatherwork	4
Asbestos mats	1	Marine store dealer	3
Basket makers	2	Medicine packing	1
Battery-charging	4	Millinery	10
Billiards tables	1	Monumental mason	7
Boot repairs	1	Motor repairs	1
Bone boiling	1	Metal refining	1
Bread and pastry	8	Oil-blending	8
Brush makers	1	Pickle making	1
Builder's yard, contractors	13	Printers	1
Cat and dog skinning	1	Packing (provisions)	1
Clothes pressing and renovating	10	Photographers	4
Confectionery	1	Perfume	1
Coopers	4	Posters and showcards	3
Corset making	2	Rag-sorting, scrap-metal, etc.	10
Cycle repairs	6	Sacks and bags	1
Cork making	1	Safety lamps	1
Disinfectants	1	Sewing machine repairs	2
Dress-making	18	Sheet metal working	3
Dressing gowns	1	Shirt making	1
Enamellers	1	Shop blinds and shutters	1
Flavouring essences	1	Stables	1
Florists	1	Soap makers	1
Fruiterers (dealer)	1	Tailors	24
Galvanisers	2	Tile slabbing	1
Glaziers	1	Timber merchant	2
Games manufacturers	1	Waterprofing compounds	1
General engineers	10	Wire-working	1
Gut-scraping	1	Wood preservatives	1
Harness makers	1	Funeral furnishers	8
Jewellery repairs	1	Farrier	7
Joinery	18		

remarkable how few of these pests are found in the vicinity of the factories. The system also offers better facilities for dealing with the noxious fumes generated during the cooking of animal and fish offal. This is due to the fact that the fumes are mainly discharged at low temperatures. The improved efficiency of condensers is obvious.

New types of condensers are continually being tried, and two have proved very effective in still further eliminating unpleasant odours. One which employs chlorine as a deodorant is automatic in action and requires little attention. The other type employs charcoal as the deodorizer and appears to be effective. A disadvantage is its tendency to become saturated, but it is possible that this will be overcome by slight mechanical adjustment.

FACTORIES AND WORKSHOPS. Factories are dealt with by H.M. Inspector of Factories and Workshops and by the officers of the Borough Council. Defects in the sanitary accommodation in the case of factories, and all sanitary defects in workshops coming to the notice of H.M. Inspector of Factories are referred by him to the Public Health Department.

The number of workshops, exclusive of bakehouses, on the register at the end of 1936 was 244, the number added to the register during the year was 22, the number removed was 19, and the number on the register at the end of 1937 was 247.

A classification of the workshops on the register at the end of 1937 is shown in Table V.

Particulars of inspections made by the sanitary inspectors during the year are set out in Table VI.

During the year 11 sanitary notices were served on workshops. Table VIII is a statement of the work carried out as a result of these notices.

The defects found and dealt with are shown in Table VII.

Table VII.

Defects in factories, workshops and workplaces. 1937.

Particulars.	No. of defects			No. of offences in respect of which prosecutions were instituted
	Found	Remedied	Referred to H.M. Inspector.	
**Nuisances under the Public Health Acts*:—				
Want of cleanliness	50	56	1	—
Want of ventilation	7	7	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	2	2	—	—
Other nuisances	34	28	1	—
Sanitary accommodation:				
(*a*) insufficient	2	2	1	—
(*b*) unsuitable or defective	21	11	—	—
(*c*) not separate for sexes	—	—	—	—
Offences under Factory and Workshops Acts:—				
Illegal occupation of underground bakehouses (s. 101)	—	—	—	—
Other offences (excluding offences relating to outwork and offences under the sections mentioned in the schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order 1921)	—	—	—	—
Total	116	106	3	—

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Table VI.

Inspection of factories, workshops and workplaces. 1937.

Premises.	No. of		
	Inspections.	Written notices.	Occupiers prosecuted.
Factories (including factory laundries) ..	498	25	—
Workshops (including workshop laundries)	259	—	—
Workplaces (other than outworkers' premises)	176	1	—
Total	933	26	—

Table VIII.

Action in respect of workshops.

Premises cleansed throughout	4
Roofs, guttering, etc., repaired	1
Defective flushing apparatus repaired	1
General repairs to water-closets	3
Light and ventilation provided	1
Window sashes, etc.	1

Bakehouses. There are 98 bakehouses in the borough, of which 22 are underground bakehouses within the meaning of the Factory Act, 1901. During the year no new bakehouses were erected and none was disused.

These bakehouses are inspected at irregular intervals, 230 inspections having been made during the course of the year. It was found necessary to serve 15 notices for cleansing, but generally a verbal warning was sufficient to secure the rectification of minor defects. A constant effort is made to raise the standard of these premises. This varies greatly, and the tendency is for the less satisfactory to fall gradually out of use.

Restaurants and cafe-kitchens. These vary from the premises of the large multiple caterers to the small coffee stalls, and cooking arrangements are on a scale varying with the nature and size of the trade done.

During the year 522 visits were paid to these premises, and although the proprietors are usually amenable to advice or warning, it was found necessary to serve four notices to secure satisfactory conditions.

Particular attention is paid to the cleanliness of the cooking apparatus and utensils, the storage of foodstuffs, and the disposal of waste matters. During the year these duties were performed by the women sanitary inspectors.

Fried fish shops. The business of fish-frying is not scheduled as an offensive trade in West Ham, but under the West Ham Corporation Act, 1937, section 67, no premises may be used for the purpose unless they are registered. Before registration the premises are visited by the sanitary inspector, and if they are found to be unsatisfactory, registration is refused until such time as the conditions complained of are remedied.

The structures of the premises and the type of apparatus used vary considerably, but great improvement in both has been effected under the advice and guidance of the sanitary inspectors. During the year the sanitary inspectors made 318 inspections. Up to the end of the year 47 such premises had been registered.

Fish offal which is a potential source of nuisance on these premises is stored in impervious containers and removed by private contractors in the early hours of the morning. Most of this matter is taken to a large modern works within the borough. This firm specialises in dealing with refuse of this nature. As a result of this arrangement, in which the sanitary inspectors closely co-operate, complaints are reduced to a minimum and statutory action was not found necessary.

Open markets. There are five open-street-markets in the borough. These are held in High Street and Angel Lane, Stratford; Stratford Road, Plaistow; Queens Road, Upton Park; and Rathbone Street, Canning Town. All stall holders are licensed and their refuse is removed daily by the Corporation cleansing department.

Foodstuffs of all kinds are sold at a large number of the stalls, and those persons who sell meat, fish, fruit or vegetables, and the premises at which they store such commodities, must be registered under the West Ham Corporation Act, 1937, section 66. This requirement extends to street hawkers, and has proved useful in raising the standard of storage of unsold foodstuffs. The foods

sold are subject to constant surveillance by the inspectorial staff, a supervision which is carried on during Saturday evening by the sanitary inspectors acting in rotation. Vendors of foodstuffs are encouraged to seek the advice of the inspectors whenever they are doubtful about the wholesomeness of these commodities, and to surrender anything that is not up to the standard of fitness.

CINEMAS. There are 25 cinemas and 2 theatres in the borough, to which during the year, 307 visits were made by the sanitary inspectors. An annual report on sanitary conditions is made to the Town Clerk for the purposes of the Licensing Committee, and other visits are made at irregular intervals to ensure that satisfactory conditions are maintained. No statutory action has been necessary, the managers invariably being found willing to meet any reasonable request.

SALE OF BEER IN PUBLIC HOUSES.

During the months of July and August, 1937, inspections were made of all the premises in the borough which were concerned with the sale of beer and other alcoholic beverages. These inspctions numbered 183, and included 123 fully-licenced premises, and 60 premises with an off-licence.

In a few of the off-licenced houses the beer was drawn direct from the cask. In all other cases the liquid was drawn by pumps through pipes to taps over drip-sinks. In three cases the pumps were found to be in an unsatisfactory condition, but were subsequently remedied.

The pipes were invariably found to be clean. More than two-thirds of them were made of glass or porcelain sections jointed with rubber, and many of the latter had one or more glass sections, enabling observation of the condition of pipes and contents to be made.

Cleaning of pipes and pumps (without dismantling) was carried out at intervals of a week or less by drawing through them a soda solution followed by a salt solution, together with the use of pipe brushes. In many cases proprietary cleaners were used. In some instances the brewers periodically dismantle the pumps and do any necessary adjustment or repair.

The drip-sinks, with three exceptions which were of glazed stoneware, were made of pewter and were generally in good condition. The majority of the washing sinks were of pewter, a

few of glazed stoneware, and one of hard wood, with pewter or hard wood draining boards or racks. They were all in good condition. In every case they were supplied with constant cold water, and in about half the premises with constant hot water in addition. In a few of the others a supply of hot water was available from outside the bar.

Glasses and tankards were rinsed in the washing-sink and set to drain immediately after use. After closing time they were washed with a brush, drained, and polished with a cloth the following morning.

In the majority of cases the waste water was carried to a gully connected to the drain, but in a few cases it was drained to the sump and pumped to the gully. A few defects in the pipes were found and rectified.

The methods of dealing with waste beer varied considerably. In a few cases it was all drained to the sewer. In the majority of cases it was collected in enamel receptacles, barrelled, and returned to the brewers, whilst in others the "pull-off" and overflow from glasses of best beer was received in enamel containers, filtered into a utiliser, and re-pumped into the main stream. In every case the condition of the receptacles used was satisfactory.

Invariably the temperature in the cellars was satisfactory, cooling apparatus having been installed in several cases. In a small minority of cases limewashing of the cellars was found to be necessary, and this, with a few minor defects, was remedied under verbal instructions from the sanitary inspector, notices being required in about half-a-dozen cases where defects were more serious.

On the whole the condition of the premises, apparatus, and utensils of the trade in beer were found to be excellent. The premises were subject to the periodical visits of the brewers' inspectors.

SMOKE ABATEMENT.

The many industrial chimneys in the borough are under the constant observation of the sanitary inspectors, who by visits and advice are able to secure considerable reduction in the emission of smoke. Where this fails, notice is served upon the offending firm, and this has had the desired effect without resorting to proceed-

ings in court. During the year 122 definite observations were made, and 14 notices of offence given. One prosecution was taken in connection with smoke nuisance at a factory within the borough. This was withdrawn as a result of negotiations between the authority and the owners, who promised to effect many major improvements in the boiler plant. This work was carried out and since then there have been no further complaints.

Considerable attention was devoted during the year to a large engineering works in the Stratford area which was referred to in the last report.

About ten steam raising plants were adapted for the use of coke fuel, and greater attention was paid to the various annealing and hardening furnaces.

A sustained effort was made to reduce emissions of smoke from railway locomotives to the practicable minimum, whilst engaged in working under load and on starting up after repair, or on standing at the repair works. Numerous observations were taken and the results, with engine numbers and times, have been reported to the District Locomotive Running Superintendent.

The legal position in regard to railway locomotives is not free from difficulty. The Railway Clauses Consolidation Act, 1845, provides that every locomotive-steam engine used on a railway must be constructed on the principle of consuming, and so as to consume, its own smoke. The Regulations of Railways Act, 1868, provides that if the engine is so constructed as to consume its own smoke, but fails to do so through any fault of the company or of any of their servants, the company shall be deemed guilty of an offence against the earlier Act.

The enforcement of these clauses is not, however, a statutory duty of the local authority, and all proceedings must be instituted by an informer, to whom half of any penalty may be paid. Usually when officers of the department institute proceedings under authority of the Local Government Act, 1933, the informations are so drafted as to incorporate the clause "acting for and on behalf of the Council of the County Borough of West Ham." This cannot be done when acting as informer—see Lake v. Smith, 1911 (76 J.P. 71)—nor apparently may the Council authorise an officer to act as informer on their behalf. The only satisfactory method appears to be for the informer to pay over to the borough fund

any penalty, and to rely upon the Council's promise to pay any costs involved in a contrary decision by the courts. Such a course might meet with criticism by the auditors.

RAG FLOCK ACTS, 1911—1928.

There are five premises in the borough in which rag flock is manufactured, and a number in which flock is used in the making of bedding and furniture.

The Rag Flock Acts provide merely for the taking of samples of flock for analysis and for the prosecution of any person selling or possessing for use flock which contains more than 30 parts of soluble chlorine per 100,000 parts. The action taken in this borough goes beyond these statutory powers. The Acts are administered with enthusiasm, and the makers' premises are visited frequently but irregularly.

As water for washing costs money, and the amount used is a sure indication of the makers' intention to produce a clean flock, their water accounts are examined in relation to their observed output, and every effort is made to induce makers to sell the whole of their output under warranty and in sealed bags, so that there may be no confusion at other towns with flocks produced elsewhere.

Samples are taken at irregular intervals and provide a useful indication of the fallacy of the present legal standard of cleanliness using soluble chlorine as the indicator. A sample was taken of a flock consisting of new and unused sugar bags, which had been rejected by the users owing to faulty mesh. These bags had been dressed with the usual solution, tin chloride, before sale, and the resulting flock was certified to contain 82 parts per 100,000 of soluble chlorine. In these circumstances no proceedings were instituted but the makers were informed that all flocks must conform to the legal standard. No doubt later consignments consisted of rags of possibly undesirable origin, which could be washed by immersion down to the required chlorine standard.

During the year 35 samples were taken for analysis, and seven of these proved to contain soluble chlorine in excess of the limit provided. Five summonses were issued. One case was dismissed on payment of forty-shillings costs, on proof that the defendant had purchased the flock elsewhere, and fines of forty shillings were imposed in each of the other four cases.

Table IX.

Prosecutions. 1937.

Statute under which prosecution taken.	Result of hearing					Total summonses issued.
	Penalties imposed	Magistrate's Order to do work.	Adjourned sine-die.	Dismissed.	Withdrawn.	
Nuisances (Public Health acts)	112	261	2	—	412	787
West Ham Corporation Acts	1	—	—	—	4	5
Shops (Hours of Closing) Act 1928	5	—	—	12 (on payment of costs)	—	17
West Ham Grocers', General Shopkeepers' and Provision dealers' Closing Order 1919	14	—	—	4 (2 on payment of costs)	—	18
Sections 116-117, Public Health Act 1875, and section 28 P.H.A.(A) Act 1890 (unsound food)	1	—	—	1	—	2
West Ham Bakers' Half Holiday Order 1913 ...	2	—	—	1	—	3
West Ham Butchers' Half Holiday Order 1922 ...	1	—	—	—	—	1
Retail Meat Dealers' Shops (Sunday Closing) Act 1936	—	—	—	1 (on payment of costs)	—	1
Shops (Sunday Trading Restrictions) Act 1936 ...	8	—	—	1	—	9
Rag Flock Acts	4	—	—	1 (40/- costs)	—	5
Municipal Corporations Acts 1882 (Dwelling vans on land)	—	—	8	—	—	8
Public Health Act and Public Health (Smoke Abatement) Act 1936	—	—	—	—	1 (with costs)	1
Bye-laws of the Corporation of West Ham (Common Lodging Houses) ...	6	—	—	—	—	6
Totals	154	261	10	21	417	863

It is hoped that future legislation will provide for the better control, by registration, of all rag flock factories, with power to cancel registration in cases of wilful evasion of the law.

PROSECUTIONS.

During the year 863 prosecutions were taken under various Acts. It should be noted that summonses listed as dismissed do not represent lost cases, but merely that the court dismissed the cases under the First Offenders Act, on payment of the Council's costs. This feature is particularly noticeable in cases taken under the various shops acts.

Particulars of the prosecutions taken are shown in Table IX.

IX. HOUSING.

HOUSING.

The number of houses in the borough at the 1931 Census was 48,907, and the number of occupied houses was 48,609. In 1937 the number of houses in the borough was 50,247. The density of the population was 56 persons per acre.

Particulars of the work carried out in connection with housing matters during 1937 are given in Table I.

TABLE I.

SUMMARY OF WORK IN CONNECTION WITH HOUSING. 1937.

Particulars of work done.	No. dealt with.
1. Inspection of dwelling houses during the year:—	
(1) (*a*) dwelling houses inspected for housing defects under the Public Health or Housing Acts	8,903
(*b*) inspections made for the purpose	29,047
(2) (*a*) dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	271
(*b*) inspections made for the purpose	1,355
(3) dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	15
(4) dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	6,811
2. Remedy of defects during the year without service of formal notices:—	

Defective dwelling houses rendered fit in consequence of informal action by the local authority or their officers 51

3. Action under statutory powers during the year:—

(1) proceedings under sections 9, 10 and 16 of the Housing Act, 1936:—

(*a*) dwelling houses in respect of which notices were served requiring repairs .. nil

(*b*) dwelling houses which were rendered fit after service of formal notices:—

(i) by owners .. .. nil

(ii) by local authority in default of owners .. .. nil

(2) Proceedings under the Public Health Acts:—

(*a*) dwelling houses in respect of which notices were served requiring defects to be remedied 6,923

(*b*) dwelling houses in which defects were remedied after service of formal notices

(i) by owners 6,381

(ii) by local authority in default of owners .. .. nil

(3) Proceedings under sections 11 and 13 of the Housing Act, 1936:—

(*a*) dwelling houses in respect of which demolition orders were made 18

(*b*) dwelling houses demolished in pursuance of demolition orders 22

(4) Proceedings under section 12 of the Housing Act, 1936:—

(*a*) separate tenements or underground rooms in respect of which closing orders were made 39

(*b*) separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit 2

4. Housing Act, 1936. Part IV. Overcrowding:—

(1)	(*a*) dwellings overcrowded at the end of the year	5,698
	(*b*) families dwelling therein	5,698
	(*c*) persons dwelling therein	32,049
(2)	new cases of overcrowding reported during the year	—
(3)	(*a*) cases of overcrowding relieved during the year	66
	(*b*) persons concerned in such cases ..	350
(4)	Particulars of any cases in which dwelling houses have become overcrowded after the local authority have taken steps for the abatement of overcrowding	nil

TABLE II.

INSPECTION OF DWELLING HOUSES.

Ward.	No. of inspections made.	No. of notices served.
Beckton Road	514	526
Bemersyde	350	206
Broadway	695	411
Canning Town and Grange ..	825	672
Custom House & Silvertown	474	422
Forest Gate	345	302
High Street	569	501
Hudsons	580	422
New Town	457	374
Ordnance	616	531
Park	259	239
Plashet Road	307	267
Plaistow	679	574
Tidal Basin	877	694
Upton	224	211
West Ham	340	313
Whole borough	8,111	6,665

INSPECTION OF DWELLING HOUSES. Table II shows the number of inspections and sanitary notices served in the sixteen wards of the borough during the year 1937. (These figures do not include inspections for the purpose of testing drainage or supervising works incidental thereto.)

OVERCROWDING.

The provision of certificates of permitted numbers to landlords was continued and a certificate has now been supplied in respect of every working-class house. The policy of giving permitted numbers in respect of tenancies and not of houses has proved to be wise and has been continued. As tenancies change and rooms are added or otherwise, new certificates are provided.

It was found possible to relieve 66 cases of overcrowding, and there can be no doubt that proceedings must be instituted in all cases where, despite the insertion of permitted numbers in rent books, occupiers sub-let, or landlords let and persons occupy, rooms in contravention of the Act. There were no prosecutions in this connection during 1937.

SLUM CLEARANCE.

During the year no representations of unhealthy areas were made by the medical officer of health. The slowing up of slum clearance was due largely to local difficulties presented by the Tidal Basin No. 1 Clearance Area. As these difficulties are considered to be of general importance, they are discussed more fully below. Work in connection with four other areas was held up pending the decision on the Tidal Basin case. The particulars regarding these four areas are given below:—

Area.	No. of houses.	Persons to be displaced.
White Hart Cottages	6	19
Castle Buildings ..	11	149
Cam Road	30	122
Abbey Road	12	43

Tidal Basin Clearance Area. The decision of the Minister of Health regarding the Tidal Basin Clearance Area has been consid-

erably delayed by an objection laid by an interested owner. The case was considered in June, 1937. Under section 63 (1) of the Housing Act, 1935 (which has been replaced by Section 41 (1) of the Housing Act, 1936), it is provided that when a person has made objection to a clearance order or compulsory purchase order on the grounds that a building included in that order is not unfit for human habitation, the Minister shall not cause a local enquiry to be held until after it has been shown to his satisfaction that the local authority have served upon the objector a notice in writing stating what facts they allege as their principal grounds for being satisfied that the building is so unfit.

The first question was whether, in view of section 11 of the Housing Act, 1930 (now the second schedule to the Act of 1936—see section 29 (3) of that Act), prohibition could be sought. It was agreed by the Solicitor General that it could be; but the Divisional Court did not decide this point, although they were apparently in favour of the plaintiff's contention. The decision turned on the amount of information given by the local authority.

So far the case may be said to decide that the local authority are bound to give such information as might be put in a statement of claim if they were bringing an action, but not the evidence they proposed to advance in support of that claim.

The forms of notice used were substantially those recommended by the Association of Municipal Corporations and separate forms were served in respect of each house.

Following the decision the Inquiry was commenced by the Minister of Health on September 30th, 1937, and continued for several days. The Minister's findings had not been received by the end of the year.

X. MENTAL HEALTH SERVICES.

MENTAL HEALTH SERVICES.

MENTAL DEFICIENCY.

The material for this section has been largely supplied by Dr. T. W. Hill, Deputy Medical Officer of Health, who is responsible for this work in the area, and to him I am indebted for his interest in the welfare of the defectives and in the progress of the Authority's scheme.

Statistics.

On 31st December, 1936, there were 757 defectives on the register. During the year 1937 the number of new cases dealt with was 59, and the number of cases removed from the register was 24. On 31st December, 1937, the number of defectives on the register was 792.

Distribution of defectives. The manner in which the defectives who were on the register at the end of the year had been dealt with is shown in Table I.

It will be seen from the above table that 245, or 30.9 per cent., of the total number of defectives on the register are receiving institutional care and training, while 547, or 69.1 per cent., are being cared for in private homes. While the number of cases in institutions at present is approximately one-third of the total cases on the register, this is not a true indication of their needs, since if sufficient accommodation were available the number of patients receiving institutional care and training would be considerably increased.

New cases dealt with. The method of disposal of the new cases who came to the notice of the local authority during the year is shown in Table II.

Of the 59 cases which were placed on the register during the year, 33—21 males and 12 females—were notified by the local education authority under section 2 (2) of the Act of 1913. The source of information in respect of the remaining cases was as

Table I.

Distribution of defectives.

	Males.	Females.	Total.
Number in institutions under order	138	106	244
Number on licence from institutions	22	11	33
Number under guardianship under order	—	6	6
Number in "places of safety"	—	1	1
Number under statutory supervision	233	275	508
Total ..	393	399	792

Table II.

Disposal of new cases.

	Males.	Females.	Total.
Recommended for institutional care	15	15	30
Recommended for supervision at home	17	12	29
Total ..	32	27	59

Table III.

Removals from register.

	Males.	Females.	Total.
Removed to other areas ..	8	5	13
Died	8	3	11
Total	16	8	24

follows:—Public Assistance Officer, 14 cases (6 males and 8 females); removals from other areas, 3 cases (one male and 2 females); local police court, one male; Board of Control, one male; local hospital, one female; Maternity and Child Welfare Committee, one female. In addition, 6 cases—2 males and 4 females—were cases who had been under friendly supervision.

Removed from register. Table III shows the reasons because of which 24 cases were removed from the register during the year.

Particulars of the cases shown in the above table as having removed from West Ham were forwarded to the area to which the defective had removed.

Of the 8 males and 3 females who died, the cause of death in each case was as follows:—*Males*: broncho-pneumonia, 1; bronchiectasis, 1; hypostatic pneumonia and spastic paraplegia, 1; lobar-pneumonia and severe epilepsy, 1; Little's disease and idiocy, 1; bronchitis and cardiac failure, 1; acute enteritis, broncho-pneumonia and pseudo-hypertrophic paralysis, 1; heart failure, fatty degeneration and chronic constipation, 1. *Females*: Intestinal statis, 1; meningitis and cystitis, 1; status epilepticus, 1.

Continuation orders. During the year 70 Continuation Orders were received:—For five years: males, 24; females, 25; total, 49. For one year: males, 12; females, 9; total, 21.

Work of this section.

Ascertainment. The number of mental defectives dealt with for the first time during the year was 59. In addition to these, 16 cases (8 males and 8 females) were investigated but proved to be not certifiable at present. Of these 14 (7 males and 7 females) were cases who were allowed to leave the special schools between the ages of 14 and 16 years in order that they could take up employment. These cases are kept under friendly supervision until the age of 16 years, when they are re-examined and placed on the register if found certifiable. Of the other two cases (one male and one female) the female was reported by the police, having appeared before the court charged with petty larceny, and the male was reported by his employer. Both of these cases were definitely not certifiable under the Mental Deficiency Acts. The case reported by his employer was, however, drafted to the Psychological Clinic for treatment.

Many difficulties are met in the carrying out of this duty, as in many cases the parents either refuse to recognise their child's mental condition or endeavour to hide the fact. These cases are specially visited by the supervising nurse, who usually succeeds in overcoming the scruples of the parents and persuading them to carry out the advice given.

The types of cases dealt with are as follows:—

(*a*) *Feeble-minded persons*. Included in this grade there were 21 males and 19 females, of whom 3 males were admitted into institutions. With regard to their physical condition, 2 males were epileptic, and one male and one female were paralysed.

(*b*) *Imbeciles*. These numbered 11 males and 7 females, of whom one female was admitted to an institution. Regarding their physical condition, one male was paralysed, one male and one female suffered from epilepsy.

