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Metropolitan Borough of Woolwich

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# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

WOOLWICH

1933

BY

J. MACMILLAN, D.S.O., M.C., M.B., D.P.H.

Medical Officer of Health

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LONDON :

WIGHTMAN & CO., LTD.

Regency Street, S.W. 1.

## PUBLIC HEALTH AND HOUSING COMMITTEE.

At 31st December, 1933.

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HIS WORSHIP THE MAYOR (Alderman E. H. Kemp, J.P., L.C.C.).

Councillor H. VAUGHAN (*Chairman*).

Councillor F. J. BLOOMFIELD (*Vice-Chairman*).

Alderman ... .. S. G. TURNER.

### Councillors :

J. S. BARRY

B. A. G. BEATEN

P. CHINNERY

Miss M. CROUT, J.P.

Mrs. L. E. DRIVER

A. H. GILDER

Miss C. K. LAMBETH

Mrs. E. L. REEVES

Miss S. TURNBULL

H. J. TURNER

Miss G. E. WALTERS, J.P.

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## MATERNITY AND CHILD WELFARE COMMITTEE.

Comprising the Members of the Public Health and Housing Committee.

Councillor H. VAUGHAN (*Chairman*).

Councillor Miss C. K. LAMBETH (*Vice-Chairman*).



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## PREFACE.

*To the Mayor, Aldermen and Councillors  
of the Metropolitan Borough of Woolwich.*

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit the Thirty-Third Annual Report on the Health of the Metropolitan Borough of Woolwich.

In accordance with the instructions of the Council the report follows the outline indicated by the Minister of Health in order to ensure uniformity in the presentation of Annual Reports of Medical Officers of Health throughout the country, but to facilitate the preparation of the report, those Sections which contain rates based on the population have been placed at the end of the Report instead of at the beginning as in previous years.

The vital statistics for the year are as follows. The birth rate was 12·7; the death rate 11·2; the infantile mortality rate 62, and the neo-natal mortality rate (deaths under four weeks per 1,000 births) was 33·92. In 1932 the corresponding figures were 14·0, 11·1, 60 and 24·82 respectively. Maternal deaths numbered six—the same as in 1932—the rate for the year being 3·29 per 1,000 births.

The population of the Borough is estimated by the Registrar General to be 146,200 at the middle of the year, a decrease of 700 on 1932. This is the total population and includes non-civilians. It is on this figure that the rates of the Borough are calculated, and so, when any comparison of figures in this report is made with those during the period 1915 to 1931 (when civilians only were included) allowance must be made for this alteration.

Compared with 1932 the incidence of infectious disease shows an increase. There were more cases of Diphtheria (370 against 233) and of Scarlet Fever (1,004 against 554). The number of cases of Pneumonia notified was 249 and the number of notifications of Puerperal Fever and Puerperal Pyrexia received was 40. There were two cases of Smallpox. Measles, which is not a notifiable disease, was not present in epidemic form.

The number of primary cases of Tuberculosis coming to the knowledge of the Department during the year was 252 (294 in 1932). At the end of the year there were 827 cases of pulmonary and 208 cases of non-pulmonary Tuberculosis, making a total of 1,035 (1,030 cases in 1932) known to be living in the Borough. The deaths from Tuberculosis numbered 135 (154 in 1932).



It is pleasing to record once again that, during the year, additional professional qualifications were obtained by the following Inspectors :—

*Advanced Inspectors' Certificate, Royal Sanitary Institute—*

Mr. C. J. Couch.

*Sanitary Science, Royal Sanitary Institute—*

Mr. E. Lewis.

The work of the Inspectors is fully reported on in those parts of the Report which deal with the sanitary inspection of the area, control of infectious disease, inspection and supervision of the food supplies, and housing. During the year it was necessary to second one of the district inspectors for special survey work in connection with slum clearance problems. A general survey of the district was carried out to enable a report to be prepared on such areas as could be dealt with as unhealthy areas under the Housing Act, 1930, and in accordance with the procedure prescribed therein some 18 small areas, numbering 187 houses in all, were submitted to the London County Council as the Council's programme for the next five years. One of these, a hutment area, was represented during the year.

During the year more attention was paid to the problem of bug infestation of houses. The scheme described in my Annual Report for 1932 was in operation the whole year and has given results which, so far as they go, appear highly satisfactory, but much more research work is necessary before adequate steps can be taken for the eradication of the bug from our midst. A report on the year's work will be found in the Housing Section of the Report.

The registration of premises where Ice Cream is manufactured, stored or sold, where sausages are manufactured, or where potted, pressed, pickled, or preserved meat, fish, or other food is prepared, was continued during the year in accordance with the powers given to the Council by the London County Council (General Powers) Act, 1932. No such premises are placed on the registers until they comply with the requirements of the Council.