(*c*) *Moral defectives*. One moral defective—a male—was dealt with during the year. He was physically sound and was admitted to an institution.

(*d*) *Licence*. During the year 7 patients (2 males and 5 females) were granted licence, 2 females were recalled from licence, and one female was discharged. One of the cases was recalled to the institution at the request of the mother and the other because she had been found to be pregnant.

There are 33 cases—22 males and 11 females—on licence, of whom 17—12 males and 5 females—are residing within the borough. The remaining 16—10 males and 6 females—are placed in private homes outside the borough. The latter cases were placed outside the borough because they had no suitable home in West Ham. Among the cases on licence, 13—11 males and 2 females—are in regular employment and making good progress. The others are behaving quite well and giving no trouble.

Supervision. On 31st December, 1937, there were 508 patients under supervision at home. In addition there were 17 patients — 12 males and 5 females — on licence from institutions and residing within the borough. These cases are visited at varying intervals by the visiting nurse according to the circumstances of the individual case. The parents are advised as to the best methods of training and caring for the patient, and endeavours are made to assist him in every possible way. Since a large number of cases have to be visited, very little time can be given to individuals, but

it is remarkable how well they respond to the assistance given. It would be of great benefit if there was a centre at which the higher grade and able-bodied cases could attend for specialised training.

In the majority of cases these visits are welcomed, but in a few instances, generally in the case of the higher grade feeble-minded defectives who are at work, resentment is felt against this visiting. Generally in these cases the parents consider their children to be normal, and feel that supervision casts a stigma on them. Although in many instances the homes of the defectives are poor, in most cases the parents care for the patients to the best of their ability.

Institutional accommodation.

General. The number of West Ham mental defectives detained in institutions under Order is 244. Of these 96 are in South Ockendon Colony and 55 in Forest Gate Hospital. The remainder are in various outside institutions. South Ockendon Colony and Forest Gate Hospital are both under the control of this Council, but approximately one-third of the beds at South Ockendon Colony are allocated to patients from the County Borough of East Ham, while a proportion of the beds at Forest Gate Hospital are allotted to patients from the County Borough of East Ham and Essex County Council. Great difficulty is still being experienced in obtaining beds for mental defectives in suitable institutions owing to the lack of accommodation, but this will be very largely overcome when the present extension scheme which is in progress at South Ockendon is completed.

(*a*) *South Ockendon Colony.* The present accommodation at South Ockendon consists of 134 beds—44 beds for male adults, 30 for female adults, 40 for male children, and 21 for female children.

The extension scheme at this Colony is now nearing completion, and the new buildings will probably be ready for occupation in the summer of 1939. The scheme as approved will provide facilities for training and care of an additional 340 patients of various grades. In the Colony there will be three villa blocks, each accommodating 60 adult male patients, one villa block for 60 adult female patients, one villa block for 50 male children and one for 50 female children, together with male and female work-

shops, laundry, boiler-house, central kitchen, recreation hall, with offices, nurses' home, medical superintendent's house, administration block with matron's quarters, and 12 staff cottages. These additional buildings, with the existing three villa blocks, will provide accommodation for 520 patients in all. It is hoped that this will suffice to provide for all cases from West Ham and East Ham, although facilities are available for further extensions if necessary.

(*b*) *Forest Gate Hospital.* This hospital is approved by the Board of Control for the reception of 75 mental defectives—20 male adults, 30 female adults, 10 male and 15 female children. At present 82 mental defectives are detained under Order in this hospital; of these 55 are West Ham patients.

South Ockendon Colony.

Report by Miss W. S. Butler, S.R.N., R.M.P.A., *Matron-Superintendent.*

On 31st December, 1937, there were 146 patients on the register, namely, 67 male adults, 45 female adults, 26 male and and 8 female children. During the year one male adult, one female adult, 6 male and one female children were admitted to the colony, while 4 patients were transferred—one adult male to Forest Gate Hospital, one female adult to Cell Barnes Colony, and one female adult and one male child to Rampton State Institution. One patient—an adult female—was discharged, and 3 patients died—2 male adults, one from pneumonia, and one from status epilepticus; and one female adult from acute bronchitis. There are 15 patients on licence to parents and guardians, 10 male adults, 3 female adults, and 2 male children. The progress reports relative to these patients have all been very satisfactory.

Health. Early in the year an epidemic of scarlet fever, which commenced during the previous November, affected three male and eight female patients. These cases were treated at the Isolation Hospital, Plaistow, and the East Ham Isolation Hospital, and all made a good recovery.

During February, 69 patients and the majority of the staff suffered from influenza. All recovered.

During the year two female patients were treated at Whipps Cross Hospital for acute rheumatism, and one female

patient for carcinoma of the breast. One male patient died of status epilecticus at the Colony, and one female patient of acute capillary bronchitis. I regret to report one fatal accident. A young lad, while working at the farm, slipped into a pond. He was admitted to Whipps Cross Hospital, but he died of septic pneumonia the following day.

Employment. All the patients continued to be usefully employed. The carpentering section, with the aid of the nursing staff, has built a sports pavilion. All the boots and shoes at the Colony are mended exclusively by the patients. The sewing room turned out 3,422 new articles. The new knitting machine produced 480 pairs of men's and children's socks. The small girls learned to weave most attractive articles.

Recreation. The scout and guide troops, and the cub pack, continue to flourish. During a fortnight in July, 15 scouts held a summer camp at Clacton. The Guide Captain having succeeded in obtaining the necessary Camp Mistresses' Certificate, the guides were able to hold a camp in Thorndon Park, Brentwood. Both camps were a great success.

The annual Sports' Day was blessed with glorious weather, and again we were honoured by the presence of Her Worship the Mayor and many Aldermen and Councillors.

In honour of the Coronation 86 of the higher grade patients went by coach to Dovercourt and enjoyed a day of fine weather. A week later the remainder of the patients went for a coach ride to Epping Forest and held a picnic in the grounds of Harold Wood Hospital.

Christmas Day was celebrated in the traditional manner. The dense fog prevented the arrival of an entertainer who had been engaged, but this in no way damped the festivities, as the staff gave an impromptu entertainment. Her Worship the Mayor honoured us with a visit on the 30th December, and she was loudly cheered on her tour through the wards.

Periodically the higher grade patients visited the cinema at Grays and the children attended special Saturday morning children's programmes at Upminster.

Foundation stone. On 28th October, 1937, the foundation stone of the extensions was laid by Her Worship the Mayor. The ceremony was attended by a large and representative gather-

ing of councillors from several boroughs, together with the chief officials of West Ham. Miss Darwin, a Senior Commissioner of the Board of Control, honoured the occasion with her presence.

Visits to the institution. On the 23rd April, 1937, a visit was paid by members of the Board of Control.

In conclusion I would like to express my gratitude for Dr. Hill's unfailing guidance and support, and for the devoted loyalty and willing co-operation of all the staff.

Forest Gate Hospital.

Mental Defective and Epileptic Section.

Report by H. R. England, M.B., M.S.A.,
Medical Superintendent.

The approximate number of beds provided for patients who are mentally defective, or who are both mentally defective and epileptic, is 453. The number of such patients in the hospital was invariably in excess of the number of beds provided.

Overcrowding exists in all the wards, but owing to the lack of adequate accommodation every effort is made to limit the admission of this class of patient. Only a partial success is achieved in this direction. Although the local authorities of West Ham and East Ham request the admission of cases of extreme urgency only, a large number have to be admitted, irrespective of accommodation being available, through the relieving officers and by transfer from other institutions. This is the method by which all Essex County Council cases, without exception, are admitted. Thus it will be seen that considerable difficulties stand in the way of the prevention of continued overcrowding.

The following is a classification of patients in residence on 31st December, 1937.

Degree of defect.	Male.	Female.	Total.
Feeble-minded	94	108	202
Imbecile	49	128	177
Idiot	19	26	45
Total ..	162	262	424

In addition to the above, there are 42 sane epileptics—11 males and 31 females—in residence.

It should be noted that the classification of these patients is only approximate. A large number of them are elderly and would be unsuitable for admission to a mental defective colony.

Mental Deficiency Acts, 1913-27. The hospital is approved by the Board of Control for the reception of 75 certified mental defectives, as follows:—Adult males, 20; adult females, 30; males under 16 years, 10; females under 16 years, 15. On 31st December, 1937, the number in the hospital was: adult males, 32; adult females, 35; males under 16 years, 11; females under 16 years, 7; total, 85.

During the year 2 male adults and 2 male juveniles were admitted to the hospital, 2 male adults were discharged, 3 male adults were transferred—one to South Ockendon Colony, one to the Royal Hostel, Godalming, and one was placed under guardianship. One male adult patient died, the cause of death being Little's disease. There are two patients on licence from other institutions, one male adult from South Ockendon Colony, and one female adult from the guardianship of her mother. Three patients are on licence from the hospital—one male adult and 2 female adults.

On 31st December, 1936, there were 4 patients—3 male adults and one female adult—in the hospital under section 15 of the Act. During the year 10 cases were admitted under this section—5 male adults, 3 female adults, and 2 male children. These were dealt with as follows:—Orders obtained for 2 male adults who were transferred to Stoke Park Colony; 2 male adults discharged to parents; 2 female adults transferred to South Ockendon Colony under Order; 2 male children detained at the hospital under Order; one female child discharged to care of parent; and one remained under this section.

On 31st December, 1937, the number of patients in the hospital under this section was 5—one male adult, two female adults, and 2 male children.

An outbreak of scarlet fever occurred during the year and 4 certified cases were involved—one male adult, one female adult and 2 male children. They all recovered after treatment in the Isolation Hospital, and were returned to this hospital.

During the year 1937, 78 patients—28 males and 50 females—were certified under the Lunacy Acts (Section 24), 2 female patients were removed under this Act, one died from carcinoma of the stomach, and one was discharged to the care of her son.

Employment. All the patients are usefully employed in a suitable form of occupation therapy. During the year a daily average number of 42 patients worked at the morning session and 72 in the afternoon session in the female handicraft centre at such occupations as needlework (including fancy needlework), rug-making, ward linen mending. There were also 14 female patients working under supervision in the laundry, and a further number engaged in various forms of ward work.

The male patients, numbering approximately 98, were employed in such occupations as boot repairing, brush making, gardening, stores duties, and general cleaning work under the supervision of the head male attendant.

Great difficulty was experienced in finding a suitable form of occupation for the low grade imbeciles.

An average daily number of 24 children attended the school for mental defectives attached to the hospital.

Recreation. Scout and guide troops have been in existence at Forest Gate Hospital for a number of years. Great interest is shown in these organisations, which stimulate physical exercises and games in the evenings. The scouts had their usual annual camp at Hatfield Broad Oak, and the guides had their camp at Battle, Sussex. Both camps were thoroughly enjoyed, and as the weather was excellent the patients who were privileged to attend the camps returned bronzed and much benefitted by their holiday. Both camps were visited by the Chairman and Members of the Public Assistance Committee.

A special word of praise is due to the matron (Mrs. E. M. Usherwood), Mr. Rendell (head male attendant), and Mr. Stanton (barber attendant), for their work and interest during the year in connection with the guide and scout troops.

The hospital has a brass band which was formed several years ago. This affords an excellent hobby for an average of 16 male patients, including 3 certified under the Mental Deficiency Acts, and 7 members of the male staff, during the year. The band is highly successful, and attends the annual outings of the male and female patients of the hospital and the outings of the patients

of the Central Home and Forest House. In addition, during the winter, band concerts with male patient artists are arranged each month, at which all the male and female patients who are able to do so attend. These concerts are very popular and are eagerly looked forward to by the patients, and the entertainment given is very good.

During the Christmas festivities a female patients' dance is arranged and the hospital band provides the dance music.

The band is under the direction of Mr. Mason, the head gardener. Mr. Mason is deserving of special mention for his work in this direction. The work he undertakes in connection with the running of the band is purely voluntary, and is done in his own time.

The main dining hall is fitted with a sound apparatus, and every Friday evening during the months October to March, a two-and-a-half hours' film show is given. This is attended by the made and female patients with the appropriate staff in attendance, and is eagerly looked forward to each week.

In addition, the patients, in the care of members of the staff, are permitted to attend a cinema outside the hospital once each week. They usually attend in parties of 25 to 30.

The female patients are also permitted to take exercise walks outside the hospital for the purpose of shopping. These outings are much appreciated, and are beneficial to the patients.

During the year a large number of the patients were allowed out on holiday leave in the care of their parents.

Dental treatment. The hospital is visited weekly by the dentist, and cases referred by the medical officers are dealt with by him.

Psychiatrist. During the year the services of a visiting psychiatrist were approved, and this has proved a great help in dealing with the difficult cases. Dr. Somerville, Medical Superintendent of the West Ham Mental Hospital, or one of his assistants, acts in this capacity.

PSYCHOLOGICAL CLINICS.

Reference has been made in previous annual reports to the West Ham Nerve Clinic which was opened six years ago as a centre at which preliminary investigation could be made into minor nervous disorders, either with a view to the treatment of the patient at the clinic or to facilitating his admission to the

mental institution as a voluntary patient. The clinic speedily began to serve a useful purpose in dealing with behaviour problems in children.

I am glad to be able to include a report on the activities of the clinic.

Report on the West Ham Nerve Clinic.

By George Somerville, M.D., D.P.H.

During the year ended 31st December, 1937, 70 new cases were treated at the West Ham Nerve Clinic. The majority of these were sent for diagnosis and disposal. A limited number were treated psychologically at the clinic. The number of psychological interviews which were held was 354. Two cases were treated by the analytical technique. In one case the treatment extended over a period of more than forty-eight hours, and in the other cases of thirty-two hours. Good results were obtained in both these cases.

Up to the present the clinic has been held on Wednesday and Saturday mornings at 11 o'clock, but, from now on, the times have been changed to 3 p.m. on Mondays and Wednesdays, as it has been found that the other times were inconvenient to a great number of patients. In future, we will therefore be able to spend more time with the patients. This will be of great advantage, as the work of the clinic is steadily increasing. We hope during the next year to improve the amenities of the clinic and to extend the services.

We have to thank the doctors of West Ham and the staffs of the Public Health Department and welfare centres for their co-operation. We think that on the whole our most useful work has been done in consultation with general practitioners, who refer to us cases of early mental disorder for diagnosis and suggestions for treatment. In all such cases, a report has been sent to the doctor and, where advisable, the patient has been encouraged to go into the mental hospital on a voluntary basis, or else he has been referred to the observation ward at Whipps Cross Hospital.

Twenty-three cases in all came to the Mental Hospital after visiting the clinic, 18 coming in directly from the clinic as voluntary patients. In 3 cases of definite mental disorder the patients or their relatives refused the advice given, but in each of these cases very full letters of advice were sent to the doctors concerned, with suggestions for management in the home.

Fourteen cases of psychological disorder in children were referred to the clinic. Nine of these were sent to the London Child Guidance Clinic, the West End Hospital Child Guidance Clinic, or the East End Child Guidance Clinic, either for intelligence testing, or for more specialised treatment than is possible at our clinic because of the absence of a social worker and an intelligence testing department. Four cases of congenital mental defect of such an order as to require institutional treatment were seen and appropriate instructions were given to the relatives.

It is interesting to note that in six cases sent to us the trouble was physical, and these patients were referred to general hospitals for pathological investigation and treatment. We have heard from three of these patients, and they have derived considerable benefit from the treatment of their physical condition.

Appended is a summary of the cases dealt with.

WORK OF THE WEST HAM NERVE CLINIC.

Types of mental illness.

Psychoses—		
Schizophrenia	6	
Paranoia	2	
Cyclothymia	14	
Cerebral arteriopathy	2	
Epilepsy	3	
General paralysis of the insane	2	
	—	29
Psychoneuroses—		
Anxiety states	4	
Compulsion	2	
Hysteria	2	
Neurasthenia	4	
Sex abnormality	1	
Various neuroses and organic states ..	14	
	—	27
Behaviour problems and maladjusted children—		
Behaviour disorders	3	
Morbid fears	2	
Tantrums	3	
Eneuresis	2	
Congenital mental defect	4	
	—	14
Total ..		70
Cases recommended to the mental hospital as voluntary patients	23	
Actually admitted as voluntary patients ..	18	

XI. SCHOOL MEDICAL SERVICE.

SCHOOL MEDICAL SERVICE.

SUMMARY OF MAIN STATISTICS, 1937.

Population of borough (mid-year estimate)	259,500
Elementary schools:—	
Number of schools	63
Number of departments	162
Average number on registers	41,571
Average attendances	36,082
Schools for higher education:—	
Number of schools	6
Number of departments	6
Average number on registers	2,123
Average attendance	1,963
Special schools:—	
Number of schools	10
Average number on registers	773
Average attendance	610
Work of the assistant medical officers:—	
Number of completed visits to schools	97
Number of half-days devoted to school inspection ..	1,150
Number of children examined at routine inspections	16,911
Number of children examined as "Specials" ..	16,149
Number of re-examinations in schools	8,049
Number of re-examinations at clinics	
Work of the dental surgeons:—	
Number of children examined	23,387
Number of children treated	10,383
Total attendances at the dental clinics	17,301
Work of the school nurses:—	
Number of visits to schools	1,531
Number of children visited in schools	4,499
Number of home visits	11,013
Number of inspections with reference to uncleanliness	79,476

INTRODUCTORY

In general it may be said that the school medical service in West Ham provides for all the requirements which are laid down by the Board of Education, and that in certain directions institutions have been established which can with justice be claimed as models for other authorities.

Detailed reference is made elsewhere in this section to the work which is carried out at the residential open-air school at Fyfield, and in my next annual report I hope to give a full description of the new deaf centre which was recently opened in Tunmarsh Lane. The Authority may well take pride in these institutions. The routine work of the section, if less spectacular, is nevertheless fundamentally sound, and it should not be forgotten that the number of complaints and defects which are dealt with in the course of this routine work is immeasurably greater, and this work consequently more important, than the special methods which serve to attract the attention of many who are ignorant of basic principles.

During the course of the year no changes were introduced in the methods of routine inspection and the general conduct of treatment. It is evident from the observations of certain school medical officers of repute that some doubt exists regarding the desirability of confining inspection rigidly to routine examinations at the three chosen age-periods, but the detailed consideration of the local effects of such a change will require time.

For the detailed work of the school medical service Dr. Robert J. Reid, the Chief Assistant School Medical Officer, is responsible.

SCOPE OF THIS REPORT

This report is divided into nineteen parts, as follows:—

I. School population.
II. Staff.
III. Co-ordination of the health services.
IV. Hygiene of school premises.
V. Medical inspection.
VI. The findings at medical inspection and results of treatment.
VII. Special treatment services.
VIII. Following-up.

IX. Infectious diseases.
X. Open-air education.
XI. Physical training.
XII. Provision of meals.
XIII. Co-operation of parents, teachers, school attendance officers and public bodies.
XIV. Blind, deaf, defective and epileptic children.
XV. Higher education for defective students.
XVI. Nursery schools.
XVII. Secondary schools and other institutions of higher education.
XVIII. Parents' payments.
XIX. Miscellaneous.

I. SCHOOL POPULATION.

The number of children on the elementary school registers on 31st December, 1937, was 41,571, as compared with 43,970 on 31st December, 1936. These children, together with children who attended institutions for higher education and special schools, were distributed as in Table I.

The average attendance of children at elementary schools for the year ending March 31st, 1937, was 36,082. This figure does not include attendances at open-air, nursery, and special schools maintained by the Authority.

The estimates of the "school population" of elementary schools at each year since 1920 are set out in Table II, together with the percentage increase or decrease each year, calculated on the population for the previous year.

The estimates for the school population at each year are those given by the Chief Medical Officer of the Board of Education in his annual reports.

It will be seen that the school population has been falling steadily since 1922, and that in recent years there has been an acceleration of the rate of decrease. The total decrease since 1922 has been equivalent to 16,930 school children, which gives an average annual decrease of 1,129 on the 1922 figures.

II. STAFF.

The staff is set out on pages 12 to 17 of this report. Apart from my appointment as School Medical Officer, there have

Table I.

Distribution of school population in 1937.

Type of School.	No. of schools.	No. of departments.	No. on registers.
Elementary:—			
Provided	49	134	35,600
Central	2	2	768
Non-provided	12	26	5,203
Higher:—			
Maintained	4	4	1,769
Part-maintained ..	2	2	354
Special:—			
Mental defectives ..	2	2	155
Physical defectives ..	2	2	108
Deaf	2	2	71
Nursery*	2	2	240
Open-air (day) ..	1	1	58
,, (residential)†	1	1	141
Total	79	178	44,467

* These figures refer only to those nursery schools under the administration of the Authority.

† This school was extended to 200 beds in June, 1937.

Table II.

School population.

Year	School population.	Increase(+)or decrease (—) per cent.	Year	School population.	Increase(+)or decrease (—) per cent.
1920	52,306	—	1929	47,278	— 3·39
1921	52,678	+ 0.71	1930	46,511	— 1.62
1922	53,012	+ 0.63	1931	45,911	— 1.29
1923	52,995	— 0.00	1932	45,282	— 1·37
1924	51,135	— 3·51	1933	44,720	— 1.24
1925	50,653	— 0.95	1934	43,227	— 3·34
1926	50,279	— 0.74	1935	40,625	— 6.02
1927	49,660	— 1.23	1936	38,434	— 5·39
1928	48,939	— 1.45	1937	36,082	— 6.46

been few changes during the year. Miss I. Cox and Miss E. Holly were appointed as school nurses in January, 1937, to fill the vacancies caused by the retirement of Miss L. F. Manning and the transfer of Mrs. C. B. Halls to the Knox Road and Crosby Road Special Schools, consequent on the retirement of Miss E. Fraser.

During the year eight members of the staff were absent, through illness for a period of one month or over.

No temporary assistance was necessary except at the Fyfield Open-air School, where Miss L. Shepherd was appointed to assist on the nursing staff during the holiday period. Nurse Taylor, of the school medical staff, was also drafted there temporarily in the early part of the year, while the matron was away on sick leave.

III. CO-ORDINATION OF THE HEALTH SERVICES.

"Co-ordination" as a name may be used so frequently as to be virtually a shibboleth; as a practice, if it is to be effective it should be exercised as completely as possible. In West Ham it may be said that co-operation between the various sections of the health services is practised extensively, but that the co-ordination of the school service with the health services generally, in so far as the fusion of staff and clinic premises are concerned, has not yet been effected.

With reference to the practice of co-operation, it may be said that the School Medical Officer is also Medical Officer of Health and Chief Tuberculosis Officer, and that in this way a united control of the various clinical services is attained. It should however be remembered that the co-ordination of the personnel ought to apply to assistants as well as to the head of the department. The true advantages of co-ordination can only be achieved if those officers who have to examine and treat the school child are able at times to engage practically in work which is somewhat outside their own particular field.

There is no doubt that the complete pooling of the resources of an Authority, so far as personnel and premises are concerned, has long had considerable support in official circles. For example, Sir George Newman wrote in 1928: "It would be inexpedient, and indeed wasteful, for an Education Committee to establish a properly equipped clinic for children of school age and a Health

Committee another one in an adjoining street for children under school age. It is obvious that there should be economic use of medical, surgical and dental clinics, of dispensaries, of X-ray or artificial light installations, of maternity and child welfare centres, of disinfecting stations, etc. Similarly, there should be appropriate employment of technical staff, doctors, dentists, consultants, school nurses, health visitors and sanitary inspectors, whatever Committee of the Authority be responsible for their appointment and the discharge of their major duties." Since these words were written the principle of complete co-ordination has been successfully carried out by many authorities, with a resultant increase in the experience and enthusiasm of the members of the respective staff, and an economic advantage to the authorities themselves.

IV. HYGIENE OF SCHOOL PREMISES.

During the year no new departures were introduced in connection with the hygiene of schools, but various minor improvements were effected in many schools. Any structural defects or matters relating to the heating, lighting, and ventilation of school premises are referred to the Authority's architect—J. H. Jacques, Esq., F.R.I.B.A.—to whom I am indebted for the following particulars.

At Three Mills School a central heating system was installed, and a new dining room was provided for the children. At Elmhurst Road and Hilda Road Schools the latrines were remodelled and modernised. Domestic hot water was installed at Grange Road, Tunmarsh Lane and Gainsborough Road Schools. At Cave Road, Credon Road, Drew Road, Odessa Road and Silvertown Infants' Schools the obsolete lavatory basins were removed, and lavatory troughs with spray taps were installed.

In the sphere of personal hygiene emphasis continued to be placed on the necessity for keeping the body clean. In the matter of cleanliness, habits can be inculcated at school which are of value in adult life, and it must be said that every encouragement is given to the children to use the baths which are installed in many schools. For example, at five schools, viz., Gainsborough Road, Rosetta Road, South Hallsville, Pretoria Road and Tollgate, spray baths are provided, and selected children are taken during school hours, with the consent of their parents, to the Corporation slipper baths

at Romford Road, Balaam Street, Plaistow Road, Silvertown and Fen Street. In addition, school children made 33,846 attendances at the Corporation's washing baths during the year—20,039 of these attendances having been made by boys and 13,807 by girls.

V. METHODS OF MEDICAL INSPECTION.

The current practice of routine examination of children in schools is based on the provisions of section 17 of the Board of Education (Special Services) Regulations, (18th August, 1925). This section makes it incumbent upon the authority to provide for the medical inspection of all children in public elementary schools as soon as possible in the twelve months following

(*a*) their first admission into public elementary schools, and

(*b*) their attaining the age of eight years, and

(*c*) their attaining the age of twelve years.

During the year there was no departure from the practice of carrying out the routine examination of all children in the three code age-groups. For practical purposes these are interpreted as follows:—

(*a*) children admitted to school for the first time during the year (*entrants*).

(*b*) children of eight years of age (*intermediates*).

(*c*) children who are expected to leave school, and who have not been previously inspected since they attained the age of twelve years (*leavers*).

The borough is divided into five sections for the purpose of school medical inspection. Each section is served by a school clinic, which is the headquarters of an assistant school medical officer, a school dentist, and a staff of nurses. The schools in each area are visited in rotation, and the head teachers in each school send out notices informing the parents when to attend for the medical inspection of their children. Those children who are absent are examined at a later visit. Owing to the absence of adequate rooms in which medical inspection can be carried out, arrangements have had to be made for the inspection to be held in other premises in certain cases. The following table gives the names of these schools and the premises which are used for inspection.

School.	Premises used for medical inspection
Clarkson Street	Public Hall, Canning Town
St. Margaret's	Public Hall, Canning Town
Holy Trinity	Public Hall, Canning Town
St. Luke's	The Boyd Institute, Tidal Basin
St. Francis'	Wesleyan Hall, The Grove, Stratford
St. Paul's	Mechanics' Institute (L.N.E.R.)
Colegrave Road	Mechanics' Institute (L.N.E.R.)
Rosetta Junior	Bancroft Hall, Custom House
St. James'	Hanford Memorial Hall, Forest Lane
St. Antony's	St. Antony's Hall, Forest Gate

In addition to the routine medical examination of children at schools, "special" examinations are carried out where necessary. These "specials" may be classified as follows:—

(*a*) children who do not fall within the three code age-groups, but who are examined at the school at the request of the head teacher during a routine visit;

(*b*) children who are sent by head teachers to the school clinics for the treatment of minor ailments;

(*c*) healthy children—classified as "other routines"—who are examined specially to decide their fitness for sport, for camp life, for school journeys; children may also be examined to decide their fitness for certain types of employment;

(*d*) other children who are referred in any way to the School Medical Officer for examination, advice, or treatment;

(*e*) children who are examined for the purpose of the compilation of a census of exceptional children (see Table III. of Appendix to this section).

During 1937 the number of visits to schools for the purpose of routine inspection of children—each completed inspection of the whole of the children in the code age-groups in the school counting as one visit—was 97*. The number of children examined as "routines" and "other routines" was 14,340, of whom 7,208 were boys and 7,132 girls. This figure represents an increase of 615 over the corresponding figure for the previous year. The details of these figures are given in Table III.

* The figures given in sections V to XVI of this report relate to elementary schools only.

TABLE III.

ROUTINE INSPECTIONS.

Code group	Boys	Girls	Total
Entrants (within 12 months of admission)	2,154	2,256	4,410
Intermediates (8 years)	2,090	1,852	3,942
Leavers (over 12 years)	1,999	2,068	4,067
Other routine inspections	965	956	1,921
Total	7,208	7,132	14,340

In addition to the above, special inspections, as defined above, were made on 16,062 children, of whom 8,690 were boys and 7,372 girls. This figure represents an increase of 46 on the corresponding figure for the previous year. Details of these special inspections, and of re-inspections, are given in Table IV.

TABLE IV.

SPECIAL INSPECTIONS AND RE-INSPECTIONS.

		Boys	Girls	Total
Special inspections	(*a*) in schools	349	458	807
	(*b*) at clinics	8,341	6,914	15,255
	Totals	8,690	7,372	16,062
Total re-inspections		—	—	7,452

The variation in the numbers of routine examinations, special examinations, and re-examinations during the last ten years are shown in Table V.

The rates which are given in this table bring out the interesting feature that, while there has been no significant variation in the proportion of children who are examined at routine inspection, there has apparently been a slight increase in the proportion who are examined as "specials".

Reference has already been made to the fact that in certain quarters there is a feeling that the time-honoured method of

detecting children who require treatment—namely, by routine medical inspection at long-term intervals in the school life of the

TABLE V.

ROUTINE AND SPECIAL INSPECTIONS.

Year	School population (*)	Routine inspections. (†)		Special inspections.		Re-inspections.
		No.	Rate per cent.	No.	Rate per cent.	
1928	48,939	19,861	40.6	17,334	35.4	7,069
1929	47,278	17,071	36.1	15,654	33.1	7,335
1930	46,511	17,516	37.7	15,508	33.3	7,966
1931	45,911	18,807	41.0	9,843	21.4	9,825
1932	45,282	19,837	43.8	17,420	38.5	9,965
1933	44,720	17,164	38.4	18,593	41.6	7,451
1934	43,227	14,558	33.7	15,776	36.5	6,638
1935	40,625	15,440	38.0	15,609	38.4	7,243
1936	38,434	13,725	35.7	16,016	41.7	5,733
1937	36,082	14,340	39.7	16,062	44.5	7,452

(*) The "school population" is that given by the Chief Medical Officer of the Board of Education in his Report for the year indicated.

(†) Includes "other routine inspections."

TABLE VI.

DEFECTS FOUND WHICH REQUIRED TREATMENT.

Year	At routine examination		At special examination.	
	No.	Percentage.*	No.	Percentage.*
1928	6,424	13.1	13,178	26.9
1929	4,095	8.7	13,711	29.0
1930	4,513	9.7	13,880	29.8
1931	5,456	11.9	13,432	29.3
1932	5,164	11.4	14,986	33.1
1933	3,614	8.1	14,927	33.4
1934	3,001	6.9	14,978	34.6
1935	2,774	6.8	15,327	37.7
1936	2,600	6.8	15,863	41.3
1937	2,802	7.8	17,177	47.6

* The percentages in these columns are calculated on the school populations given in Table V.

individual—has perhaps outlived its usefulness. There is no doubt that this method has given good results in the past, but

there is some evidence that under present day conditions it is perhaps somewhat wasteful. For example, Table VI shows the number of defects which were discovered on routine examination and at special examinations respectively for the ten years 1928—1937. The table also shows those figures expressed as percentages of the school population for each year.

This table brings out quite clearly the fact that routine inspections are becoming less and less fruitful of results as the years pass, while the number of defects which are discovered as a result of special examinations is increasing steadily. In fact, the proportion of defects found at special examinations per 100 of the school population in 1937 was 77·5 per cent. greater than the corresponding figure for 1928. When account is taken of the fact—as is shown in Table V—that during this period there has been only a slight increase in the proportion of children who are examined as "specials", this increase in the positive findings at examinations is remarkable. It can hardly be that doctors are more efficient at spotting defects. The only other alternative which seems to merit serious consideration is the suggestion that teachers are becoming more adept in recognising those children who should have a special examination.

A casual inspection of treatment tables for a series of years will show that the bulk of the defects which are discovered at routine examinations is made up of cases of visual defects, squint, enlarged tonsils and adenoids, otitis media, anaemia, and simple lung diseases. When these conditions—which, with the possible exception of diseases of the throat and nose, can often be suspected by a nurse or a teacher—are excluded, little remains, and the question arises whether it is economic to ask a doctor to devote a considerable proportion of his time to the detection of the residue by routine examination.

The School Medical Officer of Manchester has expressed his dissatisfaction with the existing procedure, and he has suggested that the time of the school doctor would be better employed in schools if the present system of routine medical inspection were made less rigid and severe, so that the doctor could, by more frequent attendance at his schools, pass under review any child who appeared to merit his attention. A similar scheme has been tried unofficially with considerable success by the School Medical Officer of Leicester. The results which have emerged regarding

the efficiency of routine examination in West Ham have not served to alter my opinion that some modification of the present system might give better results.

VI. THE FINDINGS OF MEDICAL INSPECTION AND RESULTS OF TREATMENT.

The following sections deal with groups of diseases, and for convenience the arrangements for treatment and its results are discussed under each condition.

General Discussion of the Findings on Inspection.

Of the 14,340 elementary school children who had routine inspections in schools, 2,605, or 18.1 per cent. were found to require treatment (excluding uncleanliness, malnutrition, and dental disease). The percentages of children in the three prescribed age groups who required treatment are given in Table VII.

Table VII.

Percentage of children examined who required treatment.

Age groups.	West Ham.	England & Wales, 1936.	London, 1936.
Entrants	17.21	16.1	14.8
Intermediates	21.74	18.5	16.6
Leavers	20.94	16.9	16.3

It will be seen from this table that at all ages inspected the proportion of West Ham school children who required treatment was slightly greater than the corresponding proportions for London children and for children in England and Wales as a whole. This slight excess is no doubt due, at least in part, to the industrial character of the district.

Certain defects will now be considered in detail.

(*a*) Nutrition. The popular conception of nutrition is connected mainly with the height, weight, and general "build" of the individual. Within recent years it has come to be recognised that the detection of malnutrition is a very complex problem, and it seems desirable therefore to discuss this question from two distinct angles.

(i) *Height and weight.* The average height and weight of children examined in the three age groups is given in Table VIII.

TABLE VIII.

AVERAGE HEIGHT AND WEIGHT, 1937.

Age (years)	Boys			Girls		
	No. examined	Average height in inches	Average weight in pounds	No. examined	Average height in inches	Average weight in pounds
5	744	43.0	41.0	635	42.2	40.1
8	1,535	49.0	56.0	1,479	49.0	54.2
12	1,076	56.3	80.1	1,724	57.1	82.8

In this table the figures given for the number examined at each age refer to both heights and weights.

Many investigations have demonstrated the relative increase in the heights and weights of the children of to-day as compared with children at corresponding age groups in pre-war years. The figures for West Ham children are set out in Table IX, which shows the average heights and weights of children in the three code age-groups for each year since 1930. The table also gives the corresponding figures for the year 1927, and also for the year 1914, in respect of children at ages 5 and 12 years. (Mean heights and weights are also available for the 8 year group, but the observations upon which these are based are too small to make the results significant.) All the means given in the table were calculated from samples which were large enough for the purpose; the smallest sample consisted of 635 children, and the largest of 2,891.

The average heights and weights for 1937 are compared with the corresponding figures for 1914 and for 1927 respectively in Table X.

Further examination of these figures is necessary in order to reach detailed conclusions, but in certain cases the differences are sufficiently striking to warrant some comment. The remarkable increase in the weight of 12-year old children, as compared with the average weight of children at this age in 1914, is considerably greater than the increase observed in many other areas.

Table IX.

Average Heights and Weights in Different Age-groups.

Year	5 years				8 years				12 years			
	Boys		Girls		Boys		Girls		Boys		Girls	
	Ht. (ins)	Wt. (lbs)	Ht. (ins)	Wt. (lbs)	Ht. (ins)	Wt. (lbs)	Ht. (ins)	Wt. (lbs)	Ht. (ins)	Wt. (lbs)	Ht. (ins)	Wt. (lbs)
1914	39·9	37·6	39·5	37·3	—	—	—	—	54·2	70·3	54·9	72·6
1927	41·3	41·1	41·1	38·9	47·5	52·0	47·3	51·0	55·0	75·7	55·7	76·2
1930	40·9	40·2	41·2	38·9	47·9	54·1	47·7	53·3	55·3	76·7	55·9	78·9
1931	41·6	40·0	41·4	39·0	48·1	54·8	47·3	52·2	55·3	77·4	56·3	79·5
1932	41·7	39·6	41·5	39·2	47·5	52·5	48·8	53·4	55·6	76·9	56·1	78·9
1933	42·2	40·6	42·4	40·0	48·0	55·6	47·4	54·0	55·8	77·9	56·1	80·2
1934	41·8	40·2	41·6	39·2	47·4	57·4	48·3	53·2	55·8	78·1	56·5	82·1
1935	41·8	40·4	41·8	39·8	48·7	57·6	48·5	54·1	56·0	79·8	56·6	83·0
1936	42·0	41·0	41·0	39·8	48·6	56·0	48·8	54·4	56·4	80·3	57·1	83·0
1937	43·0	41·0	42·2	40·1	49·0	56·0	49·0	54·2	56·3	80·1	57·1	82·8

Table X.

Comparative heights and weights.

Age.		Increase or decrease compared with 1914.		Increase or decrease compared with 1927.	
		Height (inches)	Weight (pounds)	Height (inches)	Weight (pounds)
5 years	(i) Boys	+ 3·1	+ 3·4	+ 1·7	− 0.1
	(ii) Girls	+ 2·7	+ 2·8	+ 1·1	+ 1·2
8 years	(i) Boys	—	—	+ 1·5	+ 4·0
	(ii) Girls	—	—	+ 1·7	+ 3·2
12 years	(i) Boys	+ 2·1	+ 9·8	+ 1·3	+ 4·4
	(ii) Girls	+ 2·2	+ 10·2	+ 1·4	+ 1·4

The greater part of this increase can evidently be assigned to the years between 1914 and 1927, and although detailed figures are not available for these years, it would seem that the increase probably began several years after the end of the war. It is strange that in the last ten years boys of 12 years should have shown such a disproportionate increase in weight as compared with girls at this age. It will be noted that a decrease in the average figures is found in only one group, and that this decrease is so small as to be insignificant.

(ii) *Nutrition surveys.* Two years ago the Board of Education made some alterations in the method of classifying varying degrees of nutrition, and the complete results of the assessment of the children in this area will be found in Table II of the Appendix to this section. The percentages of children who were assessed as falling in the four categories in the various age-groups are shown in Table XI.

TABLE XI.

PERCENTAGE DISTRIBUTION OF GRADES OF NUTRITION.

Age.	A. (Excellent)	B. (Normal)	C. (Slightly subnormal)	D. (Bad)
5 years	12.97	75·51	11.43	0.09
8 years	13.93	73.01	12.83	0.23
12 years	21.24	69.29	9.37	0.10
Other routines	24.41	68.87	6.66	0.05
Total (1937)	17.11	72.16	10.59	0.13
Total (1936)	15.02	72.51	12.15	0.32
England and Wales (1936)	14.6	74.2	10.5	0.7

Superficially the figures for West Ham compare favourably with those for England and Wales. It should however be noted that the opinion is gradually gaining ground that the grade of nutrition, as gauged in the usual way by clinical examination, is possibly not of great value. In a recent investigation Mr. R. Huws Jones adduced some convincing statistical evidence on this point, and the discrepancies which he showed to exist between the findings, not only of different doctors who examined the same children, but also of the same doctors who examined the same

children after an interval of time, are possibly sufficient to discredit attempts at accurate work in this direction.

It is obvious that the correct method of dealing with "malnutrition" is to give the child adequate "nourishment." This practice is not quite so simple as the description seems to imply. Emphasis is now constantly placed on the fact that the child's state of nutrition depends not only on the quality and quantity of the food which he eats, but also on important factors such as fresh air, sunlight, and adequate exercise. The word "nutrition" means "the nourishment of the child or the general well-being of the child. It is the process of normal growth and healthy maintenance of the child's body in function as well as in substance." In treating the child who is suffering from deficient nutrition, therefore, an endeavour is made to compensate him for his previous lack of all or any of these factors. Severe cases may be admitted to a day or residential open-air school such as Fyfield, and the results obtained will be found in the appropriate section of this report. Other children may be sent to convalescent homes. In necessitous cases free meals may be provided, and those who can do so may participate in the voluntary milk scheme which is in operation in the schools.

(*b*) Uncleanliness. Dirty and verminous children who are discovered at routine or special inspections, or during cleanliness surveys, are followed up at their homes until they are clean. A certain number are cleansed at the school clinics, the consent of the parents having been first obtained. The number of children examined was 79,476. The conditions found were as follows:—

Ova	6,805
Ova and pediculi	1,230
Body pediculi	1
Head and body pediculi	15
Sores	379
Dirty	113

The percentages for head and body vermin were 1.56 and 0.02 respectively. The number of children who were visited at their homes was 4,260, and the number visited at school was 7,614.

In connection with this work 1,554 unclean heads were dealt with. In addition 9 cases in which the body was unclean,

and 10 cases of skin disease were dealt with. Defective clothing was remedied in 31 instances.

It was not found necessary to cleanse any children under Section 122 of the Children's Act, but 86 heads were cleansed at the school clinics by nurses.

(*c*) MINOR AILMENTS. The treatment of minor ailments and diseases of the skin is undertaken at the school clinics. Details of the treatment carried out during 1937 are given in Table IV of the Appendix to this section. The table shows that the total number of cases who were treated at these clinics during the year was 12,937. This figure may be compared with a total of 12,896 for 1936. It is of course necessary for many patients to attend on more than one occasion, and some indication of the work carried out at these clinics will be obtained from the following table. (The Stratford Clinic is served by two doctors.)

Clinic.	No. of attendances for treatment.
Stratford (*a*)	12,279
Stratford (*b*)	10,698
Balaam Street	12,966
Swanscombe Street	13,711
Rosetta Road	15,864
Total attendances	65,518

Skin diseases. A comparison of the incidence of various skin diseases, as judged by the number of patients who attended for treatment at the clinics, is instructive. Table XII gives these figures for twelve years.

This table brings out certain satisfactory features. Ringworm, both of the scalp and of the body, has shown a progressive and marked decline, and the incidence of impetigo has been halved in ten years. These facts may indicate an improvement in the handling of patients by their mothers, so that children who are infected are kept away from others. On the other hand, the incidence of scabies has increased three fold since 1927. This increase is very regettable, but is quite analogous to a similiar increase which has been noted in other large areas.

Ringworm. Only 23 cases of ringworm of the scalp were treated during the year. This low incidence is satisfactory. The authority has an arrangement with the London Hospital for X-ray treatment, and each patient is seen by a school doctor before the commencement of treatment and later before he is re-admitted to school. The number of patients treated by X-rays during the year was 13. The incidence of ringworm of the body fell considerably; the number of cases treated during the year was 98, as compared with 149 in 1936.

As a result of complaints which were received regarding

TABLE XII.

CASES OF SKIN DISEASES TREATED.

Year.	Ringworm of scalp.	Ringworm of body.	Scabies.	Impetigo.	Other skin diseases.
1926	107	277	64	1,053	2,631
1927	84	254	82	1,271	2,986
1928	80	208	97	1,202	2,823
1929	62	179	97	1,164	2,945
1930	53	151	119	1,142	2,725
1931	48	142	165	1,174	2,087
1932	46	136	242	1,025	2,127
1933	27	116	213	1,052	1,959
1934	13	109	221	802	2,495
1935	13	146	168	679	3,476
1936	23	149	216	701	3,992
1937	23	98	254	637	3,233

the spread of ringworm during the year 1937, it was decided to exclude from school any child who was suffering from ringworm of the body, in addition to cases of ringworm of the head.

Scabies. Reference was made above to the regrettable increase in the incidence of this disease. So far as the household is concerned, this complaint is a particularly difficult one to deal with. The individual patient usually reacts rapidly to proper treatment and frequent changes of clothing, but it is well known that adults are frequently infected, and treatment in these cases is most difficult. There is no doubt that the only satisfactory method of dealing with the condition is by continuous treatment of all the

members of the household simultaneously, together with disinfection, repeated if necessary, of all infected clothing and bedding.

At the present time it can hardly be said that the Authority has a complete scheme for the treatment of scabies. The usual method suggested is the application of sulphur ointment by the parent. From what has been said above, however, it will be

TABLE XIII.

ELEMENTARY SCHOOLS. EYE CONDITIONS.

RESULTS OF ROUTINE AND SPECIAL INSPECTIONS.

Year	Minor eye conditions			Defective vision (excluding squint)			Squint		
	Requiring treatment.	Requiring observation.	Total	Requiring treatment.	Requiring observation.	Total	Requiring treatment.	Requiring observation.	Total
1926	1,479	43	1,522	1,649	138	1,787	343	32	375
1927	1,371	20	1,391	1,664	183	1,847	381	75	456
1928	1,204	26	1,230	1,974	144	2,118	397	25	422
1929	1,203	19	1,222	1,572	127	1,699	328	14	342
1930	1,214	19	1,233	2,049	134	2,183	361	4	365
1931	828	35	863	2,106	275	2,381	335	23	358
1932	1,250	29	1,279	2,528	236	2,764	418	56	474
1933	1,396	18	1,414	1,979	252	2,231	364	11	375
1934	1,261	27	1,288	1,564	226	1,790	302	22	324
1935	1,163	36	1,199	1,210	130	1,340	285	23	308
1936	1,167	29	1,196	1,072	112	1,184	240	19	259
1937	1,018	19	1,037	1,281	95	1,376	415	17	432

realised that the provision of one or more cleansing stations by the Local Authority would probably serve to reduce the duration of the disease in individual cases and to prevent the spread of infection to other members of the family.

(*d*) VISUAL DEFECTS AND EYE DISEASES. A summary of the

results of routine and special inspections with reference to eye conditions for the last twelve years is given in Table XIII.

Further information regarding the incidence of eye conditions may be obtained from Table XIV, which deals with those children who were treated for eye conditions during the same period.

TABLE XIV.

ELEMENTARY SCHOOLS.

SUMMARY OF TREATMENT OF VISUAL DEFECTS AND EYE DISEASES.

Year	Minor eye defects	Errors of refraction	Other defects	Spectacles prescribed	Spectacles obtained
1926	1,231	1,989	14	1,790	1,663
1927	1,060	2,082	22	1,953	1,740
1928	1,089	2,086	13	1,965	1,530
1929	1,123	1,835	21	1,710	1,558
1930	1,073	2,959	25	2,850	2,517
1931	1,191	3,016	—	2,809	2,632
1932	1,208	3,621	12	3,068	2,717
1933	1,303	3,653	31	2,961	2,813
1934	1,259	3,484	—	2,849	2,604
1935	1,153	3,483	—	2,693	2,560
1936	1,111	2,853	—	2,472	2,312
1937	969	2,043	—	1,877	1,790

The actual incidence of these eye conditions, based on the total cases requiring treatment and observation for last year, and on the school populations given in Table II is set out in Table XV.

It may be inferred from this table that there has been no marked change in the incidence of minor eye defects. It would appear that defective vision was definitely more frequently found six years ago than it is to-day. Apart from the years 1932 and 1937 the incidence of squint showed no marked variations. The high incidence of this condition in 1937 is remarkable, and suggests

that the personal factor of the oculist is partly responsible. No definite conclusions can be drawn from these figures without the application of more advanced methods.

(i) *Minor eye diseases.* Although there was no marked change in the actual incidence of these conditions, as found at routine and special inspections, there was a welcome reduction of the number of children who required treatment at the clinics. So far as secondary school pupils were concerned, 9 required treatment at the clinics, and 5 were treated otherwise.

(ii) *Defective vision and squint.* Reference has already

TABLE XV.

INCIDENCE OF EYE CONDITIONS PER 1,000 SCHOOL POPULATION.

Year.	Minor defects.	Defective vision (excluding squint).	Squint.
1926	30.3	35.5	7.5
1927	28.0	37.2	9.2
1928	25.1	43.3	8.6
1929	25.8	35.9	7.2
1930	26.5	46.9	7.8
1931	18.8	51.9	7.8
1932	28.2	61.0	10.5
1933	31.6	49.9	8.4
1934	29.8	41.4	7.5
1935	29.5	33.0	7.6
1936	31.1	30.8	6.7
1937	28.7	38.1	12.0

been made to the incidence of this condition in the population of the elementary schools. In secondary schools the number of children who were found to require treatment was 358, of whom 29 had their vision assessed as defective as a result of a special inspection. The number of children in these schools who were found to require observation but not treatment was 19. The incidence of squint in secondary school children was very low, only eleven cases of this type having been observed. This was probably due to the fact that children suffering from squint had had the defect corrected before they entered the scondary school.

TREATMENT OF EYE CONDITIONS. All cases of visual defect are examined by the school oculist. This specialist devotes ten sessions per week to these refractions. Each case is re-examined by the respective assistant school medical officer within three months after the primary examination. Satisfactory dark rooms for ophthalmological work have been constructed at two of the school clinics.

The following table gives a resumé of the work of the school oculist during 1937:—

	Elementary Schools.	Higher Education.	Special Schools.
Cases referred to oculist	2,531	559	40
Number who attended	2,018	479	32
Percentage attendance	79·7	85·7	80.0
Glasses ordered ..	1,835	450	30

The total number of clinic sessions devoted to refraction work was 362. Those children who did not keep the first appointment were followed up by the school nurses, and in most cases further appointments were made.

The following is a report by Dr. Agnes A. S. Russell, the school oculist:—

"The work of the ophthalmic clinic includes the examination of the eyes of all school children referred by the assistant school medical officers. The children examined are mostly those who require glasses because of defective vision, or strabismus, or because of headaches due to eyestrain; they also include a number of cases of eye diseases which require treatment.

Where glasses are prescribed the children are re-inspected after obtaining them, either in the ophthalmic clinic or at a school clinic by the assistant school medical officers, who have been provided with a copy of the report of the ophthalmic examination.

I have found that the number of children with strabismus forms a large proportion of the children attending the ophthalmic clinic. As the majority of these cases benefit by treatment additional to the correction of the refractive error, I have all such cases under observation. These children attend the clinic at frequent intervals, and the nature of the condition and the neces-

sary care are explained carefully to the parents. Orthoptic training has also been started in the clinic for a few of the suitable cases, but much more can be done in this direction. The following are some figures regarding the special work on cases of strabismus during 1937.

Among the children who attended the eye clinic during 1937, there were 543 cases of strabismus, and of these 306 attended more than once during the year. Some had as many as eight or nine visits for advice and following up of treatment by occlusion.