During the year alterations in the Centre accommodation were made at North Woolwich and at Plumstead.

At North Woolwich, owing to the re-organisation of the Baths, a portion of the building became available for other purposes, and the Council decided to convert this into a Maternity and Child Welfare Centre. The necessary alterations were made and in June the new Centre was opened. Infant welfare centres are held there weekly, the Medical Officer attending every alternate week, and an ante-natal session is held once a month. Arrangements have been entered into with East Ham Borough Council whereby the Centre is rented to that body on two afternoons



a week for the purposes of a School Clinic, and on one afternoon a week for a Maternity and Child Welfare Centre. This new Centre replaces the rooms rented at St. John's Church Hall.

Plumstead Welfare Centre was enlarged, a new waiting room, with consequential alterations, being provided on the ground floor and a second storey being added. Arrangements were entered into with the London County Council and the local School Medical Treatment Committee, whereby all school medical treatment work at Plumstead is now carried out at this Centre, thus following the Eltham precedent.

The scheme for the medical examination of Toddlers continues to work satisfactorily and to become more popular each year. Mothers cannot, of course, be compelled to bring their children for medical inspection at these Clinics, and it is therefore gratifying to find that each year more and more are anxious that their children should be examined. It is a sign of the times and it means that defects in children are found much earlier than they would be if such clinics were not established. Many children now enter school with unhealthy conditions already remedied instead of waiting to be discovered at a school medical inspection. A report on the year's working will be found in Section VI.

Since my last report the following officers have left the service of the Council :—

Mrs. M. L. Morrison, Lay Organiser, who entered the service of the Council in 1922, resigned in March.

Mr. Thomas Powell, Sanitary Inspector, who entered the service of the Council in 1904, retired on superannuation in April.

Miss Kate Latham, Health Visitor, who entered the service of the Council in 1917, retired on superannuation in September.

Mrs. M. Prestige, Tuberculosis Visitor, who joined the staff in 1921 when the Tuberculosis Service was taken over by the Council, resigned in October.

I am much indebted to the Members of the Health Committees of the Council from whom I have received many kindnesses and the greatest possible help during the year, and I take this opportunity of expressing my appreciation thereof. My sincere thanks are also given to the Staff of the Department for their co-operation and assistance during the year in dealing with the ever increasing demands made upon them.

I am,

Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

J. MACMILLAN,

*Medical Officer of Health.*

# THIRTY-THIRD ANNUAL REPORT

OF THE

HEALTH OF THE METROPOLITAN BOROUGH OF WOOLWICH.

Year ending 31st December, 1933.

## SECTION I.

### GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

#### i. PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

(a) In tabular form are shown below the names, qualifications and appointments of all Medical Officers employed by, or discharging duties for the Council, either whole or part time, or in a consultative capacity, at the 31st December.

TABLE No. 1.

Year appointed.	Name.	Qualifications.	Appointment.
1918	Mackenzie, R. E. W. ...	M.B., D.P.H. ...	Assistant Medical Officer of Health for Maternity and Child Welfare.
1921	Blackmore, F. J. C. ...	M.R.C.S., L.R.C.P. ...	Assistant Medical Officer of Health and Tuberculosis Officer.
1931	Proudfoot, M. E. ...	M.B., Ch.B. ...	Assistant Medical Officer (General Purposes).
1931	Saunders-Jacobs, E. V.	M.A., M.B., B.S., M.R.C.S., L.R.C.P., B.Sc., D.P.H.	do. do.
1927	Lynham, J. E. A. ...	B.A., M.D., D.M.R.E. ...	Consultant, Artificial Sunlight.
1927	Taylor, H. G. ...	F.R.C.S. ...	Consultant under Puerperal Fever Regulations, 1926.
1930	Emslie, M. ...	M.B., Ch.B. ...	Obstetric Consultant (1931).
1930	Brews, R. V. ...	L.R.C.P.I. and L.M., L.R.C.S.I. and L.M.	Medical Officer, Toddlers, Clinics (part time).
1930	Cowie, W. ...	M.A., M.B., C.M. ...	Public Vaccinator (part time).
1930	Clarke, C. F. ...	M.R.C.S., L.S.A. ...	do.
1930	Wise, H. M. ...	M.B., M.R.C.S., L.R.C.P. ...	do.
1930	Milton, E. F. ...	M.D., B.S. ...	do.
1930	Blackall, G. ...	M.B., B.A.O., D.P.H. ...	do.
1930	Power, F. J. ...	L.R.C.P.I. and L.M., L.R.C.S.I. and L.M.	do.

The deputies for the above Public Vaccinators are respectively :—

Dr. N. E. Sampey, Dr. D. Wilson, Dr. H. M. Wise, Dr. E. C. Wise, Dr. W. T. Milton, Dr. R. W. Wood, Dr. R. Lewys-Lloyd.