The ages of children suffering from strabismus are given hereunder:—

Age.	Under 6.	6—	8—	11—
No.	123	127	200	93

The number of children who attended for orthoptic exercises was 20; these children made a total of 170 attendances.

The carrying out of occlusion in cases of strabismus requires the active co-operation of the teachers in schools. This has been freely given, and the results are satisfactory in many cases."

I agree with the suggestions of Dr. Russell that an extension of orthoptic treatment is desirable. This matter will have my attention in the near future.

(*e*) NOSE AND THROAT DEFECTS. A summary of the results of examination and of the treatment carried out in children suffering from nose and throat defects, and also in children who had diseases of the ear, during 1937 will be found in Table XVI.

No secondary school children received any other form of treatment under these headings.

No direct arrangements are made by the Authority for treatment of defects of the throat and nose. All children who are recommended for operative treatment are, by arrangement with the respective hospitals, referred to Queen Mary's Hospital for the East End, to St. Mary's Hospital, Plaistow, and to the Children's Hospital, Balaam Street. During the year 627 children were operated on for these conditions, and 87 received treatment by private practitioners or in hospitals outside the Authority's

Table XVI.

Nose and throat work. 1937.

(a) Elementary education.

	Enlarged tonsils.	Adenoids.	Enlarged tonsils and adenoids.	Other Conditions.	Total.
Cases referred by School Medical Officer for treatment	188	56	812	287	1,343
No. of children who received operative treatment—					
(*a*) under Authority's scheme ..	58	25	537	2	622
(*b*) by general practitioner or local hospital	2	2	75	7	86
Other forms of treatment ..	—	—	—	143	143
Totals ..	248	83	1,424	439	2,194

(b) Secondary schools.

	Enlarged tonsils.	Adenoids.	Enlarged tonsils and adenoids.	Other Conditions.	Total.
Cases referred by School Medical Officer for treatment	13	1	5	—	19
No. of children who received operative treatment—					
(*a*) under Authority's scheme ..	2	—	3	—	5
(*b*) by general practitioner or local hospital	—	—	1	—	1
Other forms of treatment ..	—	—	—	—	—
Totals ..	15	1	9	—	25

scheme. In addition to these children who had operative treatment, 171 children were treated by other methods.

(*f*) EAR DISEASE AND DEFECTIVE HEARING. Some indication of the incidence of these conditions will be found in Table XVII, which gives for a series of twelve years the number of children who were found to be suffering from these conditions. In this table the numbers refer to children who required either treatment or observation, and the rates are expressed per 1,000 of the school population given in Table II.

The results of routine and special inspections at institutions for higher education show the following:—

	Requiring treatment.	Requiring observation.	Total.
Defective hearing	3	2	5
Otitis media	14	2	16
Other ear diseases	7	1	8
Total	24	5	29

Of the total cases referred for treatment, 875 children suffering from ear diseases or defective hearing were treated at the school clinics; of these 6 were children attending institutions for higher education. The number of children who received treatment privately was 73, of whom 4 were attending schools for higher education.

In 1937 there were two deaf centres in the Borough, situated respectively at Water Lane and Frederick Road. Further notes on these centres appear on page 417. The children at these centres are examined once a year by the Authority's consultant aural surgeon.

The following is a report by Mr. Fred Stoker, F.R.C.S.:—

"The deaf children who came up for examination in July, many of whom have been under my observation for some years, may be classified as coming under one of the following categories:

(*a*) Cases of *inherited deafness* in which total absence of hearing has been evident from birth.

(*b*) Cases of *congenital deafness* in which the defect has been absolute since birth.

(*c*) Cases of total deafness secondary to *acute infectious* fevers in infancy.

(*d*) Cases of partial deafness due to the *sequelae of local inflammatory conditions*.

Classes (*a*) and (*b*) are caused by developmental defects in the labyrinth or cochlear nerve, (*c*) to disorganization of the same

TABLE XVII.

ELEMENTARY EDUCATION. EAR DEFECTS.

Year	Defective hearing		Otitis media		Other ear disease		Total ear conditions	
	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000
1926	367	7·3	769	15·3	262	5·2	1,398	27·8
1927	349	7·0	780	15·7	268	5·4	1,397	28·1
1928	267	5·5	780	15·9	251	5·1	1,298	26·5
1929	199	4·2	819	17·3	202	4·3	1,220	25·8
1930	161	3·5	836	18·0	228	4·9	1,225	26·3
1931	134	2·9	730	15·9	181	3·9	1,178	25·7
1932	235	5·2	880	19·4	363	8·0	1,478	32·6
1933	177	4·0	852	19·0	459	10·3	1,488	33·3
1934	96	2·2	770	17·8	376	8·7	1,242	28·7
1935	99	2·4	659	16·2	401	9·9	1,159	28·5
1936	114	3·0	588	15·3	435	11·3	1,137	29·6
1937	88	2·4	493	13·7	484	13·4	1,065	29·5

structures, and (*d*) to the residua of simple inflammation of the labyrinth or to simple or suppurative inflammation of the middle-ear. Cases coming under (*a*), (*b*) and (*c*) cannot be remedied, so far as the hearing is concerned, by any treatment. Those included under (*d*) can frequently be benefited to the extent of the sufferers regaining at least useful hearing. The (*d*) category forms the minority of the cases seen.

In the circumstances, therefore, the problem lies chiefly in converting the totally and permanently deaf into useful members of society. This difficult task, it is my privilege to say, is being carried out with conspicuous and often astonishing success by the staff of the West Ham centres for deaf children. There are, it is true, certain cases that do not respond satisfactorily even to the most meticulous care and skill. These children unhappily suffer from congenital mental defects in addition to deafness, but even they, I have observed, benefit materially from the environment in which they are placed."

(*g*) DENTAL DEFECTS. My report on school dental work will be found on pages 389-396 of this report.

(*h*) ORTHOPAEDIC AND POSTURAL DEFECTS. The Authority has a comprehensive scheme for the treatment of children suffering from orthopaedic defects. The arrangement is with the Children's Hospital, Balaam Street, which specializes largely in work of this type, and the Authority undertakes financial responsibility for patients treated at the Hospital. During the year 1937 the number of children who were in-patients in the hospital was 24, and the number treated as out-patients was 91. In addition to these elementary children, 5 secondary school children and 14 children from special schools attended as out-patients, so that the total number of children treated under the Authority's Scheme at this hospital was 134. Those cases of orthopaedic and postural defects which were not treated under the Authority's scheme were dealt with in other ways, and it has been ascertained that 41 elementary and 7 secondary school children were treated thus during the year. In addition to this hospital treatment for early cases, the Committee from time to time maintain special cases at orthopaedic hospital schools approved by the Board of Education. Any children who are found to be suffering from minor postural defects are reported to their head teachers on confidential lists. Recommendations regarding any definite exercises or drill which may be required are given according to the nature of the defect.

The following report is based upon data supplied by Mr. Kenneth Heritage, F.R.C.S., the orthopaedic surgeon to the Children's Hospital, Balaam Street, Plaistow.

In-patients. During the year 1937 the number of West Ham school children who received treatment as in-patients of this

hospital was 32, 28 of whom were admitted during the year. The number of patients who were in residence on the 1st January, 1937, was 4. There was one death in the hospital during the year. Twenty-eight patients were discharged and two patients were still under treatment on the 31st December, 1937. Of the patients who were treated, fifteen were males and sixteen females. The patient who died was a female of six years who was suffering from acute osteomyelitis; the cause of death was staphylococcal septicaemia. Of the patients who were discharged ten were cured, eight were much improved, seven improved and three showed no improvement. The duration of treatment is shown in the following table:—

—2 weeks	—4 weeks	—2 months	—3 months	—6 months	Over 6 months	Total
5	8	9	6	2	2	32

TABLE XVII(*a*).

Condition	Cured	Much improved	Improved	Not improved	Total
Flat foot	7	10	7	—	24
Spastic paralysis	—	8	6	—	14
Scoliosis	4	5	4	—	13
Anterior poliomyelitis ..	—	7	4	—	11
Hammer toe	3	3	2	—	8
Kyphosis	4	3	—	—	7
Knock knee	3	1	—	—	4
Lordosis	—	4	—	—	4
Torticollis	2	—	—	—	2
Congenital dislocation of hip	—	2	—	—	2
Asthma	—	2	—	—	2
Chest deformity	—	—	2	—	2
Other conditions	8	6	2	1	17
Total ..	31	51	27	1	110

The cases treated consisted of the following:—Tuberculous joints 6; anterior poliomyelitis 4; spastic diplegia 3; osteomyelitis 2; torticollis 2; talipes 2; erb's paralysis 1; sclatter's diseases 1; congenital facial paralysis 1; congenital dislocation of hip 1; other conditions 9.

Treatment consisted of operative measures, conservative treatment by plaster and other appliances, and other measures.

Out-patients. The number of West Ham children who attended the Remedial Clinic as out-patients during the year was 110. These children made 2,324 attendances, giving an average of 21 attendances per patient. The results of treatment were as follows:—

Cured 31, much improved 51, improved 27, not improved 1.

Table XVII(*a*) gives the result of treatment in the more important groups of cases.

In many cases treatment was mainly by remedial exercises and massage, but a few patients were treated by diathermy.

(*i*) HEART DISEASE AND RHEUMATISM. During the year 1937 the number of children who were discovered to be suffering from organic heart lesions sufficiently severe to require treatment was 123. Of these 74 were discovered at routine inspections and 49 at special inspections. In addition 117 children were found to be suffering from organic lesions which were not sufficiently severe to require treatment. Among children attending secondary schools only one was discovered with a heart lesion which was sufficiently severe to require treatment.

Table XVIII gives particulars of the incidence of organic heart lesions during the last 12 years.

A special clinic for the treatment of heart disease and rheumatism has not yet been established in the borough. For a number of years, however, an attempt has been made to give these children the careful attention which they merit. Cases of this type, from whatever source referred, are examined by the Chief Assistant School Medical Officer and recommendations are made to parents and teachers regarding the treatment which should be adopted. In addition certain children are sent for in-patient treatment at various heart hospital schools; the majority of the girls being sent to West Wickham and of the boys

to the St. John's Open-air School for Heart Cases, Woodford Bridge. During the year 1937 the number of children treated as in-patients in these special institutions was 31.

The following is a report from Dr. Wilfrid Sheldon, who was in charge of the patients treated at the St. John's Open-air School for heart cases. It should be noted that this is a general report, which applies also to patients other than those admitted from West Ham. The report is useful in that it indicates the main dangers in the treatment of patients who are suffering from

TABLE XVIII.

ELEMENTARY EDUCATION. INCIDENCE OF ORGANIC HEART LESIONS.

Year.	Organic lesions.		Total.	Rate per 1,000 school pop.
	For treatment.	For observation.		
1926	41	149	190	3.8
1927	63	126	189	3.8
1928	103	154	157	3.2
1929	61	110	171	3.6
1930	46	92	138	3.0
1931	56	163	219	4.8
1932	67	175	242	5.3
1933	83	139	222	5.0
1934	45	133	178	4.1
1935	72	193	265	6.5
1936	85	173	258	6.7
1937	123	117	240	6.6

rheumatic heart disease, and the most recent methods of treatment.

"It is a pleasure to record the completion of another year of useful work at St. John's School. The School is a residential home for convalescent boys, and contains 124 beds, of which 40 are reserved for boys with rheumatic heart disease, and it is with this latter group that this report is concerned. During the last year 66 cases of rheumatic heart disease have been admitted and about an equal number discharged. During the year two of the children have succumbed to progressive cardiac failure, associated with a fresh exacerbation of acute rheumatic inflammation, and it may be added that in view of the advanced state of the rheumatic process in some of the boys, it is perhaps a matter for congratu-

lation that the mortality rate should be so low. This reflects great credit on the patience and skill of the sisters who have to look after these cases.

During the winter a long epidemic of diphtheria occurred, necessitating the removal of several of the boys to the local isolation hospital. The epidemic is now over, and the boys have all returned to the school, and the condition of their hearts seems none the worse for this additional infection.

The children in the heart beds are managed along the lines customary in residential heart homes, that is to say, they are slowly worked through a series of grades, the first consisting of complete rest in bed, and the fifth and last grade being reached when they are up all day and leading what amounts to a normal life, with the exception of a mid-day rest and curtailment of vigorous exercises. The time occupied in each grade varies considerably with the individual children, the passage from one grade to the next being governed by the rate of the heart, the increase in weight, and the general well-being. A blood-sedimentation-rate test is not employed in this home, because there are no satisfactory facilities for performing the test. This may perhaps mean that the boys pass a little more slowly from grade to grade than might otherwise be the case, but with regard to heart children this can simply mean erring on the side of safety.

The clinical observation, already made in other similar institutions, to the effect that a streptococcal sore throat in a child with a rheumatic heart disease is likely to lead to a relapse of fresh rheumatism after an interval of two or three weeks, has been amply confirmed at St. John's school during the past five years—that is, since heart cases were particularly catered for. This would appear to be one of the most important recent additions to our knowledge of rheumatic heart disease. During the coming year it is hoped to co-operate with the rheumatic home at Baskerville, Birmingham, and the Cheyne Hospital, Chelsea, in an effort to determine whether drugs of the salicylate group, given at the time of the sore throat and continued for a period of one month, can do anything to mitigate or abort an ensuing rheumatic relapse. Although this aspect has already been mooted in medical literature, a decisive opinion awaits expression, and this is a question which homes such as St. John's are in a position to answer."

(*j*) TUBERCULOSIS. All definite cases of tuberculosis found by assistant school medical officers are notified to the medical officer of health. Suspicious cases are always referred to the tuberculosis officer for examination and report. The number of cases so referred during this year was 29.

The Council have a special sanatorium for children at Langdon Hill, Essex, with accommodation for 40 children. The tuberculosis officer is responsible for all children who are admitted to and discharged from this institution. All cases are examined by a school dental surgeon and treated where necessary before they are admitted. Particulars of the work of this institution are given in another section of this report.

Close co-operation between the tuberculosis section and the school medical section is maintained relative to school children who are considered by the tuberculosis officer to be unfit for school. These cases are notified to the school medical officer who officially excludes them from school attendance until they are considered to be fit for school. Many of these children do not show signs of active tuberculosis.

During the year 121 cases were reported by the tuberculosis officer as being unfit for school.

VII. SPECIAL TREATMENT SERVICES.

SCHOOL DENTAL SERVICE.

The staff of the Authority's school dental service consists at present of five whole time dentists, to each of whom an area is allotted, and each of whom carries out treatment in a school dental clinic. These dental clinics are distinct from any other dental clinics which may be conducted by the local authority. The dental clinics are not all equally suitable for the purpose for which they are being used, and the type of equipment also varies to a slight degree. General anaesthetics have not so far been used for extraction purposes.

Recently I have given considerable attention to all aspects of school dental work, and a report suggesting certain alterations in staffing, equipment and procedure was adopted by the Education Committee. In my next annual report I shall deal with this question in detail, and in the present report I intend to discuss the work which has been done during the last eighteen years—that

is, since the year in which the present type of statistical return was adopted. It is only by considering data for a series of years that any true appreciation can be obtained of the amount and type of work which is being done in an area. Similarly, it is only by such methods that the observer is able to appreciate the gradual change in the incidence of certain conditions.

Tables XIX and XX set out certain data which are essential for an appreciation of the incidence of dental conditions in the children of the area.

These two tables show the progress which has been made in the extension of the service. From 1920 to 1927 inclusive, inspection of school children was confined to those at the ages of 6, 7, and 8 years respectively. After the latter date children at other ages came to be examined more frequently. Although in 1937 the numbers examined in these other age groups were considerable, 11,909—or 65.6 per cent—of the 18,182 children who were examined at routine inspection fell within the age group 6—8 years. A complete dental service should provide equal facilities for examination of children in all age groups, and it is hoped that some progress in this direction will be made at an early date. The figures in the last column of Table XIX show a progressive increase. The high ratios in the last few years are probably due to two factors—an actual increase of the inspection work carried out by the school dentists, and a fall in the school population.

Table XX brings out the fact that there has been an increase in the proportion of children inspected who required treatment. The figures for West Ham do not differ very markedly from those for other areas, and the increase is probably due to a change in the conception of the type of lesion which is suitable for treatment. The seventh column of this table, in that it shows the degree to which parents are responding to the offer of treatment for those children who have been shown to require it, has points of interest. This figure is fairly constant for the country generally, and the ratios for West Ham are somewhat above those for other similar areas. In an ideal dental service, the full co-operation of hypothetical ideal parents would raise the figures in this column to approximately 100 per cent., but it will probably be long before even an approach to this high figure is attained.

Table XIX.

Elementary Education. Age Grouping of Children inspected by Dentists.

Year	No. of children at ages (years) who had routine inspections											Total routine inspections	Special inspections	Total inspections	Total inspections per cent. school population
	4	5	6	7	8	9	10	11	12	13	14				
1920	—	—	4,936	1,901	1,046	—	—	—	—	—	—	7,883	305	14,188	27·4
1921	—	—	8,063	11,189	2,654	—	—	—	—	—	—	21,906	530	22,436	42·6
1922	—	—	7,883	10,724	5,421	—	—	—	—	—	—	24,028	1,042	25,070	47·3
1923	—	—	4,972	6,706	2,874	—	—	—	—	—	—	14,552	1,127	15,679	29·6
1924	—	—	5,453	6,951	3,685	—	—	—	—	—	—	16,089	1,045	17,134	33·5
1925	—	—	6,078	6,301	3,609	—	—	—	—	—	—	15,988	1,421	17,409	34·4
1926	—	—	7,083	6,598	2,483	—	—	—	—	—	—	16,164	1,794	17,958	35·6
1927	—	—	5,499	7,102	2,478	—	—	—	—	—	—	15,079	2,958	18,037	36·3
1928	37	105	5,245	5,895	2,562	66	71	84	104	146	11	14,326	3,537	17,863	36·5
1929	261	437	4,336	4,565	2,490	578	434	364	439	454	34	14,392	3,820	18,212	38·5
1930	576	1,224	6,053	6,206	3,591	1,333	1,356	832	721	842	149	22,883	3,706	26,589	57·2
1931	396	851	5,812	5,576	3,343	1,011	1,009	1,333	855	790	129	21,105	3,551	24,656	53·7
1932	461	957	6,357	6,258	3,347	1,072	1,076	950	820	542	80	21,920	4,189	26,109	57·7
1933	521	1,064	5,452	4,728	2,997	964	964	1,151	993	1,189	79	20,102	4,736	24,838	55·5
1934	406	720	4,455	4,372	3,828	821	887	728	721	656	91	17,685	3,843	21,528	49·8
1935	378	688	4,049	3,899	3,820	673	672	697	854	900	44	16,674	3,890	20,564	50·6
1936	459	697	3,743	3,721	3,835	1,039	1,099	1,036	861	1,087	57	17,634	4,791	22,425	58·3
1937	375	779	3,742	4,040	4,127	1,021	934	944	1,033	1,081	106	18,182	4,559	22,741	63·0

England and Wales, 1936. Routine inspections — 3,199,592
Special inspections — 264,356
Total inspections — 3,463,948
Total average attendances (1935-36) — 4,748,453
Total inspections per cent. of school population — 73·1

Table XX.

Elementary education. Dental inspection and treatment.

Year.	Total inspections	No. requiring treatment.	Percentage of inspected who required treatment.	No. treated.	Percentage of inspected who were treated.	Percentage of those who required treatment who were treated	No. who required treatment as rate per cent. of school population.
1920	14,188	6,493	45·8	4,353	30·7	67·0	12·4
1921	22,436	9,453	42·1	2,831	12·6	29·9	18·0
1922	25,070	14,779	58·8	3,487	13·9	23·6	28·0
1923	15,679	8,692	55·4	6,241	39·8	71·8	16·4
1924	17,134	8,489	49·5	7,097	41·4	83·6	16·6
1925	17,409	7,528	43·2	6,321	36·3	84·0	14·9
1926	17,958	7,933	44·3	6,912	38·6	87·1	15·2
1927[a]	18,037	7,266	40·3	6,707	37·2	92·3	14·6
1928	17,863	7,228	40·5	7,213	40·4	99·8	14·8
1929	18,212	8,619	47·3	8,370	46·0	97·1	18·2
1930	26,589	12,700	47·8	10,101	38·0	79·5	27·3
1931	24,656	14,668	59·5	10,401	42·2	70·9	31·9
1932	26,109	15,409	59·0	10,805	41·4	70·1	34·0
1933	24,838	13,857	55·8	10,628	42·8	76·7	31·0
1934	21,528	12,505	58·1	9,875	45·9	79·0	28·9
1935	20,564	13,518	65·7	10,684	52·0	79·0	33·3
1936	22,425	15,046	67·1	10,489	46·8	69·7	39·1
1937	22,741	14,258	62·7	10,095	44·4	70·8	39·5
England and Wales, 1936.	3,463,948	2,425,299	70·0	1,536,627	45·3	63·4	51·2

Certain aspects of the arrangements made for inspection and treatment are set out in Table XXI. It will be seen that the number of half-days which are devoted to inspections has not

TABLE XXI.

ELEMENTARY EDUCATION. DENTAL INSPECTION AND TREATMENT.

Year	Half-days devoted to		Total half-days	Total attendances for treatment	Average No. inspected per inspection session	Average No. treated per treatment session
	Inspection	Treatment				
1920	224	515	739	6,348	63·3	8·5
1921	392	338	730	3,674	57·2	8·4
1922	451	259	710	4,014	55·7	13·4
1923	175	491	666	8.148	89·6	12·7
1924	249	1,129	1,378	11,333	68·8	6·3
1925	239	1,147	1,386	11,314	72·8	5·5
1926	222	1,151	1,373	11,529	80·1	6·0
1927	200	1,168	1,368	11,903	90·2	5·7
1928	180	1,234	1,414	12,112	99·2	5·8
1929	182	1,612	1,794	14,081	100·1	5·2
1930	276	1,923	2,199	17,360	96·3	5·3
1931	255	1,988	2,243	18,419	96·7	5·2
1932	262	2,068	2,330	18,812	99·7	5·2
1933	233	1,958	2,191	16,892	106·6	5·4
1934	198	2,024	2,222	17,267	108·7	4·9
1935	191	2,001	2,192	16,883	107·7	5·3
1936	194	2,079	2,273	17,346	115·6	5·0
1937	195	1,996	2,191	16,720	116·6	5·1

altered very materially during the past eighteen years. On the other hand the number of sessions devoted to treatment is now four or five times what it was about the beginning of this period. It should be remembered that time spent in discovering defects

Table XXII.

Elementary education. Treatment at dental clinics.

Year	Fillings			Fillings in temp. teeth per 1,000 inspected	Extractions			Extractions of permanent teeth per 1,000 inspected	Other operations			Total operations
	Perm. teeth	Temp. teeth	Total		Perm. teeth	Temp. teeth	Total		Perm. teeth	Temp. teeth	Total	
1920	1,024	—	1,024	—	135	9,770	9,905	9·5	—	—	235	11,164
1921	500	27	527	1·2	135	5,249	5,384	6·0	—	—	213	6,124
1922	565	119	684	4·7	120	4,335	4,455	4·8	—	—	—	—
1923	517	151	668	9·6	127	8,570	8,697	8·1	—	—	103	9,468
1924	786	762	1,548	44·4	58	10,291	10,349	3·4	339	377	716	12,613
1925	1,042	602	1,644	34·6	118	10,325	10,443	6·8	634	386	1,020	13,107
1926	865	688	1,553	28·3	85	10,681	10,766	4·7	844	379	1,223	13,542
1927	871	578	1,449	32·0	163	10,806	10,969	9·0	929	526	1,455	13,873
1928	753	566	1,319	21·7	267	11,689	11,956	14·9	745	398	1,143	14,418
1929	1,890	469	2,359	25·8	718	12,976	13,694	29·4	1,310	1,047	2,357	18,410
1930	2,224	789	3,013	29·7	792	17,686	18,478	29·8	1,314	668	1,982	23,473
1931	1,955	907	2,862	36·8	1,175	19,402	20,577	47·7	1,626	490	2,116	25,555
1932	2,501	1,158	3,659	44·4	1,439	19,525	20,964	55·1	1,816	581	2,397	27,020
1933	1,876	648	2,524	26·1	1,672	16,941	18,613	67·3	1,805	445	2,250	23,387
1934	1,636	327	1,963	15·2	1,336	16,451	17,787	62·1	1,879	1,097	2,976	22,726
1935	1,825	538	2,363	26·2	1,566	16,356	17,922	76·2	2,125	585	2,710	22,995
1936	2,047	282	2,329	12·6	1,497	15,539	17,036	66·8	1,943	576	2,519	21,884
1937	2,152	341	2,493	15·0	1,756	15,846	17,602	77·2	1,691	621	2,312	22,407

which cannot be treated is time wasted. The present number of treatment sessions possibly represents the number which is necessary to treat the defects found at the present number of inspection sessions. Any increase in the latter will have to be accompanied by a corresponding increase in the number of treatment sessions. Table XXI also shows the increase through the years of the average number of children inspected per session devoted to inspection. It has been shown that the keeping of detailed records of the findings at these inspections is not

TABLE XXIII.

SCHOOL DENTISTRY. ENGLAND AND WALES, 1936.

Fillings:	
Permanent teeth	1,145,051
Temporary teeth	105,418
Total	1,250,469
Fillings in temporary teeth per 1,000 inspected	30.3
Extractions:	
Permanent teeth	545,886
Temporary teeth	2,441,784
Total	2,987,670
Extractions of permanent teeth per 1,000 inspected	157·5
Other operations	503,180

necessary, and the gradual increase in the figures in column 6 probably represents the change in the attitude of dentists to this question. As column 7 shows, there has been little change throughout the years in the average number of children treated per treatment session. There is, on the whole, a tendency for more detailed work to be carried out, and this figure will probably not tend to rise—apart from the operation of extraneous factors.

Details of the actual treatment carried out are contained in Table XXII. The most conspicuous feature shown in this table is the fact that there has been a rather rapid increase in the

number of permanent teeth extracted. Nine years ago the increase was sudden, and since that date there has been only a partial diminution in the rate of increase. In column 9 the permanent teeth extracted each year are expressed as a rate per 1,000 of the children inspected. From these figures, and from the data given in Table XXIII, which refers to England and Wales, it will be seen that the frequency of extractions of permanent teeth is below that for the country as a whole. No doubt many of these teeth were extracted for orthodontic purposes, and the practice of performing extractions rather than fillings in certain cases is in accordance with current opinion. Nevertheless, it does seem to be rather distressing that this practice is on the increase. Surely the children could be taught that a permanent tooth which has been saved is a valuable possession, and that they should look after it accordingly. A further interesting feature which is shown in Table XXII is the great increase in the frequency of "other operations." No doubt this practice is to be highly commended.

Reports from the school dentists contain information on certain points. For example most of the dentists refer to the persistently large number of children who have to be treated as " specials." Mr. Baird attributes this to the fact that routine inspection ceases when the children reach the age of 9 years. Miss Gubb suggests, with considerable reason, that many children are forced to become "specials" because of the fact that from the beginning of June until the end of September they are absent from the district with their parents, who are at that season employed as fruit-pickers and hop-pickers. With reference to the interest displayed in conservative work, opinion seems to differ. For example Miss Marsden expresses the opinion that extraction is still more acceptable than conservative treatment in most cases, whereas Mr. Soper comments on the fact that there has been an increased demand for conservative work, a demand which is sometimes difficult to cope with. Mr. Soper also expresses the opinion that the children are becoming more conscious of their duty to care for their teeth.

Ultra Violet Light.

Artificial sunlight treatment for school children who require it is carried out at the Children's Hospital, Balaam Street, under an arrangement whereby the Authority accept financial responsibility for any children who are sent for treatment.

The following is the report of Dr. Eva Morton who is in charge of this work at the hospital:—

"The number of children of school age receiving ultra violet light treatment at the West Ham Clinic during the year 1937 was 112, the smallest number since the clinic was started. As before, a large number of these children were cases of debility, often associated with anaemia. The conditions for which treatment was carried out in these 112 cases were as follows:—

Debility	44
Psoriasis and other skin conditions ..	16
Bronchial catarrh	15
Alopecia	12
Malnutrition	9
Cervical adenitis	6
Rheumatism	5
Other conditions	5

Improvement or cure was noted in practically all the skin cases which completed their course of treatment, and this was also true in respect of the alopecia cases, although some of these were still under treatment at the close of the year. Eleven children, most of whom were suffering from debility, attended on less than 12 occasions—many of them on less than 6; but apart from these, by far the greater number of children who attended with some degree of regularity were discharged as 'greatly improved.'

The smaller number of school children attending has, for the past two years necessitated a reduction in the number of weekly sessions which are set apart for them. Two sessions are now sufficient for this purpose instead of three as formerly."

VIII. FOLLOWING UP.

The system of following-up is intended to secure the attendance at the clincs of all children who have been recommended for treatment. When information has been received that a certain child requires medical treatment an appropriate card is filled up. Two different cards are in use, namely for minor ailments and for defects of vision respectively. In the event of the child failing to keep an appointment or ceasing to attend the clinic a follow-up card is filled up and the appropriate nurse visits the home and makes a report upon the card. A separate following-up card is made out for every defect which may develop in the future. The

following-up cards used for children with defective vision sets out a complete history of the oculist's notes.

Duties of School Nurses.

Generally speaking the duty of a school nurse is concerned mainly with the treatment of children at clinics, with the giving of assistance to the medical officers in connection with inspections at schools, with the following-up of children and with duties regarding uncleanliness surveys.

A special enquiry nurse is attached to the office, her chief duties being in connection with children attending special schools, with out-of-school children and with assisting at medical inspections carried out at the office. These inspections include the examination of children who are recommended for admission to special schools or to Fyfield Open-air School.

Other examinations carried out at the office include those of mental defectives, children requiring licences under the Children and Young Persons Act for singing and dancing and all cases referred for admission to institutions.

The following gives an indication of the work of the school nurses during the year:—

Number of visits to schools	1,531
Number of children visited in schools	4,499
Number of home visits	11,013
Number of inspections with reference to uncleanliness	79,476

IX. INFECTIOUS DISEASES.

The "General Regulations for the Management of Provided and Non-Provided Public Elementary Schools" contains full particulars of the exclusion periods which have been approved by the Board of Education, and this booklet is in the hands of all head teachers. No teacher or pupil is allowed to attend school while he is suffering from any disease which is regarded as being infectious or contagious. A teacher who suspects that any pupil is suffering from any such disease must immediately report the fact to the head teacher, who should exclude the child from school and notify the school medical officer of his action. Exclusion of contacts is also practised in every case in which the presence of an infectious disease in the household warrants this action. Knowledge of the existence of infectious cases may be obtained from

various sources. For example, a list of infectious cases notified under the Public Health Act is supplied daily to the school medical section, and daily returns of children who are absent from school on medical grounds are made to the medical officer of health by the school attendance officers. The assistant school medical officers may also diagnose infectious or contagious diseases at the school clinics, and in this way patients who would otherwise have been missed are dealt with.

Notifiable infectious diseases which are notified to the medical officer of health are dealt with in the manner indicated in previous sections of this report. Generally, in the case of infectious diseases the homes of the patients are visited by the sanitary inspectors or health visitors. In the case of measles especially, advice is given to the parents regarding the care of the patients.

During the year 1937 there was no outstanding outbreak of infectious disease among school children. Detailed information regarding the incidence is contained in the section of this report which deals with infectious disease. The following table gives particulars of 399 excluded children who were found at clinics and elsewhere to be suffering from infectious or contagious diseases: these conditions were, of course, exclusive of the many cases of notifiable diseases which were notified in the normal way.

Impetigo	67	Anaemia and Debility	1
Scabies	182	Bronchitis	7
Other skin diseases ..	33	Verminous	10
Conjunctivitis	6	Ringworm of head:	
Mumps	4	treated by X-ray	13
Enlarged glands ..	2	treated at clinic ..	10
Chicken pox	11	Ringworm of body ..	20
Tonsillitis	5	Other defects and	
Diphtheria	4	diseases	39

Exclusion notices were sent by the school medical officer to the appropriate schools and the superintendent of visitors in connection with the above cases.

During the year the following cases were brought to the

notice of the medical officer of health by the school attendance officers:—

Measles (including German measles)	217	Whooping cough	461
Tonsillitis	261	Chicken pox	980
Mumps	359	Other diseases	470

It was not found necessary to close any schools on account of infectious disease during the year.

X. OPEN-AIR EDUCATION.

(*a*) *Playground classes.* Opportunity is taken, weather permitting, of holding classes in the playgrounds, and physical exercises are taken in the open-air whenever possible. Some schools hold classes during the warmer months in the open-air on the flat roofs available, and certain schools hold classes in the neighbouring parks and recreation grounds.

(*b*) *Open-air classrooms.* In three of the most modern schools in the borough, viz. Tollgate, Pretoria Road and the reconstructed South Hallsville schools, special provision has been made for open-air classrooms.

(*c*) *School journeys and camps.* During the year several departments undertook school journeys to different places for varying periods. The children were accommodated in boarding houses or hostels, while some went under canvas. All children before going on a school journey are examined by an assistant school medical officer as to their fitness to undertake the journey.

The holiday camps which have been held in the summer for some years, already sufficiently described in previous reports, were again held in 1937. In this year the camp for girls was again held at East Cowes, Isle of Wight, but the boys' camp was transferred from Shoeburyness, where it had been held for eleven years, to Dovercourt. The children who are selected to go to these camps all have a thorough medical and dental examination before their departure, and special attention is paid to cleanliness and freedom from contagion.

It would appear from the report of Mr. Pannell, the Superintendent of the boys' camp, that the change to the new camp was a great success. The site was a sixteen acre meadow in Upper Dovercourt within ten minutes' walk from the sea; it thus combined the advantageous features of sea and country. The journey

was made without incident, and the railway company agreed to collect all the camp gear and deliver it on the site at a cost of 6/8d. per ton. The weather was on the whole very good. During the first fortnight 200 boys went to the camp and the second party consisted of 173 boys. Mr. Pannell comments upon the excellent appetites of the boys and on the fact that they were much improved in their physical appearance by the time they returned home. He also draws attention to the fact that in a camp of this type a satisfactory boiler for hot water is a necessity.

The camp for girls, which was again in the charge of Miss Wise, was also a great success. The quarters consist of four well built dormitories, with attached accommodation for staff and for bathing; all the buildings are connected by a covered way. One of the dormitories is used as a dining hall. There is also a house with a staff dining room, kitchen, and some additional accommodation. The number of girls who attended the camp during the first fortnight was 202, and the number during the second fortnight was 187. Miss Wise comments on the fact that walks were sometimes made less enjoyable by unsuitable or poor footwear. In the camp, games were again popular. A good library has been established. It was found that packed lunches were very popular.

(*d*) *Children's Country Holidays Fund.* A further activity which should be mentioned under this heading is the work of the Children's Country Holidays Fund. All children sent away by the local branches of this Fund are examined by the nursing staff as to their cleanliness and freedom from infectious or contagious conditions. The number of children who were inspected for this purpose during 1937 was 2,114.

XI. PHYSICAL TRAINING.

An inspector of physical training was appointed by the West Ham Education Committee in October, 1935. This officer left to take up an appointment with the London County Council during the summer of 1938. I am indebted to Mr. Irvine G. Jardine, the chief inspector of schools, for the following report upon the progress of physical education in the area during the year 1937:—

West Ham Schools' Sports Association. West Ham is

fortunate in possessing one of the oldest and strongest schools' sport associations in the country, built up over many years by a public spirited body of teachers who have given their time and energy freely in order to provide for the children of West Ham opportunities to take part in all kinds of games and sports. There has been a happy spirit of co-operation between the officers of this association and the inspector of physical training. The association's activities cover a very wide field, and include football, netball, cricket, athletics, boxing and swimming.. The following statistics give an indication of the extent of the work undertaken.

Football, 1937-38. Four local leagues were arranged during this season.

Senior (under 14)	30	teams	in 4	sections
Intermediate (under 13)	18	,,	,, 2	,,
Minor (under 12)	19	,,	,, 2	,,
Junior (under 11)	26	,,	,, 3	,,

Representative teams were successful in capturing the Cook Cup (Essex) and reaching the third round of the Dewar Shield competition. In the English Schools' Shield and the Corinthian Shield competitions West Ham boys reached the last sixteen and the final respectively.

One boy was awarded international caps against Wales and Scotland, while six boys played for London and Essex during the season.

Netball (Girls). In the league competitions 46 teams took part. Of these, 17 teams were in the senior division, 15 in the intermediate, and 14 in the junior division.

Cricket. In the league competitions 51 teams took part—32 in the senior division, 5 in the intermediate, and 14 in the junior division. Three boys played for London and Essex.

Athletics. The activities of this branch of the association include

(*a*) Individual school sports.
(*b*) Championships.
(*c*) Non-competitive examinations.
(*d*) Sports' Day for infants' schools.

In the season 1936-37, 83 departments took part in the individual school sports as against 65 in the previous season. Season 1937-38 has again seen an increased entry in this section. In the Sports' Day for infant schools, over 5,000 children were

entered. The best aggregate at the Essex Schools A.A. meeting was won by a West Ham girls' team.

Boxing. During the season 1936-37 the following were the entries for the championships:—

Senior championships .. 182 boys from 20 schools
Junior championships .. 177 ,, ,, 22 ,,

The corresponding figures for the 1937-38 season were:—

Senior championships ,, 143 boys from 25 schools
Junior championships .. 121 ,, ,, 16 ,,

In the National Championships of Great Britain the following successes were obtained:—

Season 1936-37 .. 3 (6 stone, 7 stone, 7½ stone)
Season 1937-38 .. 3 (6½ stone, 7 stone, 8 stone)

Swimming. A brief summary of the activities in this sphere of sport and of the successes obtained are given below:—

Attendances at Baths (Winter Season 1936-37).

	Boys	Girls	Total
Romford Road Baths	4,672	4,687	9,359
Balaam Street ,, ...	12,475	9,189	21,664
Silvertown ,, ...	359	—	359
Totals ..	17,506	13,876	31,382

Summer Season, 1937.

	Boys	Girls	Total
Romford Road Baths	28,206	24,876	53,082
Balaam Street ,, ...	23,094	16,940	40,034
Silvertown ,, ...	2,863	2,603	5,466
Y.M.C.A. ,, ...	7,032	6,552	13,584
Dockland ,, ...	6,243	7,237	13,480
Totals ..	67,438	58,208	125,646

Awards (1936-37).

	Boys	Girls	Total
40 yds. Certificates	674	992	1,666
100 yds. ,, ...	704	840	1,544
440 yds. ,, ...	566	415	981
R.L.S.S. Awards:			
Elementary	9	37	46
Intermediate	145	148	293
Bronze Medallion ..	26	33	59

Apparatus and accommodation. All schools in West Ham have been provided with an adequate supply of apparatus for both gymnastics and games. The majority of the Council schools are fortunate in having large halls for indoor physical training. Every opportunity is being taken to improve and add to the existing accommodation. The aim is, as schools are being reorganised, to provide, where possible, each department with a hall of adequate size. During the current year a gymnasium has been erected at Gainsborough Senior School, and at the Deanery School the hall is being fitted with fixed apparatus. Lister Day Continuation Institute (also used for classes of unemployed juveniles) is now provided with fixed apparatus, changing room and shower baths.

Clothing. This presents a major problem in areas like West Ham. Children cannot derive full benefit from their exercises unless they are suitably clothed. It is desirable that all pupils should make a complete change of clothing for the physical training lesson, and it is essential that light rubber shoes should be worn during exercises. Unfortunately only in a few schools in West Ham is this complete change of clothing made. In too large a proportion of schools, especially in boys' departments, many of the children are dangerously overclothed and can derive little, if any, benefit from their physical training. It would be a great step forward if all children could be persuaded to provide themselves with rubber shoes, or have them provided by the Authority.

Teachers' classes. All teachers in the Borough have been afforded opportunities to attend demonstrations in physical exercises and games. Several special courses have also been arranged for teachers to attend during school time so that it is now possible to utilise the services of trained teachers in a specialist capacity in the majority of senior schools and to a lesser extent in junior schools.

Organised games. West Ham is very inadequately provided with playing fields. During the last year, however, by the courtesy of the Highways and Parks Committee, schools are now allowed to send classes to the local parks and recreation grounds. In addition, the City Corporation has given permission for West Ham Park to be used for this purpose; and the Epping Forest Conservators have similarly allotted a portion of Wanstead Flats for the use of the Authority. With this increased accommodation it has been found possible to arrange for an additional 10,000

children to pay a weekly visit to a playing field for an hour's period of games.

Swimming. Arrangements are made for children to attend the baths in school time to receive instruction in swimming from fully qualified specialist instructors, and the baths are used to capacity. Both summer and winter swimming is arranged for. In addition life-saving classes are conducted by several teachers; children who are sufficiently competent may attend the baths free of charge for life-saving instruction. Swimming proves to be a very popular and successful part of the physical education activities, as is indicated by the figures given above in the paragraph dealing with the West Ham Schools' Sports Association.

Curriculum. The majority of schools in West Ham have allocated a generous time allowance for sports. Many head teachers have remarked on a better spirit, increased concentration and higher state of alertness in the children since more physical training was introduced into the curiculum.

Physical recreation for those who have left school. "Keep-fit" classes are organised in connection with evening institutes. Independent clubs are also assisted by the Authority in this work, either by the provision of a block grant or the services of an instructor. A new development is the formation of "keep-fit" classes in connection with Old Scholars' Clubs. This movement is developing rapidly.

West Ham Juvenile Organisations Committee (J.O.C.). This important committee organises and controls the sports activities of the majority of the boys and girls between fourteen and eighteen years of age. It publishes a magazine which is much in demand.

XII. PROVISION OF MEALS.

Since 1908 a scheme has been in existence in West Ham for the provision of meals for necessitous children. There have been many fluctuations during the ensuing years in the number of meals provided annually, largely due to economic circumstances. At the present time there are twelve centres, one having been opened at Elmhurst Road School during the year. All these centres are so situated as to be easily accessible from any part of the Borough. The menus are arranged by the superintendent of the dining centres. Fresh fruit and vegetables are always

supplied when in season. Since 1933 there has been a steady decrease in the number of meals provided.

The following figures summarise the extent of this undertaking during 1937:—

	Breakfasts.	Dinners.
Free meals provided ..	301,927	633,130
Meals provided on part or full payment	5,286	32,780
Total	307,213	665,910

The average number of children fed each week was 18,714.

The above figures relate to elementary school children only.

School milk. The scheme instituted by the Milk Marketing Board became operative in October, 1934. One-third of a pint of pasteurised milk was supplied daily to approximately 22,000 children during the year 1st April, 1936, to 31st March, 1937.

XIII. CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND PUBLIC BODIES.

(*a*) Parents are always notified when their children are due to be medically inspected, and the fact that last year the percentage of parents who were actually present at the elementary school examinations amounted to 90.2 indicates the interest taken in the work of the school medical service.

The number of parents who refuse to have their children medically examined is extremely low. In 1937 the number of children who were affected by this parental objection amounted to 63. Parents are always encouraged to accompany their children when they are being inspected at school, or treated at the clinics.

(*b*) The assistance rendered by teachers has always been greatly appreciated by the staff of the school medical service. The facilities, which are invariably afforded doctors, dentists and nurses whenever they have occasion to go to a school, help considerably in the smooth running of the department. In selecting special cases for examination, urging attendance at clinics and impressing upon parents the need for carrying out advice given,

or recommendations made, the teachers play an invaluable part. Children who show some defect and are considered by the doctor to need individual supervision by the teacher are reported to the head teacher on a special confidential form. All cases such as bad vision, defective hearing, heart trouble, etc., are so reported.

To the members of the school inspectorate I tender my thanks for their enthusiastic co-operation.

(*c*) There is complete co-ordination between the school medical service and the school attendance officers. The work done by these officers in connection with the health services of the borough is of great value, particularly in regard to cases of non-notifiable infectious diseases, which are brought by them daily to the notice of the medical officer of health.

(*d*) The school medical service is in close touch with certain voluntary associations and societies in connection with the welfare of individual children. The Invalid Children's Aid Association and the Invalid and Crippled Children's Society notify the school medical officer of children coming to their notice who require new or altered surgical appliances. The Authority assists in the purchase or alteration of instruments. These societies also report cases requiring convalescent treatment. During the year a large number of school children were reported to the medical officer of health, and sent away for periods of convalescence. Assistance in the purchase or repair of surgical appliances was rendered to 34 children.

I am also indebted to the National Society for the Prevention of Cruelty to Children and the Central Association for Mental Welfare, as well as to the almoners of a number of voluntary hospitals for their valuable help.

(*e*) In addition to the voluntary hospitals of West Ham and of the County of London, I am also indebted to a number of other voluntary bodies for their valuable work for the welfare of school children.

XIV. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(*a*) Ascertainment. Information regarding the incidence of children who are suffering from these defects is obtained from various sources; for example, from head teachers, from the school

attendance department, from hospitals and other voluntary associations. All such children are kept under close supervision. They may be examined in the first instance by one of the assistant school medical officers. All children are examined by the chief assistant school medical officer, who decides their fitness for certain activities and the desirability of admitting them to special institutions—such as those dealt with later in this section. The school nurse, who is specially designated for this purpose, visits the homes of the children and advises the parents regarding their care. The permanent out-of-school cases are visited from time to time by the nurse, and should there be any changes in the condition which justify re-examination, arrangements are made accordingly.

In addition to these arrangements, the head teachers, at the end of each year, submit a report on all children who in their opinion are exceptional. These are dealt with in the manner described above.

(*b*) BLIND CHILDREN. A blind child is defined, by Section 69 of the Education Act, 1921, as one who is too blind to be able to read the ordinary school books used by children.

A partially sighted child is one who, though he cannot read ordinary school books, or cannot read them without injury to his eyesight, has such power of vision that he can appropriately be taught in a school for the partially sighted. Children who are able by means of suitable glasses to read the ordinary school books used by children without fatigue or injury to their vision are not included under this heading.

The Authority has made no direct arrangement for the education of blind and partially sighted children, but where possible arrangements are made for these children to be admitted to residential schools conducted under other auspices.

During the year 1937 it was necessary to make arrangements for only one blind child; this child was accommodated in a certified school for the blind. The number of partially sighted children known to the Authority was 17. Of these 10 were in certified schools for the blind, 6 were at public elementary schools, and 1 was at home.

(*c*) DEAF CHILDREN. Information regarding deaf children is received from the assistant school medical officers, or from

voluntary hospitals and other sources. When the information is received at the office, arrangements are made for the child to be examined by the chief assistant school medical officer, who decides its fitness to attend a deaf centre.

A deaf child is defined, by section 69 of the Education Act, 1921, as one who is too deaf to be taught in a class of hearing children in an elementary school. This definition covers some children who are totally, or almost totally deaf and can only be appropriately taught in a school for deaf children. Partially deaf children are defined as children who have partial hearing and can be appropriately taught in a special school for such children.

In the year 1937 the Authority had information of 21 deaf children; all of these were at certified schools for the deaf. In the same year the Authority had information of 18 partially deaf children; 7 of these were at certified schools for the deaf and 11 were at public elementary schools.

(*d*) MENTALLY DEFECTIVE CHILDREN. All mentally defective children of school age who have not been certified are under the care of the Education Authority. These children are medically examined by the chief assistant school medical officer, and if suitable they are recommended for attendance at one of the special schools. While they are at these schools they have periodical medical examinations. Whether or not such children are attending special schools they are kept under close observation, and a school nurse who is designated for this work attends frequently at their homes to advise the parents regarding the care of these children. On reaching the age of sixteen years, or before that date if necessary, these children may be notified to the medical officer of health, who is officially responsible for the care of mental defectives brought to the attention of the Local Authority.

For the purpose of this section mentally defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary public elementary schools, but are not incapable by reason of that defect of receiving benefit from instruction in special schools for mentally defective children.

The following figures relate to all such children, except those who have been notified to the Local Authority under the

Mental Deficiency Act, in accordance with Article 3 of the Mental Deficiency (Notification of children) Regulations, 1928.

In 1937 the total number of feeble minded children known to the Education Authority was 179. Of these 156 were at certified schools for mentally defective children; 10 were at public elementary schools, and 13 were not attending any school or institution.

(*e*) EPILEPTIC CHILDREN. The definition of an epileptic child for this purpose is one who is epileptic within the meaning of the Act, i.e. a child who, not being an idiot or an imbecile, is unfit by reason of severe epilepsy to attend the ordinary public elementary school. Only severe cases of epilepsy are excluded from attendance at the elementary schools. With reference to treatment, arrangements are made for cases of major epilepsy to be boarded out in suitable institutions.

In the year 1937 the total number of cases of epilepsy—as defined above—which were under the notice of the Authority was 16. Of these five were at certified special schools, two were at public elementary schools, one was at an institution of another type, and eight were at home, under the supervision of the school medical and nursing staff.

(*f*) PHYSICALLY DEFECTIVE CHILDREN. This group of defective children includes those suffering from tuberculosis of the lungs and (or) other organs, delicate children, crippled children, children with heart diseases, and children with multiple defects.

Tuberculous children. This sub-group includes only those children who are diagnosed as tuberculous, and who require treatment for this condition at a sanatorium, a dispensary, or at another similar institution. Children who are suffering from crippling due to tuberculous disease who are no longer in need of treatment are classified below as "crippled children"—provided that the degree of crippling conforms to that classification. All other tuberculous children who are regarded as being no longer in need of treatment are grouped as "delicate children" below, provided that it can be certified under section 55 of the Education Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from instruction in the ordinary public elementary schools. It will thus be seen that the figures given here for tuberculous children bear little relationship to the figures given in the section of this report which deals with tuber-

culosis. The classification "pulmonary tuberculosis" includes tuberculosis of the pleura and of the intra-thoracic glands, and the classification "non-pulmonary tuberculosis" includes tuberculosis of all sites other than these.

In 1937 the number of cases of pulmonary tuberculosis which were under the supervision of the Authority was 48. Of these 41 were in certified special schools, 5 were in public elementary schools, and 2 were at home. The number of cases of non-pulmonary tuberculosis under the Authority's supervision was 50. Of these 39 were at certified special schools, 10 were at public elementary schools, and 1 was at home.

Delicate children. This sub-group includes all children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an open-air school, and in respect of whom the medical officer is prepared to certify under section 55 of the Education Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from instruction in the ordinary public elementary schools. Such children are included in this classification irrespective of the practicability of sending them to residential schools at the time when the diagnosis is made.