(b) In tabular form are shown below the dates of appointments, names, and qualifications of the Public Analyst, the Sanitary Inspectors, Health Visitors, the Vaccination Officer, the Tuberculosis Staff and the Clerical Staff employed by the Council at the 31st December.

TABLE No. 2.

Year. appoint- ed.	Name.	Qualifications.	Appointment.
1933	Williams, H. Amphlett	A.C.G.F.C., F.I.C.... ...	Public Analyst (part time).
1909	Shaw, H. ...	Cert. Royal San. Inst.; Cert. San. Insp., Exam. Board; Cert. San. Insp. Assocn.; Cert. Meat and other foods; Cert. San. Science, R.S.I.	Chief Sanitary Inspector. (1928)
1901	Tedham, W. ...	Cert. Royal San. Inst., Cert. Meat and other foods.	Sanitary Inspector.
1920	Pendrill, H. W. ...	Cert. San. Insp., Exam. Board; Cert. Advanced Inspectors, R.S.I.; Cert. Meat and other foods; Cert. Smoke Insp., R.S.I.	Sanitary Inspector.
1921	Harris, C V ...	Cert San. Insp., Exam Board; Cert. Royal San. Inst.; Cert. Meat and other foods.	Sanitary Inspector.
1922	Couch, C. ...	Cert. San. Insp., Exam. Board; Cert. Royal San. Inst.; Cert. Meat and other foods; Cert. Smoke Insp., R.S.I.; Cert. Advanced Inspectors', R.S.I.	Sanitary Inspector.
1925	Pindar, E. B. ...	Cert. San. Insp., Exam. Board; Cert. Royal San. Inst.; Cert. Meat and other foods.	Sanitary Inspector.
1928	Andrew, F. A. ...	Cert. San. Insp., Exam. Joint Board; Cert. Meat and other foods.	Sanitary Inspector.
1929	Hemingway, F. ...	Cert. San. Insp., Exam. Joint Board; Cert. Meat and other foods.	Sanitary Inspector.
1930	Kersey, H. M....	Cert. San. Insp., Exam. Joint Board; Cert. Meat and other foods; Cert. Smoke Insp., R.S.I.	Sanitary Inspector.
1931	Hoines, F. J. ...	Cert. San. Insp., Exam. Joint Board; Cert. Meat and other foods.	Sanitary Inspector.
1933	Lewis, E. ...	Cert. San. Insp., Exam. Joint Board; Cert. Meat and other foods; Cert. Smoke Insp., R.S.I.; Cert. San. Science, R.S.I.	Sanitary Inspector.
1904	Farrugia, Mrs. A. ...	Cert. San. Insp., Exam. Board; Cert. Royal San. Inst.	Woman Sanitary Inspector.

TABLE No. 2—*continued.*

Year. appoint- ed.	Name.	Qualifications.	Appointment.
1918	Garside, Mrs. M. ...	Cert. San. Insp., Exam. Board ; C.M.B. ; Health Visitors' Cert.	Health Visitor and Sanitary Inspector.
1919	Burnett, Miss W. ...	Cert. San. Insp., Exam. Board ; C.M.B. ; Health Visitors' Cert., Board of Education.	Health Visitor.
1919	Tibbits, Miss E. ...	Cert. San. Insp., Exam. Board ; Health Visitors' Cert., Board of Education.	Health Visitor.
1919	Ware, Miss C. ...	Cert. San. Insp., Exam. Board ; C.M.B. ; Health Visitors' Cert., Board of Education.	Health Visitor and Sanitary Inspector.
1920	Campbell, Miss M. ...	Cert. General Hospital Training ; C.M.B. ; Cert. San. Insp., Exam. Board ; Health Visitors' Cert., Royal San. Inst.	Health Visitor.
1920	Morgan, Miss F. ...	Cert. General Hospital Training ; C.M.B. ; Health Visitors' Cert. ; Maternity and Child Welfare Cert.	Health Visitor.
1922	Seccombe, Miss W. ...	Cert. General Hospital Training ; C.M.B. ; Health Visitors' Cert.	Health Visitor.
1927	Farrell, Miss E. V. ...	Cert. General Hospital Training ; C.M.B. ; Heliotherapy Cert. ; Health Visitors' Cert., Board of Education.	Health Visitor and Artificial Sunlight Nurse.
1930	Frederick, Miss F. E. ...	Cert. General Hospital Training ; C.M.B. ; Health Visitors' Cert.	Health Visitor.
1933	Carey, Miss A. ...	Cert. General Hospital Training ; Cert. Fever Training ; C.M.B. ; Health Visitors' Cert.	Health Visitor.
1933	Adams, Miss W. ...	Cert. General Hospital Training ; C.M.B. ; Health Visitors' Cert.	Health Visitor.
1931	Taylor, S. G. ...	—	Vaccination Officer (part time).
1921	Castledine, Mrs. L. ...	Cert. General Hospital Training.	Tuberculosis Visitor.
1921	Mahony, Miss N. ...	Cert. General Hospital Training ; Health Visitors' Cert.	Tuberculosis Visitor.
—	One vacancy ...	—	Tuberculosis Visitor.
1923	Smith, Mrs. M. ...	Dispensing Certificate ...	Dispenser and Secre- tary of Care Com- mittee.