In the year 1937 the number of delicate children who were under the supervision of the Authority was 640. Of these 263 were at certified special schools, 371 were at public elementary schools, and 6 were not at school.

Crippled children. This classification is confined to children (other than those diagnosed as tuberculous and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life, i.e., children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the school curriculum as gardening or forms of handwork usually engaged in by other children, and in whose case the medical officer would be prepared to certify under section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary public elementary schools.

In the year 1937 the number of crippled children who were under the supervision of the Authority was 103. Of these 68

were in certified special schools, 23 were in public elementary schools, 2 were in other institutions and 10 were not at school.

Children with heart disease. This classification is confined to children in whose case the medical officer would be prepared to certify, under section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary public elementary schools.

In the year 1937 the number of children who were suffering from such defects and were under the supervision of the Authority was 98, of these 31 were at certified special schools, 49 were at public elementary schools, 17 were at home, and one child was in an institution of another type.

Children suffering from multiple defects. This classification includes children suffering from any combination of the following types of defect: blindness (excluding partially sighted children); deafness (excluding partially deaf children); mental defect (feeble-minded); severe epilepsy; active tuberculosis; crippling (as defined above); and heart disease.

In the year 1937 three such children were known to the Authority. Particulars of these three cases are given in Table III of Appendix .

(*g*) INCIDENCE OF EXCEPTIONAL CHILDREN. The incidence of children showing these defects in the years 1920—1937 inclusive is set out in Table XXIV. In this table the number of mentally defective children includes those notified to the Local Authority for appropriate action. The total number of defects includes children who showed multiple defects. The number of children classified as having multiple defects is not clearly stated before 1931, but in any case the numbers are always small.

It will be seen from this table that the incidence of deaf children and physically defective children was very high in the years 1920—1922 inclusive. This fact is hardly in accord with the findings in other parts of the country and it would seem that some external factor must have been responsible. Consideration has, of course, been given to the possibility that the high incidence may have been due to the practice of the medical officers at the time, but this theory does not entirely explain the facts. The point is interesting, and I intend to examine it further at a later date.

Table XXIV.

Elementary Education. Incidence of Exceptional Children (rates per 1,000 of school population).

Year	Blind and partially blind		Deaf and partially deaf		Mentally defectives (including cases notified to Local Authority)		Epileptic		Physically defective		Total defectives (including multiple defects)	
	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000
1920	26	0·50	342	6·54	265	5·07	97	1·85	2,429	46·44	3,159	60·39
1921	116	2·20	349	6·62	353	6·70	69	1.31	2,204	41·84	3,091	58·68
1922	158	2·98	343	6·47	359	6·77	76	1·43	1,497	28·24	2,433	45·90
1923	47	0·89	93	1·75	251	4·74	63	1·19	819	15·45	1,273	24·02
1924	37	0·72	57	1·11	262	5·12	85	1·66	482	9·43	923	18·05
1925	41	0·81	87	1·72	252	4·98	60	1·18	538	10·62	978	19·31
1926	36	0·72	82	1·63	252	5·01	64	1·27	651	12·95	1,085	21·58
1927	44	0·89	68	1·37	262	5·28	68	1·37	681	13·71	1,123	22·61
1928	50	1·02	89	1·82	283	5·78	32	0·65	633	12·93	1,087	22·21
1929	45	0·95	85	1·80	304	6·43	29	0·61	528	11·17	991	20·96
1930	44	0·95	70	1·51	296	6·36	26	0·56	580	12·47	1,016	21·84
1931	36	0·78	74	1·61	279	6·08	31	0·68	644	14·03	1,072	23·35
1932	26	0·57	68	1·50	255	5·63	28	0·62	629	13·89	1,015	22·42
1933	22	0·49	46	1·03	265	5·93	19	0·42	774	17·31	1,131	25·29
1934	18	0·41	39	0·90	234	5·41	16	0·37	735	17·00	1,048	24·24
1935	18	0·44	39	0·96	232	5·71	15	0·37	768	18·90	1,078	26·54
1936	19	0·49	41	1·07	212	5·52	13	0·34	755	19·64	1,046	27·22
1937	18	0·50	39	1·08	211	5·85	16	0·44	942	26·11	1,229	34·06

From 1923 onwards the figures show comparison with those for other areas, and the following remarks refer to these latter figures.

It will be seen that the incidence of blind children has not varied much during the years, but that on the whole there is a tendency for such children to be less frequent than formerly. The same statement would apply to the incidences of deaf and partially deaf children, and to mentally deficient children. On the other hand the incidence of epileptic children has shown a definite decline though the figures on which the rates are based are in all cases small. The most significant feature of the table, however, is the rapid increase in the incidence of physically defective children. This increase is similar to that which was recently found for London children by Dr. W. Allen Daley.

(*h*) SPECIAL SCHOOLS. The special schools for which the Authority is responsible are shown hereunder:—

Name of School.	No. of places, or beds	Purposes for which used.
Knox Road	175	Mental defectives Physically defectives
Grange Road	167	Mental defectives Physically defectives
Frederick Road Deaf Centre	40	Deaf and partially deaf
Water Lane Deaf Centre	40	Deaf and partially deaf
Crosby Road Day Open-air School	60	Debilitated children
Fyfield Residential Open-air School	200	do.

SCHOOLS FOR MENTALLY DEFECTIVE AND PHYSICALLY DEFECTIVE CHILDREN. All the children attending these special schools have annual routine inspection, and any patients found to require treatment for minor ailments are referred to the clinics as in the case of elementary school children. Cases also found to be in need of

dental treatment are sent to a school dental clinic and treated, where possible, under the Authority's scheme. A certain number of cases are referred for treatment at the dental department of a local hospital. Children found with defective vision are seen by the Authority's oculist, and assistance given in the purchase of glasses, if necessary, as in the case of elementary school children. During the year 1937, 213 children were medically examined at these schools.

The following tables give some information regarding the type of medical work which was carried out at these two schools during the year 1937.

The following table shows the number of defects treated during the year:—

Skin diseases (non T.B.)	33
Blepharitis	1
Minor eye defects	4
Minor ear defects	29
Other defects and diseases	328

Two voluntary After-Care Committees sit to consider the welfare of children who have recently left these schools.

Further progress of leavers. During the year 1937, the number of mentally defective children who left the special schools was 38 and the number of physically defective children was 31. The reasons for leaving are given in Table XXVI.

TABLE XXVI.

REASONS FOR LEAVING SPECIAL SCHOOLS.

School.	Age limit (16 years)	Returned to elementary school.	Admitted to residential school.	Obtained employment.	Removed from district.	Unfit for any school.
Knox Rd. M.D.	3	—	—	6	6	1
,, P.D.	—	1	1	6	3	—
Grange Rd. M.D.	4	—	—	12	3	3
,, P.D.	2	2	3	8	3	2

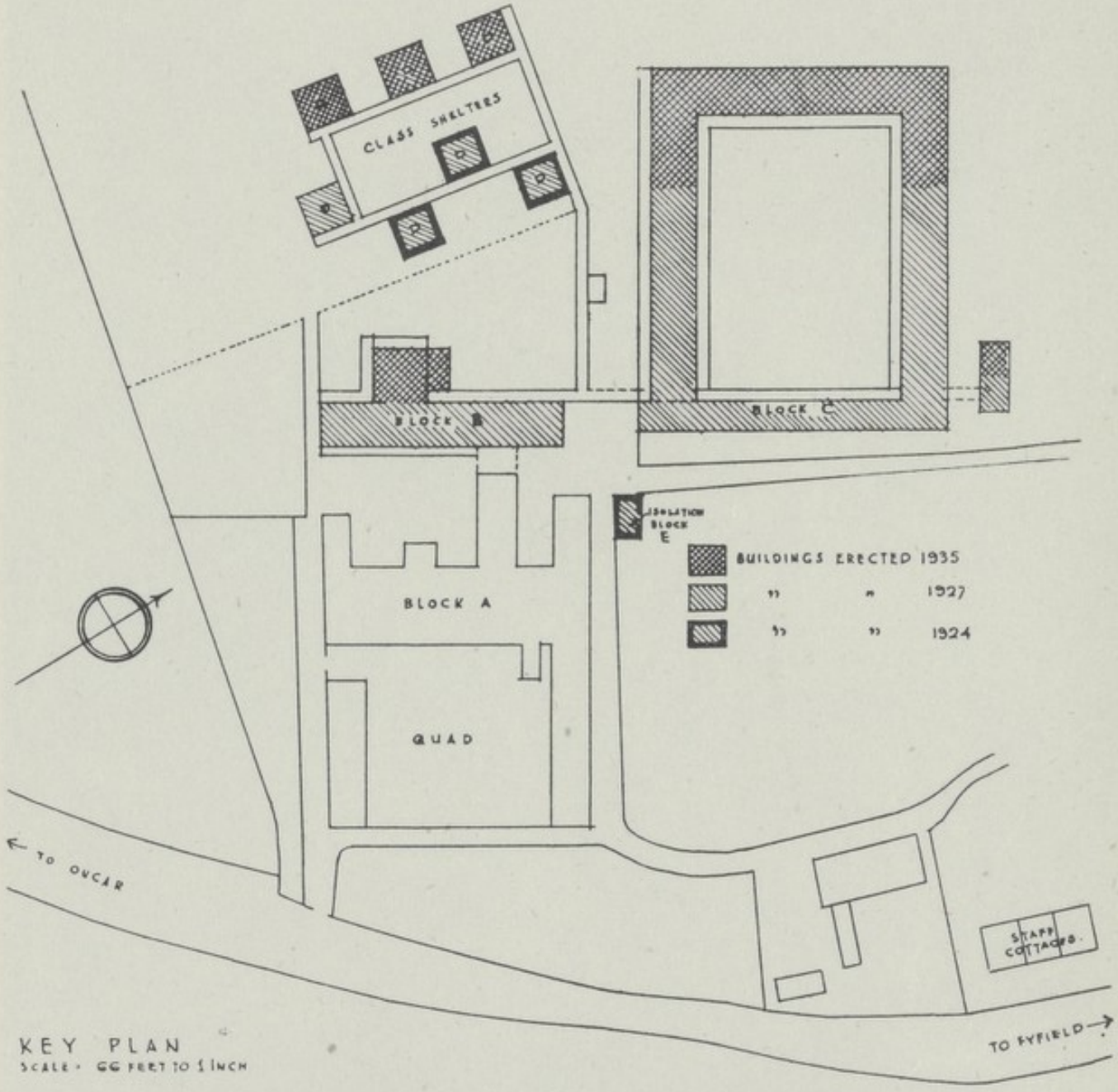
Of the 9 children referred to in column 1, 6 are employed as factory hands or errand boys, 2 are in hospital and 1 is unemployed.

The occupations taken up by children referred to in column

Table XXV.

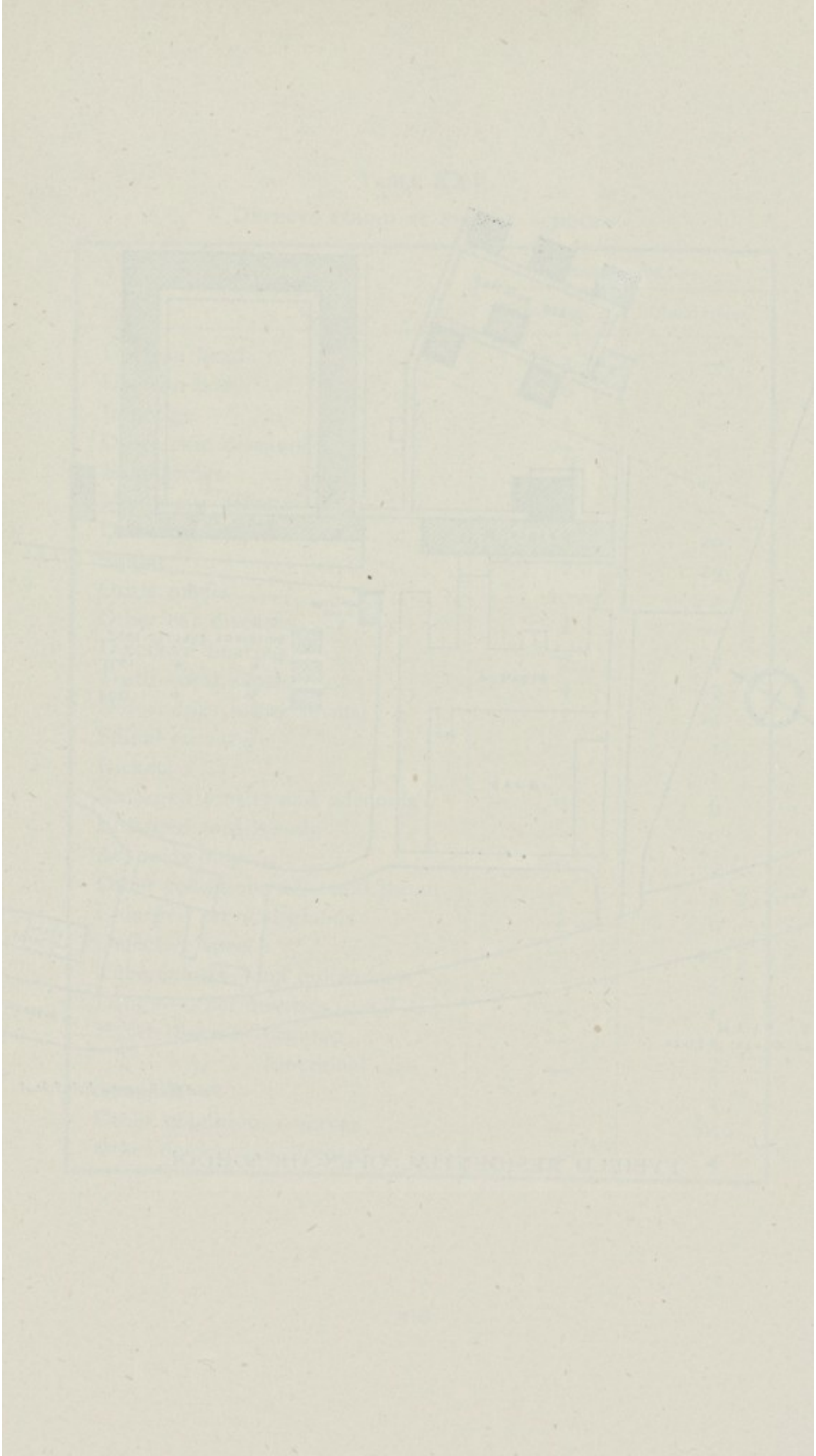
Defects found at special schools.

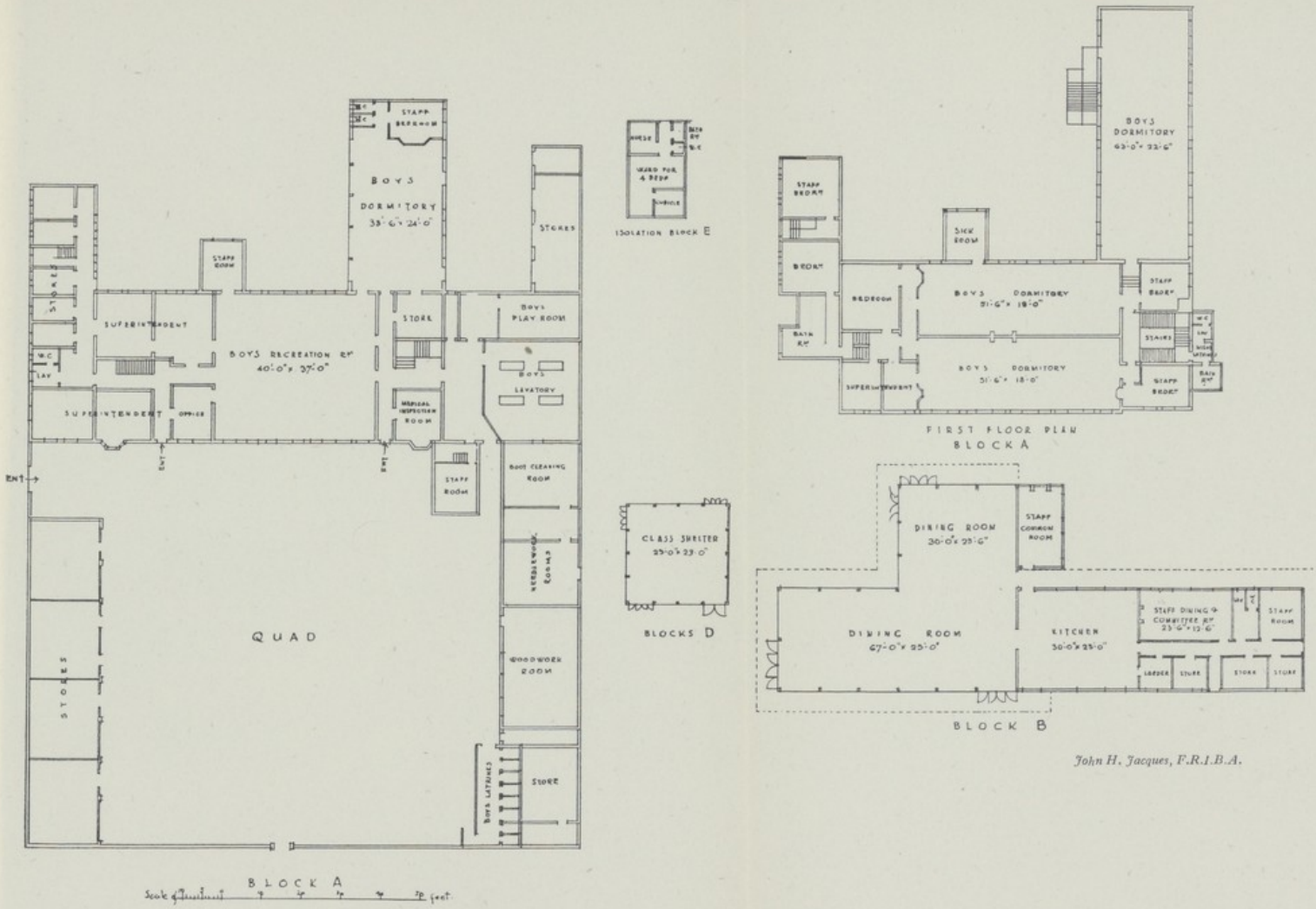
Defect.	Recommended for	
	Treatment.	Observation.
Unclean head	3	—
Unclean body	6	—
Impetigo	1	—
Other skin diseases	7	1
Blepharities	1	—
Minor eye defects	—	—
Defective vision	3	20
Squint	2	13
Otitis media	10	2
Other ear diseases	1	—
Defective hearing	—	4
Teeth—oral sepsis	4	9
Deformities (other forms) ..	1	24
Spinal curvature	—	1
Rickets	—	1
Enlarged tonsils and adenoids	2	6
Enlarged tonsils only ..	—	10
Adenoids only	—	3
Other conditions nose and throat	—	3
Enlarged cervical glands ..	—	6
Defective speech	—	20
Tuberculosis—non pulmonary	—	25
Lungs—other diseases (not T.B.)	—	1
Heart disease—organic ..	—	15
,, ,, functional ..	—	2
Anaemia	1	2
Other conditions—nerves ..	—	19
Other defects and diseases ..	—	4



John H. Jacques, F.R.I.B.A.

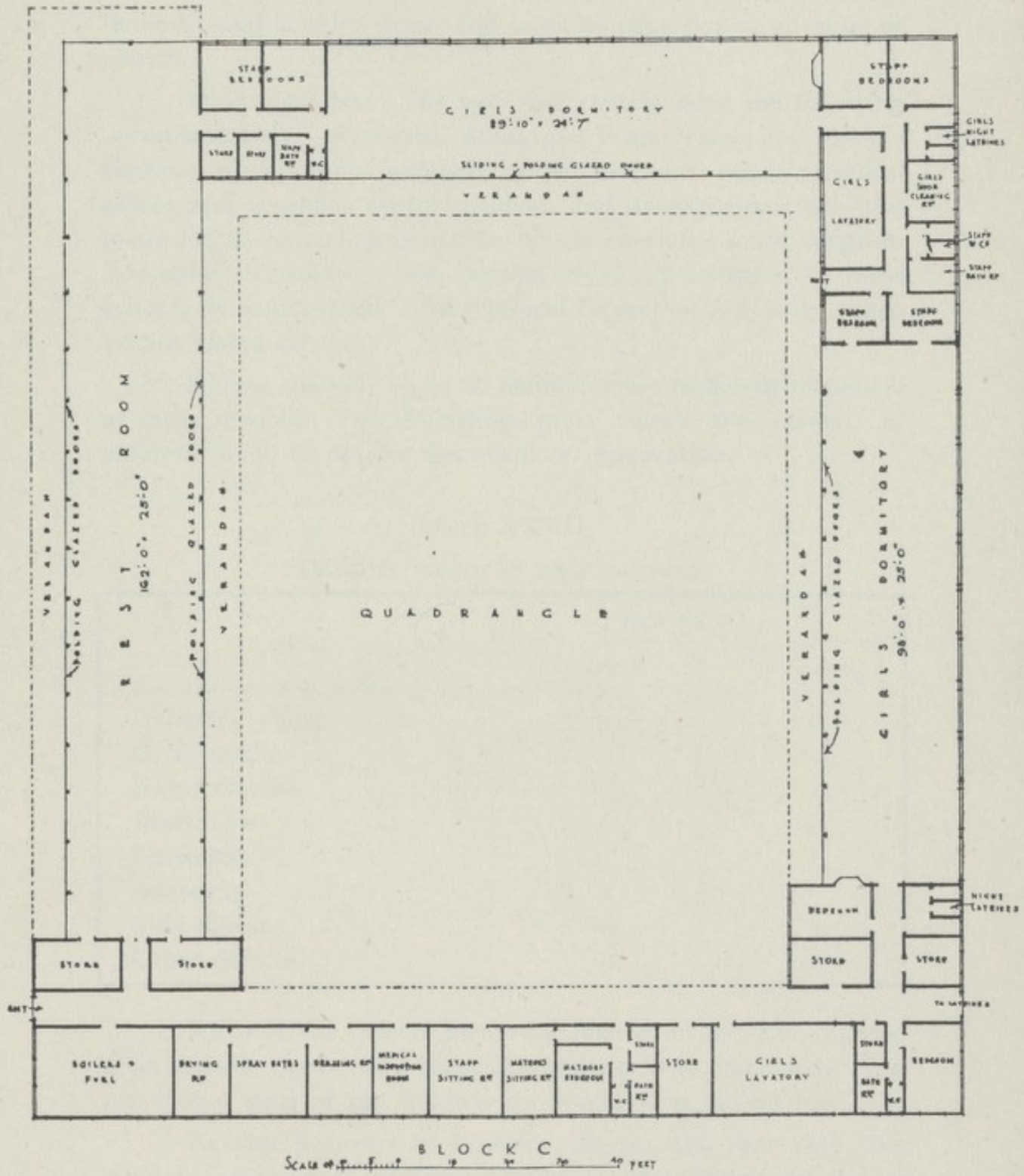
FYFIELD RESIDENTIAL OPEN-AIR SCHOOL.





John H. Jacques, F.R.I.B.A.

FYFIELD RESIDENTIAL OPEN-AIR SCHOOL.



John H. Jacques, F.R.I.B.A.

FYFIELD RESIDENTIAL OPEN-AIR SCHOOL.

4 include factory work, work in shops, clerking, dressmaking, domestic and laundry work, and work as page boy at an hotel or cinema.

Deaf Centres. The two deaf centres have the following accommodation:—Frederick Road, 40; Water Lane, 40. All the children are examined annually by an assistant school medical officer and a school dental surgeon, and arrangements are also made for an annual examination by the specialist aural surgeon. A number of children from outside areas are admitted to these schools by arrangement with the local Education Authority, when vacant places occur.

During the year 1937, 66 children were medically examined at these schools. The following table shows the number of children found to require treatment or observation.

Table XXVII.

Defects found at deaf centres.

Defect.	Recommended for	
	Treatment.	Observation.
Defective vision	9	—
Otitis media	2	—
Heart disease	—	1
Bronchitis	2	—
Deformity	1	1
Adenoids	1	—
Skin disease	—	1
Other defects	2	1

Some of the defects mentioned above occurred in children from outside areas, and these Authorities were informed. The nutritional state of the children continues to be satisfactory.

Further progress of leavers. During the year 1937, ten children left the deaf centres. The reasons for leaving are set out in Table XXVIII.

Of the five children referred to in column 1, four are employed as factory hands, etc., and one is at home. The child referred to in column 4, left the school to be apprenticed to a dental surgeon.

Crosby Road Open-air School. This is a day open-air school, situated in Forest Gate. It has accommodation for 60 girls and junior boys aged 7 years and upwards. The children are recommended by the school medical staff for attendance at the school, and periodic medical examinations are made while they are there. While they are at the school, the children have the benefit of spray baths, breathing exercises and handkerchief and tooth-brush drill. The children attend the swimming baths at Romford Road, and the girls the domestic centre for cookery and housecraft. Good

Table XXVIII.

Name of deaf centre.	Age limit (16 years).	Returned to elementary schools	Admitted to residential schools.	Obtained employment.	Removed from district.
Frederick Rd.	4	—	—	1	—
Water Lane	1	1	1	—	2

meals are provided, and in the morning they have milk. Lessons take place largely in an open-air environment.

During the year 16 children were admitted, and 15 were discharged.

I am indebted to the headmistress (Miss Davies) for the following note on the work of the school.