## CLERKS :

Allen, L.  
Biswell, Miss V.  
Britter, A.  
Bryant, Miss A. (Temporary)

Collyer, H. M.  
Crawford, Miss I.  
Edwards, Mrs. N.  
Pike, L.

Prescott, H. T.  
Smith, H. S.  
Stephenson, Miss D.  
Taylor, S. G. (part-time).

The Medical Officer of Health is Administrative Tuberculosis Officer and Executive Officer under the Council's Maternity and Child Welfare Scheme.



## ii. PROFESSIONAL NURSING IN THE HOME.

During the year nursing assistance was available in all parts of the Borough. Such assistance is provided by four Nursing Associations, as follows :—

Woolwich and Plumstead District Nursing Association :

All Woolwich (except North Woolwich) and Plumstead.

Silvertown and North Woolwich District Nursing Association :

North Woolwich.

Eltham Provident Nursing Association :

All Eltham (except New Eltham).

New Eltham District Nursing Association :

New Eltham.

All these Associations insist that the patient shall be under the care of a medical practitioner, and, in ordinary circumstances, only nurse non-infectious cases. On the recommendation of the Medical Officer of Health, however, they provide nursing assistance for cases of measles, whooping cough, zymotic enteritis, ophthalmia neonatorum, pneumonia, anterior poliomyelitis, tuberculosis, puerperal fever and puerperal pyrexia. For nursing assistance the Borough Council pay, in necessitous cases, in accordance with the following schedule :—

Disease.	Rate of Payment.
Measles ... ..	1s. 0d. per visit for one case ; 6d. per visit, per case, for more than one case in the house at the same time.
Ophthalmia Neonatorum...	
Zymotic Enteritis... ..	
Whooping Cough ... ..	
Poliomyelitis ... ..	
Acute Primary Pneumonia	1s. 3d. per visit.
Influenzal Pneumonia ...	
Puerperal Fever ... ..	
Puerperal Pyrexia ... ..	
Tuberculosis ... ..	

## iii. MIDWIVES.

There are no whole-time midwives employed by the Council. By the courtesy of the County Medical Officer of Health I have been able to ascertain that 51 midwives gave notice during the year of their intention to practise in the Borough.

## iv. LABORATORY FACILITIES.

The bacteriological work of the Council rendered necessary by investigations of infectious diseases, food poisoning, and water control in the Council's swim-



ming baths, is carried out at the Woolwich War Memorial Hospital. The bacteriological examination of milk samples is carried out partly at the Woolwich War Memorial Hospital and partly at the Clinical Research Laboratory.

A minimum of 500 samples are purchased annually in accordance with the provisions of the Food and Drugs (Adulteration) Act, 1928, and the various Regulations and Orders in which are laid down the standards for food. They are submitted for chemical analysis to the Public Analyst.

During the first quarter of the year the work was carried out at the Royal Institute of Public Health, arrangements having been made with Dr. Alan Stewart, the Public Analyst of the Metropolitan Borough of Islington, pending the appointment of a successor to the late Sir William Robert Smith, who died in March, 1932. From the 1st April the work was carried out at 16, Southwark Street, London, S.E. 1, the laboratory of the Public Analyst, Mr. Hugh Amphlett Williams.

#### V. ADOPTIVE ACTS, BY-LAWS AND REGULATIONS RELATING TO PUBLIC HEALTH IN FORCE IN THE DISTRICT.

*Adoptive Acts.*—The Small Dwellings Acquisition Acts, 1899-1923, have been adopted by the Council. During the year, the Borough Treasurer tells me, the Council made 399 advances to purchasers of houses in accordance with the provisions of these Acts.

*By-laws and Regulations.*—A complete list of the various by-laws and regulations in force in the Borough was given in the Annual Report for 1930.

*Transfer of Powers Order, 1933.*—This Order came into operation on the 1st April, 1933, and transferred the following duties to the Borough Council from the London County Council :—

- (a) *Building Lines.*—Power to prescribe a building line in relation to any part of a highway not being a road classified by the Minister of Transport.
- (b) *Disused Burial Grounds.*—Enforcement of prohibition of erection of buildings on disused burial grounds.
- (c) *Seamen's Lodging Houses.*—Enforcement of by-laws made by the County Council relating to seamen's lodging houses, licensing and inspection of seamen's lodging houses, and supervision of the sanitary condition of such lodging houses, in accordance with the by-laws for the time being in force.