"The year ended with 34 girls and 18 boys in attendance. The average age of the children is lower than that of previous years. The wide age range—6 years to 14 and over—and the fact that there are only two classes, increase the difficulty of teaching, and individual methods are the only ones practicable.

In addition to the usual school subjects, gardening is a most important and useful form of handwork. This year, added attention has been given to art and weaving. Physical training and country dancing are enjoyed, and help, with well balanced meals, a daily rest period, and the maximum of fresh air, to improve the health of the children, and render possible their return to ordinary school. Great stress is laid on personal hygiene, and valuable social training is given. Adequate warm clothing, blankets, and good shoes are provided for the winter months, while during the summer the children wear light cotton sun suits.

Ten children returned to ordinary schools during the year, and all the girls who left, having attained the age of 14 years, have obtained suitable employment."

Fyfield Residential Open-air School. This school, which is maintained by the Authority, is situated near Ongar, and now has accommodation for 100 boys and 100 girls. The extensions to the building were completed in June, and the additional 20 boys and 40 girls were admitted thereafter. The additions consisted mainly of sleeping accommodation, additions to the kitchen, and additional class room shelters.

Sleeping accommodation. For the sleeping accommodation for twenty extra boys the room under the dormitory was adapted. This involved the clearing away of the existing class room which enclosed the south front, and the provision of a master's bedroom and two w.c.'s, one for the boys at night and one for the master. For the girls a new dormitory was erected in the west side of the quadrangle. This new dormitory is reached from the playground or through the rest room. At the south end of this new dormitory are two staff bedrooms, two store rooms, a staff w.c. and bathroom. At the other end are two staff bedrooms, night w.c.'s for the children, shoe-cleaning room, staff w.c. and bathroom, and lavatories for forty girls. Six additional w.c.'s were added to the existing range.

Rest room. The rest room was extended to 164 feet long by 24 feet wide. It is now a very pleasant room which can accommodate the whole of the children in the school.

Dining room and kitchen. An addition to the dining room—measuring 23 feet 6 inches by 30 feet—was erected at right angles to the existing room and connected to it. The kitchen was also enlarged. A coal fire range was removed and electrical appliances installed. These consisted of two large ovens, a large boiling plate, a steamer, six boiling coppers and two hot cupboards.

Class room shelters. Three additional class room shelters were erected in the neighbourhood of the present shelters, separated from each other by a distance of twenty feet.

Staff rooms. Five new staff bedrooms were provided, making a total of thirteen in all. A new staff common room, measuring 25 feet by 11 feet 6 inches, was constructed adjoining the extension of the dining room.

Spray baths. A domestic hot water boiler was enlarged, as also was the central heating boiler.

Cost. The total cost of these reconstructions and additions was £8,165, of which sum £7,245 was spent on the buildings.

As this school is sufficiently large and well adapted for its purpose to serve as a model, it is desirable to include here a review of the main points in its design. These are shown in the following table.

Particulars of Fyfield Residential Open-air School.

Points.	Remarks.
Site.	
Size	Approximately 32 acres.
Proportion to site of:—	
(*a*) Buildings ..	$\frac{7}{8}$ths of an acre.
(*b*) Playground ..	Tarred. Boys 105 ft. x 101 ft. (10,605 sq. ft.) Girls 100 ft. x 145 ft. (14,500 sq. ft).
(*c*) Garden	10 acres approximately, balance playing field, etc.
Classrooms	Seven.
Size	Four, 24 ft. x 24 ft.
	Three, 23 ft. x 23 ft.
Type	Open-air (on three sides).
Means of heating ..	Low pressure hot water.
Position of solid wall or walls ..	Timber built open-air type; one wall with no openings.
Verandahs	None.
Grass or asphalt plots in front of ..	Small gardens between and in front of class rooms with tar-paved paths.
Practical instruction rooms	None.
Hall.	
Size	41 ft. x 37 ft. x 15 ft. high (1,517 sq. ft.).

Uses to which put ..	Used as boys' play-room, etc.
Dining room	Area 2,325 sq. ft. Not used for other purposes.
Kitchen.	
Accessibility to dining room ..	Adjoins dining room, 25 ft. x 33 ft.
Water closet and lavatory provision for kitchen staff ..	1 lavatory basin and 1 w.c.
Resting shed	163 ft. 9 in. x 25 ft. (4,093 sq. ft.)
Use of for other purposes	Used as girls' recreation room, music room, drill room, etc.
Methods of closing and provision for drying	Folding doors. Heated by low pressure hot water.
Cloakrooms.	
Arrangements of hat and coat pegs ..	Around lavatories.
Warming of and provision for drying clothes ..	Drying room 16 ft. 6 in. x 10 ft. 4 in.
Closets and urinals ..	Boys. 8 day and 3 night.
Adequacy of provision	Urinals: 2—32 ft. and 20 ft. run; 1—6 ft. night urinal. Girls. 14 day and 4 night.
Baths and lavatory basins.	
Type of	Troughs with hot and cold water, and with 80 spray taps.
Adequacy of provision	Spray baths. Considered ample. Girls 1—3 double washing troughs 6 ft. long; 1 double washing trough 9 ft. long; 1 double washing trough 15 ft. long. Boys 4 double washing troughs, 16 ft. long.

Medical inspection room.	
How warmed	Coal fire and also electric fire.
Use of for other purposes	Used as dispensary for treatment of girls.
Head teacher's room ..	Office in main building.
Dormitories or wards ..	Six*.
Ventilation	Cross ventilation.
Means of supervision ..	Separate supervising officer's bedroom with window overlooking each dormitory.
Dimensions	Rest room is used as playroom for girls. Hall is used for boys, and there is a ping-pong room.
Locker accommodation ..	Separate locker for each boy and girl (200).
Sick rooms.	
Number	Two. 10 ft. x 13 ft.
Number of beds in each	Two.
Floor space per bed ..	65 sq. ft.
Isolation accommodation ..	Separate building. Ward for 4 beds, cubicle for one bed. Nurse's room, bath-room and w.c.
Staircases	1 internal, 1 external (fireproof).
Exits in case of fire ..	Boys' dormitory. 1 internal emergency staircase; 1 external fireproof staircase. Other dormitories, etc., are on ground floor. All doors on front open outwards.
Staff accommodation ..	
Teachers	Bedroom for each and joint use of sitting- and dining-rooms.

* For further particulars of these dormitories see table on page 423.

FYFIELD OPEN-AIR SCHOOL. LARGE GIRLS' DORMITORY.

DIMENSIONS OF DORMITORIES AT FYFIELD OPEN-AIR SCHOOL.

Name of ward	Lea.	Chelmer.	Roding.	Thames.	Fyfield.	Moreton.
Number of beds in each	22	22	36	20	60	40
Dimensions	51′ 6″ x 18′ 914 sq. ft.	51′ 6″ x 18′ 914 sq. ft.	63′ x 23′ 1,449 sq. ft.	38′ x 23′ 874 sq. ft.	99′ x 25′ 2,250 sq. ft.	90′ x 25′ 2,475 sq. ft.
Floor space for bed ..	42 sq. ft.	42 sq. ft.	40¼ sq. ft.	43¾ sq. ft.	37½ sq. ft.	61¾ sq. ft.
Spaces between the edges of adjacent beds	2′ 3″	2′ 3″	2′ 0″	2′ 3″ and 6′	2′ 3″ and 8′	2′ 3″ and 8′
Total accommodation	100 boys				100 girls	

Matron	Bedroom, sitting-room and bathroom.
Nurses	Bedroom each and joint use of sitting- and dining-rooms.
Domestic	Non-resident, except cook and two maids who have a bedroom each.
Dining accommodation and common rooms	1 domestic staff dining room and common room; 1 senior staff dining-room.
	There are three cottages for staff.
Clothing stores	12 clothing stores.
Ward class cupboards for daily storage ..	One cupboard for each child.
Rooms for medical treatment	(*a*) Dispensary in old building for boys; (*b*) medical inspection room used for girls.

The routine of work and play in the school has been sufficiently described in previous reports.

During the year 188 boys and 165 girls were admitted, and 190 boys and 148 girls were discharged. The children are re-examined a few months after they leave school to ascertain if their improvement has been maintained. Of the 289 children who were requested to attend for re-examination, 39 did not attend for various reasons. Of the 250 who were examined, 222 showed continued improvement, but 28 children had had intercurrent illnesses, and their condition at the time of examination was not so satisfactory.

Ogilvie School of Recovery, Clacton-on-Sea. The Authority also retains 10 beds for girls at the Ogilvie School of Recovery, Clacton-on-Sea. The selected cases are delicate children found at routine and special examinations. The children selected for admission are further examined medically before going to Clacton, and the discharged cases are examined soon after their return home. During the year 12 cases were admitted and 10 discharged.

Speech defects. Special classes of from eight to ten weeks' duration have been carried out at Cave Road School during the year. They are under the supervision of a qualified teacher

and the results have been very promising. In the case of children who did not make sufficient improvement during the first course, a repeat course was recommended. The following table sets out the general daily routine at the stammering class:—

9.30 to 10.30 a.m. ..	Breathing, voice and articulation exercises, followed by individual difficulties.
10.30 to 10.45 a.m. ..	Break.
10.45 to 11.30 a.m. ..	Reading, poetry or conversation.
11.30 to 12 noon	Arithmetic or written answers to questions on English, geography, history, or general knowledge.
2.0 to 3.0 p.m. ..	Voice and articulation exercises. Reading, poetry or conversation.
3.0 to 3.15 p.m. ..	Break.
3.15 to 4.0 p.m. ..	Handwork, composed of bookbinding, paper-modelling or drawing. Girls encouraged to bring needlework or knitting. Solving of children's crossword puzzles.

The children are examined by an assistant school medical officer before and at the end of each course. During the year 12 boys and 4 girls attended the first class; 10 boys and 3 girls took a second course, and 2 boys and 4 girls a third class. One boy was considered to be in need of a further course.

Four classes were held during the year. Children from outside areas are accepted when vacancies are available.

The children were re-inspected about six months after attending the class, and the improvement made had been maintained with the exception of four boys and one girl, who were recommended to attend the class for stammerers for a further course.

XV. HIGHER EDUCATION FOR DEFECTIVE STUDENTS.

In 1937 vocational training was being provided for three blind men—one at the School for the Blind, Swiss Cottage, and two at the Royal School for the Blind, Leatherhead.

In addition two adult blind persons were receiving training at the West Ham Municipal Workshops for the Blind. This institution is administered by the Local Authority. The following are a few particulars of these two blind persons:—

Initials.	Trade.	Date admitted to workshops.
A.N.	Brush making	7.9.36
G.S.C. ..	do.	18.8.36

These blind persons whilst in training are in receipt of the Council's unemployed grant. On completion of their training they are usually given employment in the Council's workshops.

XVI. NURSERY SCHOOLS.

The Authority has two nursery schools—the Rebecca Cheetham nursery school in the north of the Borough and the Edith Kerrison nursery school in the south. These schools have been sufficiently described in previous annual reports.

Rebecca Cheetham Nursery School. Dr. West reports as follows on his work at the school during the year:—

"During the year 1937 four quarterly routine medical inspections were made. The following particulars indicate the findings:—

Examination.	Boys.	Girls.	Total.	Parents present.	Defects.	
					No.	Percent.
March	54	56	110	84	20	18.1
June	62	52	114	92	22	19.2
September	47	40	87	80	18	20.6
December	52	51	103	85	13	12.6

In March the attendance was good and the condition of most of the children satisfactory. There were no cases of infectious disease amongst the absentees.

In June the general condition of the children remained good and with few exceptions all showed increase of weight. A particularly high attendance is to be noted. Some of the new children admitted were found to be slightly below normal nutrition,

FYFIELD OPEN-AIR SCHOOL. "AFTER DINNER REST A WHILE."

and were accordingly recommended for a course of malt and oil. There were again no cases of infectious disease amongst the absentees.

In September the attendance was much lower than at the corresponding period in the previous year, due to a number of children being away with their parents hopping, or in convalescent homes. The general condition of those in attendance was satisfactory. Some loss of weight was noted in certain instances, which may be attributed to alteration in diet and especially rest periods during the previous holiday. There was only one case of infectious disease, viz. diphtheria, amongst the absentees.

In December the general health and condition of the children continued to be good and their weight records satisfactory. A noteworthy feature was the low percentage of defects. Amongst the absentees there were two cases of chicken pox, two of diphtheria, and two of mumps.

During the year 40 children received malt and oil, or cod liver oil. These were cases of slightly subnormal nutrition, debility, slight rickets and bronchial catarrh."

Miss Gubb in her report comments on the beneficial effect of training in nose blowing on the mouths of the children.

Edith Kerrison Nursery School. Dr. Furniss reports as follows on his work at the school during the year:—

"The Edith Kerrison Nursery School has now completed its seventh year. During the year 1937 four quarterly medical inspections were carried out. The following report relates to the chief findings at these inspections:—

Examination.	Boys.	Girls.	Total.	Parents present.	Defects.	
					No.	Percent.
March	61	52	113	93	21	18.5
June	65	49	114	89	18	15.7
September	57	43	100	80	16	16.0
December	59	51	110	90	16	14.5

The number in column 5 relates to individual children found to be defective and not to the number of defects discovered. As in previous years, extracts from the four quarterly reports will give a good idea as to the condition of the children.

March: The condition of the children is satisfactory. This is noteworthy, as this is usually the worst quarter of the year. Only three children were found to have bronchitis—none severe.

June: The attendance at this inspection is particularly good, only six children being absent. Most of the children have a good colour and the nutritional condition is satisfactory.

September: The attendance at this inspection is satisfactory. The children are in good condition, very few of the defects being of a really serious nature. There were three cases of rickety deformity among the new children of age two years. They were sent to the orthopaedic surgeon. Only three children lost weight: this is very satisfactory as it is usually found that quite a number lose weight during the long summer vacation. This loss of weight has been referred to in previous reports, and is probably due to alterations in their diet and rest periods. There are no cases of infectious disease among the absentees.

December: The results of this examination are most gratifying. The percentage defective is the lowest recorded during the year. The nutritional state of the children remains good. During the last quarter the average gain in weight has been $2\frac{1}{4}$ lbs. per child.

General report. Using the Board's classification for nutrition, the returns are as follows:—

	Per cent. of children examined.	
	1936.	1937.
Excellent	26.0	32.7
Normal	70.0	65.5
Slightly subnormal ..	4.0	1.8

The fact that the Rosetta Road Clinic is situated next to the nursery school enables all children who require treatment to receive it promptly. During the course of the year 45 children were given cod liver oil. These children were suffering from very slight subnormal nutrition, debility, bronchitis, or slight rickets. It is now three years since cod liver oil was first given to certain special cases, and it is found that between forty and fifty children need the preparation every year. The use of the oil is discontinued during the summer months. There is no doubt as to the good the oil does in these special cases."

VOLUNTARY DAY NURSERY SCHOOLS. There are two voluntary day nursery schools in the Borough. No statutory medical examinations have taken place in the schools, but children under five years for whom operative treatment of tonsils and adenoids is required are referred for treatment by the maternity and child welfare section.

XVII. SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

This section refers to the work carried out in the following institutions:—

Type of school.	Name of school.	Relation to Authority.	No. on roll.	Average attendance
Technical	West Ham Municipal College	Maintained	344	292
Secondary	West Ham Municipal Secondary	Maintained	632	596
Secondary	The Plaistow Secondary	Maintained	570	550
High	St. Angela's High School	Part-maintained	157	154
High	The West Ham High School	Part-maintained	197	192
*Central	The Grove	Maintained	384	365
*Central	The Russell	Maintained	381	374

* The figures relating to the examination of children in the central schools are included in the tables relating to higher education in the Appendix to this section on pages 438 to 448. The average attendance at these schools, however is included in the average attendance at elementary schools, bringing the total from 35,354 to 36,082 as returned on page 360.

ARRANGEMENTS FOR EXAMINATION.

(*a*) *Municipal College.* The Authority undertakes the medical inspection of certain students in attendance at this College, provided by them. The students examined are those attending (1) junior courses in engineering, first and second year; (2) Trade School for Girls, (*a*) preparatory, (*b*) dressmaking, first and second year, (*c*) cookery, first and second year; (3) Junior Art Trade School for Boys and Girls.

Three visits are made during the year, and re-inspections are made of examinees from each previous medical inspection. The examinations are fuller in detail than those carried out in the elementary schools, colour vision, chest measurements, and other enquiries incidental to the age period being noted. Arrangements have been made for the girl students to be examined by a lady doctor.

The procedure of following-up by nurses' visits and by re-inspection by the assistant school medical officers is the same as in the elementary schools. The school clinic and hospital arrangements for the treatment of tonsils and adenoids, defective vision, and ringworm of the scalp by X-ray treatment are available if required.

(*b*) *Secondary schools.* The children who are about to enter these schools are examined specially before the schools open. All the scholars in the secondary schools also have an annual medical examination, in addition to which the assistant school medical officers make one visit a year for the purpose of re-inspecting those pupils who were found to have defects at a previous examination. The girl students in these schools are examined by a lady doctor. The procedure of following-up by nurses' visits is the same as in the elementary schools.

Every facility provided by the Authority for the treatment of children is available for these pupils. Many of the pupils, however, have their defects remedied privately. Treatment is obtainable by all the scholars, i.e. scholarship holders and fee payers.

(*c*) *High schools.* On the request of the respective Governors, the Authority provides for the medical inspection of West Ham scholars in the West Ham High School for Girls, and in St. Angela's High School, with the exception of the preparatory departments of those schools. These schools are visited each year by a lady doctor, and the same medical services are available for the scholars as for those children attending elementary schools.

(*d*) *Continuation institutes.* There is now only one continuation school in the borough, viz., the Lister Institute. Routine medical inspection of the pupils attending this continuation school is now undertaken by the Authority. Arrangements have been made for the examination of the girl students by a lady doctor.

(*e*) *Central schools.* There are two central schools—The Grove School, Forest Gate, and The Russell School, Plaistow.

The children who are about to enter these schools are examined specially before the schools open. The second examination takes place during the second quarter of the year, and all scholars who are in their third year and due to leave at midsummer are then examined. At the latter examination the headmaster may submit as "specials" any scholars who exhibit features of some ailment or of retarded progress. At the request of the headmaster special arrangements may also be made for the examination of such children.

The routine procedure of following-up by nurses' visits and by re-inspection by the assistant school medical officer, is the same as in the case of the elementary schools. The Authority's specialists, school clinics, and arrangements for the operative treatment of tonsils and adenoids are available where necessary.

Scholarship children. These children have a medical examination before they take up their scholarship. The schools at which such scholarships are held are The Grove Central School, The Russell Central School, The West Ham Secondary School, The Plaistow Secondary School, St. Angela's High School for Girls and the West Ham High School for Girls. A few boys hold their scholarships at St. Bonaventure's.

Results of inspection. Table XXIX gives the results of the inspection of children at these various schools. It will be seen that there was some slight variation in the frequency of defects in different schools, but that in several cases this can be accounted for by the small numbers of children examined. The percentage of defects found at the Plaistow Secondary School is definitely larger than that found in other schools. This comparatively high percentage is due mainly to the fact that defects in the girls in this school were much more frequent than in the boys. On the whole there is no marked difference in the frequency of defects in boys and in girls respectively in the other schools.

With reference to individual defects it will be seen from Table XXX. that defective vision was by far the commonest. This condition was present in 12.0 per cent. of the boys examined, and in 17.1 per cent. of the girls examined. The frequency of other defects is shown in the table. None of these was sufficiently common to warrant any mention.

It will be realised that no definite conclusions can be

Table XXIX.

Higher education and central schools.

Frequency of defects, 1937.

Type of school and name	Frequency of all defects								
	Boys			Girls			Persons		
	No. examined.	No. defective.	Per cent. defective.	No. examined.	No. defective.	Per cent. defective.	No. examined.	No. defective.	Per cent. defective.
Technical institutions :									
Municipal College ...	194	29	14·9	160	34	21·3	354	63	17·8
Secondary schools :									
West Ham Secondary School ...	354	68	19·2	268	53	19·8	622	121	19·5
Plaistow Secondary School ...	328	76	23·2	220	92	41·8	548	168	30·7
High schools :									
St. Angela's	—	—	—	165	31	18·8	165	31	18·8
West Ham High School for Girls	—	—	—	184	38	20·7	184	38	20·7
Continuation :									
Lister Institute ...	55	5	9·1	119	27	22·7	174	32	18·4
	931	178	19·1	1116	275	24·6	2047*	453	22·1
Central Schools :									
The Grove : Entrants ...	52	12	23·1	40	7	17·5	92	19	20·7
Leavers ...	40	8	20·0	29	7	24·1	69	15	21·7
The Russell : Entrants	52	14	26·9	45	7	15·6	97	21	21·6
Leavers	38	4	10·5	42	3	7·1	80	7	8·8
	182	38	20·9	156	24	15·4	338*	62	18·3

* The total of these two entries differs from the total number of higher school children inspected, as set out in Table I. of the Appendix, as a result of the exclusion of certain individual children who had special examinations.

TABLE XXX.

HIGHER EDUCATION AND CENTRAL SCHOOLS. DETAILS OF DEFECTS, 1937.

Nature of defect	Higher Education						Central Schools		All Schools		Defects present per 1,000 examined
	Municipal College	West Ham Secondary School	Plaistow Secondary School	St. Angela's High School	West Ham High School for Girls	Lister Institute	The Grove	The Russell	No. examined	No. showing defects	
Defective vision :											
(*a*) Boys	16	39	46	—	—	2	17	14	1,113	134	120·39
(*b*) Girls	19	39	74	16	24	17	12	6	1,272	217	170·60
Squint	—	1	5	1	—	1	1	1	2,385	10	4·19
Other eye conditions	1	—	4	—	1	—	1	—	2,385	7	2·94
Skin diseases	3	6	10	1	1	4	—	2	2,385	27	11·32
Enlarged tonsils and (or) adenoids ...	1	2	10	—	2	1	—	1	2,385	17	7·13
Other nose and throat conditions ...	5	4	3	7	3	2	1	—	2,385	25	10·48
Ear conditions	3	1	9	2	2	1	—	—	2,385	18	7·55
Chest conditions	—	2	—	—	—	—	—	—	2,385	2	0·84
Nervous conditions	—	—	—	1	—	—	—	—	2,385	1	0·42
Heart disease	—	—	1	—	—	—	—	—	2,385	1	0·42
Anæmic	8	9	1	2	6	—	1	—	2,385	27	11·32
Spinal curvature	4	—	3	—	1	1	—	1	2,385	10	4·19
Deformities	8	—	7	—	—	2	—	—	2,385	17	7·13
Minor orthopædic defects	1	—	—	—	—	1	—	—	2,385	2	0·84
Other conditions	18	5	14	2	3	3	2	3	2,385	50	20·97

TABLE XXXI.

HIGHER EDUCATION AND CENTRAL SCHOOLS. STATE OF NUTRITION, 1937.

Type of school and name	Boys						Girls						Subnormal nutrition	
	Excellent		Normal		Subnormal		Excellent		Normal		Subnormal			
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No. (boys and girls)	Percentage of children examined
Technical institutions :														
Municipal College	72	37·1	113	58·2	9	4·6	50	31·3	104	65·0	6	3·8	15	4·2
Secondary schools :														
West Ham Secondary School	130	36·7	202	57·1	22	6·2	39	18·5	165	78·2	7	3·2	29	5·1
Plaistow Secondary School	111	33·8	213	64·9	4	1·2	54	24·5	148	67·3	18	8·2	22	4·0
High schools :														
St. Angela's	—	—	—	—	—	—	44	26·7	111	67·3	10†	6·1	10	6·1
West Ham High School for Girls	—	—	—	—	—	—	49	26·6	126	68·5	9	4·9	9	4·9
Continuation :														
Lister Institute	19	34·5	31	56·4	5	9·1	32	26·9	75	63·0	12	10·1	17	9·8
	332	35·7	559	60·0	40	4·3	268	25·3	729	68·8	62	5·9	102	5·1
Central Schools :														
The Grove: Entrants	8	15·4	33	63·5	11	21·2	12	30.0	23	57.5	5	12.5	16	17·4
Leavers	13	32·5	26	65·0	1	2·5	8	27·6	20	69·0	1	3·4	2	2·9
The Russell: Entrants ...	8	15.4	34	65.4	10	19.2	8	17.8	27	60.0	10	22.2	20	20.6
Leavers	23	60·5	15	39·5	0	0·0	15	35·7	23	54·8	4	9·5	4	5·0
	52	28·6	108	59·3	22	12·1	43	27·6	93	59·6	20	12.8	42	12·4

* Details of nutrition in respect of 57 girls examined at this school are unavailable.

† This figure includes one girl whose nutritional state was classified as D (bad).

drawn from the figures in these tables, but the figures are published here for reference purposes and for use later.

State of nutrition. The state of nutrition in these children is set out in Table XXXI. Comparison of the percentages in this table with those in Table II B of the Appendix on page 442 will show that the children attending higher institutions were definitely much better nourished than children attending elementary schools. The percentage of children with subnormal nutrition in the former schools was 5.0 per cent.