- (d) *Thames and other Embankments*.—Maintenance, repair, cleansing, watering and lighting of any footway or carriageway forming part of any embankment vested in the County Council, but exclusive of the maintenance and repair of any embankment wall or any lamp erected on an embankment wall.
- (e) *Common Lodging Houses*.—Registration, licensing, inspection and regulation of common lodging houses and the enforcement of by-laws relating to such houses, but exclusive of the power of making by-laws under Section 53 of the London County Council (General Powers) Act, 1902.
- (f) *Cowhouses and Places for the Keeping of Cows*.—Licensing of dairymen to use premises as a cowhouse or place for the keeping of cows.
- (g) *Infant Life Protection*.—Reception of notices given by persons who undertake for reward the nursing and maintenance in a dwelling of infants and the inspection of premises by infant protection visitors or other persons appointed by the Council for that purpose.

Fixing the number of infants to be kept in a dwelling in which any infant is received for reward.

Applications to a Court of Justice for an Order directing the removal of an infant to a place of safety.

- (h) *Offensive Trades*.—Consideration of, and decision upon, applications for sanction to the establishment anew or enlargement of certain offensive businesses; or imposition, modification or removal of conditions.
- (i) *Slaughterhouses and Knackers' Yards*.—Licensing of slaughterers of cattle or horses and of knackers to use premises as a slaughterhouse or knacker's yard.

Licensing of persons to use premises for receiving or keeping horses for slaughter or the carcases of dead horses.

Certain recreation grounds, disused burial grounds and other open spaces in London, provided they do not exceed a prescribed area, are also transferred to the Borough Councils, but this does not affect Woolwich.

#### vi. INSTITUTIONAL TREATMENT FOR UNMARRIED MOTHERS, ILLEGITIMATE INFANTS AND HOMELESS CHILDREN.

There are no special provisions for any of these classes in the Borough.



## vii. AMBULANCE FACILITIES.

The London County Council's ambulance service is available :—

- (a) For the removal to hospital, free of charge, of persons suffering from infectious disease ;
- (b) For the removal, on payment, of persons suffering from non-infectious diseases to hospitals or other places ;
- (c) For the removal, free of charge, of cases of accident and sudden illness arising in the streets or public buildings, to hospitals or home.
- (d) For the removal, free of charge, of ordinary maternity cases between the hours of 11 p.m. and 8 a.m., and urgent maternity cases during the day-time, when accompanied by a doctor or nurse.

In addition to these services the Council hire the ambulances of the London County Council for the conveyance of non-urgent maternity cases, between 8 a.m., and 11 p.m., to hospitals in the London area. A note on the use of this service will be found in the Maternity and Child Welfare Section.

## viii. MATERNAL MORTALITY.

In accordance with the terms of the Ministry of Health Circular 888, confidential enquiries are made by the Council's medical officers into every maternal death and reports are furnished to the Ministry of Health.

The services of a Consultant Surgeon are now available for cases of obstetric emergencies and difficulties occurring at home, and for consultation and treatment in cases of puerperal fever or puerperal pyrexia.

Arrangements have also been made for the home nursing of such cases and for such bacteriological investigations as are necessary.

## ix. VACCINATION.

I submit a return by the Vaccination Officer on the work carried out under the Vaccination Acts for the year 1932.



TABLE No. 3.

RETURN to be made on or before the 9th of February, 1934, by Mr. S. G. Taylor, Vaccination Officer of all Sub-Districts of the Metropolitan Borough of Woolwich Registration District, respecting the Vaccination of Children whose Births were registered from 1st January to 31st December, 1932, inclusive :—

Registration Sub-Districts comprised in Vaccination Officer's District.	Number of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December, 1932.	Number of these Births duly entered by 31st January, 1934, in Columns I., II., IV. and V. of the "Vaccination Register" (Birth List Sheets), viz. :—				
		Col. I. Successfully Vaccinated.	Col. II.		Col. IV. Number in respect of whom Statutory Declaration of Conscientious Objection has been received.	Col. V. Died Unvaccinated.
			Insusceptible of Vaccination.	Had Small Pox.		
1.	2.	3.	4.	5.	6.	7.
1. PLUMSTEAD...	524	230	—	—	219	36
2. WOOLWICH†	1,273	676	12	—	461	42
3. ELTHAM ...	468	239	3	—	174	17
Total ...	2,265	1,145	15	—	854	95

Number of these Births which on 31st January, 1934, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of :—			Number of these Births remaining on 31st January, 1934, neither duly entered in the "Vaccination Register" (Columns 3, 4, 5, 6 and 7 of this Return) nor temporarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return).	*Total Number of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1933.	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year 1933.
Postponement by Medical Certificate.	Removal to Districts the Vaccination Officers of which have been duly apprised.	Removal to places unknown or which cannot be reached; and cases not having been found.			
8.	9.	10.	11.	12.	13.
3	9	21	6	These figures are to be obtained from columns 2 and 6 of the Summary (Form N.)	
14	36	25	7		
5	11	12	7		
22	56	58	20	*1,201	856

For notes on Table 3 see page 17.



## NOTES ON TABLE NO. 3.

NOTE.—(a) The total of the figures in columns 3 to 11 should agree with the figures in column 2. Any cases of children successfully vaccinated after the declaration of conscientious objection had been made should be included in column 6 above and not in column 3. The number of such cases should be inserted here :—Nil.

(b) The figures in columns 2 to 11 should not include re-registered births or cases of children born in other districts.

\*The total in this column should be the number of Certificates of successful primary vaccination of children under 14, actually received during the year, including any relating to births registered in previous years. The total thus given should include the Certificates of successful primary vaccination of which copies have been sent to the Vaccination Officers of other Districts. The total number of Certificates for the year 1933 sent to other Vaccination Officers should be stated here :—78.

†Includes the Burrage and Herbert Wards in Plumstead Parish.

(Signature) S. G. TAYLOR,

Date—10th February, 1934.

Vaccination Officer.

During the year ended 30th September, 1933, the number of persons successfully vaccinated and re-vaccinated at the cost of the rates was 1,241. This figure includes 715 primary vaccinations of persons under one year of age and 236 over one year of age, and 290 re-vaccinations.

#### X. SUPPLY OF INSULIN TO PERSONS SUFFERING FROM DIABETES.

In May, 1930, the Council agreed to supply Insulin to diabetic patients who were necessitous and unable to obtain it under the National Health Insurance Acts, and obtained the Ministry's approval. A continuing approval was obtained in 1931 and 1932.

A supply of Insulin was given under this scheme to seven patients during the year, the total cost being £33 8s. 0d.

Insulin is supplied to medical practitioners under the following conditions :—

- (1) The application must state the name, age, address, and sex of the patient for whom it is required.
- (2) A quarterly report must be furnished in respect of each patient treated, giving the following information :—
  - (a) The number of doses of Insulin administered ;
  - (b) Stating whether any tests were made of the urine or of the blood of the patient, and, if so, by whom and with what results ;
  - (c) A report on the progress of the patient.

#### xi. CLINICS AND TREATMENT CENTRES.

In tabular form (next page) is shown a list of clinics and treatment centres in the Borough. It differs from the one published last year in two respects :—

- (a) The new Centre in North Woolwich replaces that of St. John's Hall, North Woolwich ; and
- (b) The Plumstead High Street (hut) School Centre has been closed.



TABLE No. 4.

## CLINICS AND TREATMENT CENTRES.

Situation.	Nature of Accommodation.	By Whom Provided.	Sessions Weekly.
<b>Maternity and Child Welfare Centres.</b>			
Old Town Hall, Woolwich ...	Doctor's Room, Weighing Rooms, Waiting Rooms, etc.	Woolwich Borough Council	8
236, Plumstead High Street ...	Doctor's Room, Ante-Natal Room, Ante-room, Weighing Room, Waiting Room, Dental Rooms	do.	6
Westhorpe Avenue, Eltham ...	Doctor's Room, Ante-Natal Room, Ante-room, Weighing Room, Waiting Room, Lecture Hall, Dental Rooms	do.	6
Elizabeth Street, North Woolwich	Doctor's Room, Weighing Room	do.	1*
Wesley Hall, Timbercroft Lane, Plumstead	do. ...	do.	2
All Saints' Church Hall, New Eltham	do. ...	do.	2
Holy Trinity Church Hall, Beresford Street, Woolwich	do. ...	do.	1
St. Luke's Hall, Westmount Road, Eltham	do. ...	do.	1
<b>Sunlight Clinic.</b>			
Old Town Hall, Woolwich ...	Treatment and Waiting Rooms, etc.	do.	9
<b>Day Nurseries.</b>			
Nil.			
<b>School Clinics.</b>			
Brewer Street, Woolwich ...	Doctor's Rooms, Treatment Rooms, Waiting Rooms.	Local Medical Association.	Daily
236, Plumstead High Street, Plumstead.	Doctor's Room, Treatment Room, Waiting Rooms, Dental Rooms	do.	Daily
Westhorpe Avenue, Eltham ...	Doctor's Room, Dental Rooms, Waiting Room, Treatment Rooms	do.	Daily
Cyril Henry Treatment Centre, St. Mary's Street, Woolwich	Accommodation for operating on, and detention of, cases of enlarged tonsils and adenoids	London County Council	Daily
Borough Disinfecting Station, Whitehart Road, Plumstead	Accommodation for cleansing of verminous children	Woolwich Borough Council	Daily

\* An Ante-Natal Clinic is held here once a month.