In the reports from individual assistant school medical officers mention is made of certain features which are worthy of comment. For example, in the West Ham Secondary School Dr. Fitchet reports that of five heart cases, three were allowed to take part in games and drill; one in exercises, but no games; and that one had to continue with the prescribed restrictions. At the Plaistow Secondary School Dr. Griffin reports that very few of the dental cases who had been recommended for dental treatment had obtained it. Dr. Fitchet also reports that at the St. Angela's High School for Girls, one case of malnutrition was admitted to a nursing home for observation and treatment, and that of three heart cases, two are now allowed to take part in all games and systematic exercises, but that the third is still restricted. It is noted that two girls, one attending the West Ham Secondary School and the other St. Angela's High School, refused to obtain the glasses prescribed.

XVIII. PARENTS' PAYMENTS.

The arrangements made for recovering the cost of treatment from parents of children attending public elementary schools and pupils attending secondary schools and other institutions of higher education are as follows:—

Medical and dental treatment. Lists of cases treated are periodically sent to the Superintendent of Visitors. The school attendance officers visit each case and ascertain the income of the parents. The cases are then assessed in accordance with the Committee's scale and the amount is collected by weekly instalments.

The following amounts were paid by parents during the year in respect of the treatment stated:—

	£	s.	d.
Dental treatment	163	12	3
Treatment for tonsils and adenoids	71	9	6
X-ray treatment for ringworm ..	1	1	0
Artificial sunlight treatment ..	24	1	0
Orthopaedic in-patient treatment	1	19	2
Fyfield Open-air School	568	11	6
Other residential institutions ..	200	2	6

Spectacles. Parents claiming assistance in respect of the supply of spectacles to children attend the School Attendance Department and state particulars of their income. Upon this information, an order is given to the optician to the Education Committee to supply the spectacles at contract price, the parents contributing according to their means.

The sum of £24 2s. 2d. was contributed by the Council in connection with these necessitous cases.

XIX. MISCELLANEOUS.

Employment of Children and Young Persons. The employment of school children out of school hours is subject to certain restrictions governed by bye-laws under section 9 of the Education Act, 1921. These restrictions limit the age at which a child can commence such work, and the hours of employment. The child must be medically examined and a certificate given that the work will not injure the child's health or prejudice his education. The greater part of the work undertaken by children in this borough consists of newspaper delivery and other errand rounds connected with provision stores.

The Bye-laws under the Education Act, 1921, relating to the employment of children have been recently revised and adopted by the Council. In the main they give greater elasticity to child employment without essentially altering the hours of employment or encroaching on the conditions. Moreover they bring these conditions more into line with those of the London County Council and neighbouring boroughs. During 1937, the number of children examined was 244.

During the same period certificates of fitness under the Employment of Children in Entertainments Rules (section 101, Education Act, 1921), were granted in respect of 55 girls and one boy.

Juvenile Instruction Centre. In accordance with the

Ministry of Labour's Memorandum on the provision of medical inspection for juveniles attending the authority's course of instruction, arrangements were made by the Authority for a medical inspection to be carried out at the Juvenile Instruction Centre, which was held in the premises of the Y.M.C.A. in Greengate Street. Unfortunately the Centre was closed in September, 1937.

Dr. West reports that he examined the boys on five occasions during the period that the Centre was in operation. The total number of boys examined at these inspections was 65, and of these 8 were found to be defective. The most common defect was defective vision. The standard of nutrition was satisfactory, 36.9 per cent. being above the average, 58.5 per cent. of average nutrition, and 4.6 per cent. showed slightly subnormal nutrition.

Dr. Griffin reports that during the six months from April to September she examined 40 juveniles at the Centre. Of these five had defective vision, and eight suffered from other defects. The parents of ten of the juveniles examined were present at the examination. The children were classified as far as nutrition was concerned as follows:—

Above average	.. ..	15.0 per cent.
Average nutrition	.. ..	67.6 per cent.
Below average	.. ..	17.4 per cent.

The number of juveniles re-inspected was thirteen, and treatment recommended was obtained in many cases. Dental appointments were made for six cases with the authority's dentist, and of these three did not attend for treatment.

Dr. Griffin notes that a considerable proportion of the defects were of the type which improved little, if at all, as a result of treatment, and which therefore interfere with the constant employment of these juveniles. Short lectures and advice were given at every opportunity in order to encourage the girls to take an interest in their health. An excellent and inexpensive midday dinner was provided daily at the Centre, and physical instruction in the gymnasium was provided as part of the education.

Pathological Work. The microscopical examination of sputum for the presence of the tubercle bacillus is undertaken by the Tuberculosis Officer. Throat swabs are taken by the school medical staff as required, and sent to the Superintendent of Plaistow Fever Hospital for culture and report.

APPENDIX TO REPORT ON SCHOOL MEDICAL SERVICE.

TABLE I.

RETURN OF MEDICAL INSPECTION.

A. Routine medical inspections.

Code Group.	Boys.	Girls.	Total.
Entrants	2,154	2,256	4,410
Second age group	2,090	1,852	3,942
Third age group	1,999	2,068	4,067
Totals	6,243	6,176	12,419
Other routine inspections ..	965	956	1,921
Elementary schools: Grand totals	7,208	7,132	14,340
Special schools	129	84	213
Nursery schools	457	394	851
Secondary schools	1,206	1,365	2,571

B. Other inspections.

	Special inspections	Re-inspections.	Total.
Elementary schools	16,062	7,452	23,514
Secondary schools	87	597	684
Totals	16,149	8,049	24,198

TABLE I—*continued.*

C. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (excluding malnutrition, uncleanliness and dental disease).

Group.	Number of children		Percentage of children found to require treatment.
	Inspected.	Found to require treatment.	
Entrants	4,410	759	17.21
Second age group	3,942	857	21.74
Third age group	4,067	852	20.95
Total (prescribed groups)	12,419	2,468	19.87
Other routine inspections ..	1,921	137	7.13
Elementary schools: Grand totals	14,340	2,605	18.17
Secondary schools (including bursars) ..	2,571	490	19.06
Nursery schools	851	144	16.92

TABLE II.

A.—Return of Defects found by Medical Inspection in the year ended 31st December, 1937.

Defect or disease	Elementary schools				Secondary schools			
	Routine inspections		Special inspections		Routine inspections		Special inspections	
	No. of defects		No. of defects		No. of defects		No. of defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Skin :								
Ringworm, scalp	—	—	23	—	—	—	—	—
Ringworm, body	7	—	99	—	—	—	—	—
Scabies	7	—	253	—	3	—	1	—
Impetigo ...	7	1	637	—	—	—	1	—
Other diseases (non-tuberculous) ...	100	18	3,204	—	25	6	16	—
Total (skin diseases) ...	121	19	4,216	—	28	6	18	—
Eye :								
Blepharitis ...	44	2	237	—	5	—	1	—
Conjunctivitis ...	11	4	409	1	2	—	4	—
Keratitis ...	1	—	8	—	—	—	—	—
Corneal opacities	1	1	17	—	—	—	—	—
Other conditions (excluding defective vision and squint) ...	15	11	275	—	—	—	4	—
Total (eye diseases) ...	72	18	946	1	7	—	9	—
Defective vision (excluding squint)	617	92	664	3	329	19	29	—
Squint	195	15	220	2	11	—	—	—
Ear :								
Defective hearing	26	9	51	2	2	2	1	—
Otitis media ...	56	10	427	—	11	2	3	—
Other ear diseases	54	4	426	—	6	1	1	—
Nose and Throat :								
Chronic tonsillitis only	136	114	52	—	13	6	—	—
Adenoids only ...	30	29	26	3	1	2	—	—
Chronic tonsillitis and adenoids	434	102	378	—	2	1	3	—
Other conditions	125	24	162	3	25	1	1	—
Enlarged cervical glands (non-tuberculous)	32	39	165	1	1	1	—	—

TABLE II.—*continued.*

Defect or disease	Elementary schools				Secondary schools			
	Routine inspections		Special inspections		Routine inspections		Special inspections	
	No. of defects		No. of defects		No. of defects		No. of defects	
	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
Defective speech ...	9	25	34	15	—	1	—	—
Heart and circulation:								
Heart disease : ...								
Organic ...	74	101	49	16	1	20	—	—
Functional ...	—	39	8	1	—	10	—	—
Anæmia	79	17	79	3	28	6	—	—
Lungs :								
Bronchitis ...	111	92	92	2	1	2	—	—
Other non-tuberculous disease	31	43	42	5	1	1	—	—
Tuberculosis :								
Pulmonary :								
Definite ...	—	10	1	3	—	—	—	—
Suspected ...	2	11	11	3	—	—	—	—
Non-Pulmonary :								
Glands ...	8	8	26	2	—	1	—	—
Bones and joints	—	—	2	—	—	—	—	—
Skin	—	—	—	—	—	—	—	—
Other forms ...	—	—	—	—	—	—	—	—
Total (non-pulm. tuberculosis) ...	8	8	28	2	—	1	—	—
Nervous system :								
Epilepsy	6	11	17	8	—	2	1	—
Chorea	10	14	28	3	—	1	—	—
Other conditions	36	25	68	2	2	4	—	—
Deformities :								
Rickets	10	11	7	1	—	—	—	—
Spinal curvature	31	6	8	1	8	1	—	—
Other forms ...	51	49	49	6	20	6	2	—
Other defects and diseases (excluding defects of nutrition, uncleanliness and dental diseases) ...	446	254	8,923	33	47	34	21	—
Total number of defects ...	2,802	1,191	17,177	119	544	130	89	—

TABLE II.—*continued.*

B.—Classification of the Nutrition of Children inspected during the year in the Routine Age Groups.

Age groups.	Number of children inspected	A. (Excellent)		B. (Normal)		C. (Slightly sub-normal)		D. (Bad)	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Entrants	4,410	572	12·97	3,330	75·51	504	11·43	4	·09
Second age group ...	3,942	549	13·93	2,878	73·01	506	12·83	9	·23
Third age group ...	4,067	864	21·24	2,818	69·29	381	9·37	4	·10
Other ages	1,921	469	24·41	1,323	68·87	128	6·66	1	·05
Totals (elementary)	14,340	2,454	17·11	10,349	72·16	1,519	10·59	18	·13
Secondary schools ...	2,571	971	37·77	1,467	57·06	132	5·13	1	·04
Totals (all groups)	16,911	34,25	20·25	11,816	69·84	1,651	9·76	19	·11

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

Blind children.

At certified schools for the blind	At public elementary schools	At other institutions	At no school or institution	Total
1	—	—	—	1

Partially sighted children.

At certified schools for the blind	At certified schools for the partially sighted	At public elementary schools	At other institutions	At no school or institution	Total.
10	—	6	—	1	17

TABLE III.—*continued.*

Deaf children.

At certified schools for the deaf	At public elementary schools	At other institutions	At no school or institution	Total.
21	—	—	—	21

Partially deaf children.

At certified schools for the deaf	At certified schools for the partially deaf	At public elementary schools	At other institutions	At no school or institution	Total.
7	—	11	—	—	18

Mentally defective children—feeble-minded children.

At certified schools for mentally defective children	At public elementary schools	At other institutions	At no school or institution	Total.
156	10	—	13	179

Epileptic children—children suffering from severe epilepsy.

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
5	2	1	8	16

Physically defective children.

A. *Tuberculous children*:—

1—Children suffering from pulmonary tuberculosis (including pleura and intra-thoracic glands).

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
41	5	—	2	48

TABLE III—*continued.*

2—Children suffering from non-pulmonary tuberculosis.

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
39	10	—	1	50

B. *Delicate children.*

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
263	371	—	6	640

C. *Crippled children.*

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
68	23	2	10	103

D. *Children with heart disease.*

At certified special schools	At public elementary schools	At other institutions	At no school or institution	Total.
31	49	1	17	98

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Combination of defect.	At certified special schools.	At public elementary Schools.	At other institutions.	At no school or institution.	Total.
Deaf and dumb and mental defect	1	—	—	—	1
Heart and crippling	—	—	—	1	1
Epilepsy and mental defect	—	—	—	1	1

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1937.

TREATMENT TABLES.

Group I. Minor ailments (excluding uncleanliness for which see Group VI).

Defect or disease.	Number of defects treated, or under treatment during the year.							
	Elementary schools.			Secondary schools.			Special schools.	Nursery schools.
	Under Local Authority's scheme.	Otherwise.	Total.	Under Local Authority's scheme.	Otherwise.	Total.	Under Local Authority's scheme.	Under Local Authority's scheme.
Skin :—								
Ringworm: scalp (*a*) X-rays ...	13	—	13	—	—	—	—	—
(*b*) otherwise	7	3	10	—	—	—	—	1
Ringworm, body	96	2	98	—	—	—	—	1
Scabies	251	3	254	3	—	3	—	1
Impetigo	620	17	637	1	—	1	1	4
Other skin diseases	3,160	73	3,233	15	5	20	40	29
Minor eye defects (External and other, but excluding cases falling in Group II)	926	43	969	9	5	14	6	26
Minor ear defects	869	69	938	6	4	10	40	34
Miscellaneous ... ... (*e.g.* minor injuries, bruises, sores, chilblains, etc.) ...	6,248	537	6,785	14	2	16	328	196
Totals	12,190	747	12,937	48	16	64	415	292

TABLE IV.—*continued.*

Group II. Defective vision and squint (excluding minor eye defects treated as minor ailments. Group I).

	Number of defects dealt with.							
	Elementary schools.			Secondary schools.			Special schools.	Nursery schools.
	Under the Authority's scheme.	Otherwise.	Total.	Under the Authority's scheme.	Otherwise.	Total.	Under the Authority's scheme.	Under the Authority's scheme.
Errors of refraction (including squint, but excluding operations for squint)	2,018	25	2,043	479	22	501	32	7
Other defects or disease of the eyes (excluding those recorded in Group I)	—	—	—	—	—	—	—	—
Totals	2,018	25	2,043	479	22	501	32	7
Number of children for whom spectacles were :—								
(*a*) prescribed	1,835	42	1,877	450	22	472	30	7
(*b*) obtained	1,748	42	1,790	437	22	459	30	5

TABLE IV.—*continued.*

Group III. Treatment of defects of nose and throat.

Type of school.	Number of defects.													
	Received operative treatment.												Received other forms of treatment.	Total number treated.
	Under the Authority's scheme in clinic or hospital.				By private practioner or hospital apart from the Authority's scheme.				Total.					
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)		
Elementary schools	58	25	537	2	2	2	75	7	60	27	612	9	143	851
Secondary schools	2	—	3	—	—	—	1	—	2	—	4	—	28	34
Special schools ...	—	—	3	—	—	—	—	—	—	—	3	—	—	3
Nursery schools ...	—	—	17	—	—	—	—	—	—	—	17	—	—	17

(1) Tonsils only.
(2) Adenoids only.
(3) Tonsils and adenoids.
(4) Other defects of the nose and throat.

Group IV. Orthopaedic and postural defects.

Type of school.	Under the Authority's Scheme.			Otherwise.			Total.
	Residential treatment with education.	Residential treatment without education	Non-Residential treatment at an orthopaedic clinic.	Residential treatment with education.	Residential treatment without education	Non-Residential treatment at an orthopaedic clinic.	
Number of children (elementary)	24	—	91	—	—	41	156
Number of children (secondary)	—	—	5	—	—	7	12

TABLE V.

DENTAL DEFECTS.

	Elementary.	Secondary.
(1) Number of children inspected by dentists:		
Routine	18,182	—
Specials	4,559	142
Total	22,741	142
(2) Found to require treatment	14,258	117
(3) Actually treated	10,095	112
(4) Attendances made by children for treatment	16,720	274
(5) Number of half-days devoted to ..		
(*a*) inspection	195	—
(*b*) treatment	1,996	—
Total half-days	2,191	—
(6) Number of fillings:—		
(*a*) permanent teeth	2,152	118
(*b*) temporary teeth	341	—
Total fillings	2,493	118
(7) Number of extractions:—		
(*a*) permanent teeth	1,756	54
(*b*) temporary teeth	15,846	20
Total extractions	17,602	74
(8) Administrations of general anaesthetics for extractions ..	—	—
(9) Other operations:—		
(*a*) permanent teeth	1,691	99
(*b*) temporary teeth	621	—
Total of "other operations"	2,312	99

TABLE V.—*continued.*

Details of elementary school children inspected by dentists as routines:—

Routine age groups	Age			Total
	4	..	375	18,182
	5	..	779	
	6	..	3,742	
	7	..	4,040	
	8	..	4,127	
	9	..	1,021	
	10	..	934	
	11	..	944	
	12	..	1,033	
	13	..	1,081	
	14	..	106	

TABLE VI.

UNCLEANLINESS AND VERMINOUS CONDITIONS.

	Elementary schools.
(1) Average number of visits per school made during the year by the school nurses ..	11.93
(2) Total number of examinations of children in the schools by the school nurses	79,476
(3) Number of individual children found unclean	1,246
(4) Number of children cleansed under section 87, Education Act, 1921	—
(5) Number of cases in which legal proceedings were taken:—	
(*a*) Under the Education Act, 1921	—
(*b*) Under the school attendance bye-laws ..	—

SCHOOL CLINICS — MEDICAL AND DENTAL.

Day	Clinic	Where held	Time
Monday to Friday	School children	Stratford Clinic, 84 West Ham Lane.	9.15—12.0 2.0 — 4.0
Saturday	,, ,,	,, ,,	9.15—12.0
Monday to Friday	,, ,,	Plaistow Clinic, Balaam Street.	9.15—12.0 2.0 — 4.0
Saturday	,, ,,	,, ,,	9.15—12.0
Monday to Friday	,, ,,	Canning Town Clinic, Swanscombe Street.	9.15—12.0 2.0 — 4.0
Saturday	,, ,,	,, ,,	9.15—12.0
Monday to Friday	,, ,,	Custom House Clinic, Rosetta Road.	9.15—12.0 2.0 — 4.0
Saturday	,, ,,	,, ,,	9.15—12.0

During school holidays (excluding bank holidays) Custom House Clinic is open daily from 9.0 a.m. to 12.0 noon and Stratford Clinic is open Monday to Friday from 2.0 to 4.0 p.m.

APPENDIX.

List of clinics and services.

MATERNITY AND CHILD WELFARE CLINICS.

Day	Clinic	Where held	Time
Monday	Infant welfare	West Ham Lane Clinic.	2.0 — 5.0
,,	Ante-natal	Maybury Road Clinic.	9.30— 1.0
,,	Infant welfare	,, ,, ,,	2.0 — 5.0
,,	,, ,,	Stratford Day Nursery, Welfare Road.	1.30— 5.0
,,	,, ,,	Given Wilson Institute, Pelly Road.	2.0 — 5.0
,,	Ante-natal	Plaistow Maternity Clinic, Chesterton House, Balaam Street.	2.0 — 4.0
,,	Dental (mothers)	Maybury Road Clinic.	9.30— 1.0
,,	,, (mothers and children)	,, ,, ,,	2.0 — 5.0
Tuesday	Ante-natal	West Ham Lane Clinic.	9.30— 1.0
,,	Infant welfare	,, ,, ,,	2.0 — 5.0
,,	Ante-natal	Forest Gate Clinic, Forest Street.	9.30— 1.0
,,	Infant welfare	,, ,,	2.0 — 5.0
,,	,, ,,	Plaistow Maternity Clinic, Hoy Street, Tidal Basin.	2.0 — 4.0
,,	Sunlight treatment	Stratford Day Nursery, Welfare Road.	9.30—12.0
	Ante-natal	Plaistow Maternity Clinic, Chesterton House, Balaam Street.	2.0 — 4.0
,,	Infant welfare	Maybury Road Clinic.	2.0 — 5.0
,,	Dental (mothers)	Forest Gate Clinic, Forest Street.	9.30— 1.0
	,, (children)	,, ,,	2.0 — 5.0
Wednesday	Infant welfare	Forest Gate Clinic, Forest Street.	2.0 — 5.0
,,	Ante-natal	Grange Road Clinic.	9.30— 1.0
,,	Infant welfare	,, ,, ,,	2.0 — 5.0
,,	Ante-natal	St. Barnabas's Church, Westwood Road, Silvertown.	9.30— 1.0
,,	Infant welfare	,, ,,	2.0 — 5.0
,,	,, ,,	Plaistow Maternity Clinic, Chesterton House, Balaam Street.	4.30—5.30
,,	Ante-natal	Lees Hall, Barking Road.	10.0— 1.0
,,	Infant welfare	,, ,,	2.0— 5.0
,,	,, ,,	Plaistow Maternity Clinic, Hoy Street, Tidal Basin.	10.0—12.0
,,	,, ,,	Trinity Mission, Oxford Road.	1.30— 5.0
,,	Dental (mothers)	Grange Road Clinic.	9.30— 1.0
,,	,, (children)	,, ,, ,,	2.0 — 5.0
Thursday	Infant welfare	West Ham Lane Clinic.	2.0 — 5.0
,,	,, ,,	Forest Gate Clinic, Forest Street.	9.30—12.30
,,	,, ,,	,, ,,	2.0 — 5.0
,,	,, ,,	Maybury Road Clinic.	2.0 — 5.0
,,	,, ,,	Plaistow Maternity Clinic, Chesterton House, Balaam Street.	12.0— 1.0
,,	Sunlight treatment	Stratford Day Nursery, Welfare Road.	9.30—12.0
,,	Infant welfare	Trinity Mission, Oxford Road.	1.30— 5.0
,,	Dental (children)	Forest Gate Clinic, Forest Street.	9.30— 1.0
,,	,, ,,	,, ,,	2.0 — 5.0

Day	Clinic	Where held	Time
Friday	Diphtheria immunisation	West Ham Lane Clinic.	9.30—12.0
,,	Infant welfare	,, ,, ,,	2.0 — 5.0
,,	,, ,,	Grange Road Clinic.	2.0 — 5.0
,,	,, ,,	Trinity Mission, Oxford Road.	1.30— 5.0
,,	,, ,,	Stratford Day Nursery, Welfare Road.	1.30— 5.0
,,	Ante-natal	Plaistow Maternity Clinic, Chesterton House, Balaam Street.	2.0 — 4.0
,,	,, ,,	Plaistow Maternity Clinic, Hoy Street, Tidal Basin.	2.0 — 4.0
,,	,, ,,	Forest Gate Clinic, Forest Street.	9.30— 1.0 (alternate Fridays)
,,	Dental (mothers)	Grange Road Clinic	9.30— 1.0
,,	,, ,,	,, ,, ,,	2.0 — 5.0
Saturday	Dental (children)	Grange Road Clinic	9.30— 1.0

V.D. CLINICS.

Day	Clinic	Where held	Time	
Monday	Venereal disease.	Royal Albert Dock Hospital	2.0 —	Men only.
Wednesday	,, ,,	,, ,,	4.0 —	Women only
Friday	,, ,,	,, ,,	2.0 —	Men only.
Daily	,, ,,	L.C.C. Clinic, Turner Street, Whitechapel.	10.0— 9.0	Both sexes.

TUBERCULOSIS.

Day	Clinic	Where held	Time	
Monday	Tuberculosis consultations and treatment.	Dispensary, Balaam Street.	9.30— 1.0	Women and children.
,,	,, ,,	,, ,,	2.0 —4.30	,, ,,
Tuesday	,, ,,	,, ,,	9.30— 1.0	Men only.
Wednesday	,, ,,	,, ,,	9.30— 1.0	Women and children.
,,	,, ,,	,, ,,	2.0 —4.30	,, ,,
Thursday	,, ,,	,, ,,	9.30— 1.0	Men only.
,,	Special treatment and examination of contacts.	,, ,,	2.0 —4.30	Men, women and children.
Friday	Tuberculosis consultations and treatment.	,, ,,	9.30— 1.0	Women and children.
,,	,, ,,	,, ,,	2.0 —4.30	,, ,,

LIST OF DISTRICTS OF DISTRICT MEDICAL OFFICERS

Name and Address.	*District.*
Dr. T. L. Dolan, North West Ham Public Assistance Sub-Office, 82 West Ham Lane, Stratford, E.15.	Broadway, Park, West Ham, Plashet Road and Forest Gate Wards.
Dr. J. P. Robinson, South West Ham Public Assistance Sub-Office, Cumberland Road, Plaistow, E.13.	Beckton Road, Ordnance, Custom House, Hudsons, Canning Town and Grange Wards and part of Silvertown Ward.
Dr. P. G. S. Kennedy, 113 Balaam Street, Plaistow, E.13.	Plaistow and Bemersyde Wards.
Dr. J. F. Begley, 184 Barking Road, Canning Town, E.16.	Part of Tidal Basin Ward.
Dr. R. V. Brews, 10 High Street, North Woolwich, E.16.	Part of Custom House and Silvertown Ward.
Dr. J. J. McSharry, 24 Freemasons Road, Custom House, E.16.	Part of Tidal Basin Ward.
Dr. M. J. Murphy, 60 Leytonstone Road, Stratford, E.15.	New Town Ward.

LIST OF LOCAL ACTS AND REGULATIONS WHICH ARE IN FORCE.

West Ham Corporation Act Improvements Act, 1888.
West Ham Corporation Act, 1893.
" " " " 1898.
" " " " 1902.
" " " " 1920.
" " " " 1925.
" " " " 1931.
" " " " 1937.
Bye-laws made under the Municipal Corporations Act, 1882, in respect of Tents, Vans, Sheds, etc.
Bye-laws made under the Public Health Acts in respect of:—

(*a*) Common lodging houses.
(*b*) Knackers'-yards.
(*c*) Offensive trades.
(*d*) Nuisances.
(*e*) Houses let in lodgings.
(*f*) Slaughter-houses.
(*g*) Removal of offensive matter.

West Ham Corporation Act, 1931—Trading in streets.
Theatres Act, 1843—Music, dancing and stage plays licences.

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