TABLE No. 4—*continued.*

Situation.	Nature of Accommodation.	By Whom Provided.	Sessions Weekly.
<b>Tuberculosis Dispensaries.</b>			
Maxey Road, Plumstead ...	Doctor's Rooms, Waiting Rooms, Dressing Rooms, Dispensary, etc.	Woolwich Borough Council	Daily
179, Well Hall Road ...	Doctor's Room, Waiting Room	do.	3
<b>Venereal Diseases.</b>			
Nil.			
<b>Orthopædic Clinic.</b>			
8, Thomas Street, Woolwich ...	Clinic, Waiting Room, Dressing Room	Woolwich Invalid Children's Aid Association	Daily

## xii. HEALTH VISITING.

The arrangements made for the visiting of children between the ages of one and five years, and the general working of the Council's Maternity and Child Welfare scheme are described in Section VI.

## xiii. HOSPITALS.

The Medical Officer of Health is asked to report under this heading on the hospitals belonging to the local authority and hospitals with which the local authority has made arrangements for the admission of patients. There are no hospitals belonging to this local authority, but arrangements for the admission of patients have been made with two local hospitals :—

- (a) War Memorial Hospital.
- (b) British Hospital for Mothers and Babies.

The Council's arrangements with these hospitals were fully reported on in the Annual Report for 1930, but it may be convenient to refer to them briefly here :—

At the War Memorial Hospital the Council reserve twelve beds for children under five years, and sufficient accommodation as may be necessary for 66 maternity cases per annum. In addition the hospital authorities are under contract to provide emergency treatment as occasion arises for such cases of midwifery as require it.

At the British Hospital for Mothers and Babies, such accommodation as may be necessary for 144 confinements per annum, and for their ante-natal treatment, is reserved for cases sent by the Borough Council.



## SECTION II.—HEALTH PROPAGANDA.

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Parliamentary enactments lose much of their value if they are merely enforced by Local Authorities and the co-operation of individual members of the public is not obtained, and, in the same way, measures taken by any Health Department have a limited field of usefulness unless this co-operation exists. Much depends upon personal effort. For this reason health education is now regarded as a permanent service—first of all to assist the public in having a better knowledge of their local health services; secondly, to tell them the laws of health, and, thirdly, to bring home to them their own personal responsibilities in the matter.

Experience has shown the importance of educating the public in matters of health, and that full value cannot be obtained for the money spent on health services without such action.

In addition to the activities outlined in the following paragraphs, which deal briefly with the propaganda work of the Council during the year, advice is given daily by the Council's Health Visitors, Sanitary Inspectors and Tuberculosis Visitors in their home visits, and in a similar way at the Welfare Centres, Tuberculosis Dispensaries and in the Department.

Much free literature, including a 16-page booklet on the Council's Health Services, is distributed every year, and as much use as possible is made of the letter-press and pictorial posters.

The Council's activities may be classified as follows:—

(a) **HEALTH WEEK.**—The ninth local Health Week was held in October, and the following is a copy of the report made by the Public Health Committee to the Council:—

“ In accordance with the resolution of the 26th July, 1933, we made arrangements for holding a local Health Week from October 23rd to the 28th. The inaugural feature of the week was the opening of the Health Centre at Plumstead. There was a good attendance at the opening meeting. In addition to members of the Council, there were present representatives of the London County Council, School Care Committee Workers, Head Teachers of Plumstead Schools, Members of the School Medical Committee, representatives from surrounding Boroughs and voluntary workers.



"The Centre was opened by His Worship the Mayor (Councillor R. A. M. Walters, J.P.). The vote of thanks was proposed by Miss C. Fulford, Chairman of the Special Services Sub-Committee of the London County Council, and seconded by Councillor Mrs. E. L. Reeves.

"Great interest was taken in the enlarged Health Centre by the people of the district, there being a steady flow of visitors all through the week.

"The Health Week was held at the Town Hall, Woolwich, opening on the evening of the 23rd October. It was arranged on a sessional basis, each afternoon and evening. At each session films were shown and a lecture or demonstration of rhythmic and remedial exercises were given. In the morning there was a session for a conducted party of school children and the general public were not admitted.

"The attendance for the week was close on seven thousand.

"We are grateful to the lecturers who gave their services ; to the organisations demonstrating the rhythmic and remedial exercises ; to those voluntary organisations who helped by loaning films, and to the voluntary workers who assisted at the Plumstead Centre and at the Nursery established at the Old Town Hall Clinic, and to all these, in accordance with the courtesy of the Council, we have extended our sincere thanks."

(b) LECTURES TO SCHOOL CHILDREN.—The policy adopted for the session 1932-33 of combining with the Libraries Committee in the presentation of cinematograph educational films to school children was continued in 1933-34. These meetings are held on Monday mornings and the films are shown at 9.30 and again at 11 o'clock to different audiences. Full attendances were recorded at most of the sessions. The health films shown were :—

January 23rd	...	"How We See."
March 20th...	...	"Your Mouth."
October 16th	...	"Ten Little Dirty Boys."
November 20th	...	"Care of the Teeth."
December 11th	...	"Weatherwise."

(c) ADULT HEALTH LECTURES.—No adult health lectures were given during the year.

(d) INFORMAL TALKS.—These talks commenced in 1929 and the series were continued during the year under review. This service of providing health education to the people in their own meeting places establishes a direct contact which is of great value. There is greater demand for such talks each year. They are given by members of the staff, but it may be necessary shortly to consider the appointing of



a part-time health lecturer. Such an appointment would enable more systematic health teaching to be given. At each talk it is the practice to show films, or lantern slides, or to give a practical demonstration.

(e) CENTRAL COUNCIL FOR HEALTH EDUCATION.—This organisation (to which the Council contributes a donation of three guineas) performs many functions of use to local health authorities. Composed as it is, of representatives of health and education authorities, insurance committees, friendly societies, etc., it co-ordinates the activities of many bodies dealing with different aspects of health education, and is consequently of great value to local authorities in their work of health teaching.

(f) BETTER HEALTH.—The magazine "Better Health," the official journal of the Central Council for Health Education, is published monthly, and 2,000 copies of each issue were purchased and distributed through the welfare centres, libraries and schools. A limited number were posted to residents, selected at random, in the Borough each month.

(g) POSTERS.—Towards the end of the year a letter was received from the Minister of Health stating that the special poster frames used in connection with the work of the Empire Marketing Board could no longer be used for that purpose, and asking if they could be used by the Council for health propaganda purposes. There were six such boards in Woolwich—one outside the Royal Arsenal; two on land belonging to the London County Council and three on land belonging to industrial organisations. At the end of the year the War Office stated that they would be prepared to allow this Council to retain the frame fixed to the wall at the Royal Arsenal main gates subject to the Council agreeing to pay 5s. 0d. per annum; one of the commercial firms had agreed to the Council using their board free of charge at such times as it was not required for the firm's purposes, and the views of the London County Council were not known.

### SECTION III.—SANITARY ADMINISTRATION.

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STAFF.—At the end of the year there were on the staff of the Sanitary Section of the Department, one Chief Sanitary Inspector, ten male Inspectors, one female Inspector and two part-time female Inspectors.

Mr. T. Powell, who entered the service of the Council on the 18th April, 1904, retired on the 30th April, on reaching the age limit, and Mr. E. Lewis, who was appointed to the vacancy so created, commenced duty on the 1st May.

WATER SUPPLY.—The water supply of the Borough is under the control of the Metropolitan Water Board, and no complaints were received as to the quality of the water supply during the year.

REMOVAL AND DISPOSAL OF REFUSE.—House refuse is collected and disposed of by direct labour in Woolwich and is under the control of the Works Committee of the Council. Collection is made once weekly with the exception of a small central area where a twice-weekly collection is made. All refuse is disposed of by burning at the Council's destructor, White Hart Lane.

The collection and disposal of house refuse was the subject of a report by a special sub-committee appointed to consider the possibility of re-organising the above service with a view to reducing the cost. From the report it appeared that the cost of collection averaged 7s. 3d. a ton in Woolwich, and 13s. 3d. a ton in Eltham, and that the two principal factors causing this difference were: (a) the great distance the refuse has to be hauled from Eltham to the Plumstead Destructor, and (b) the difficulty in keeping the loaders continually employed whilst the lorries were making their journeys to the Destructor.

After careful consideration the sub-committee recommended that the needs of the Eltham district would be best met by adopting the "Pagefield" system, a system which consists of collection by motor vehicles working in conjunction with horse-drawn vehicles. The Council adopted this report and the change-over took place gradually as the vehicles were obtained.

From a public health point of view the new method is much better than the old, inasmuch as refuse is not scattered over the public highway during loading.



Most of the dustbins in the Borough are of a movable pattern. It was found necessary to take action for the renewal of 328 dustbins.

Offensive trade refuse is removed by contractors who collect the fish waste from the various shops in the Borough and make their own arrangements with the occupiers of the shops regarding the times of collection. The contractors provide suitable airtight receptacles which have to satisfy the requirements of the Medical Officer of Health, and guarantee a collection of the material every other day or weekly, according to the individual requirements of the premises affected.

When the change-over took place from the old system a considerable number of complaints were received, particularly regarding noise, but a few regarding nuisance. At the end of the year, however, an improved type of receptacle had been put into use and the scheme was working satisfactorily.

Inoffensive trade refuse is removed by the Works Department at a charge of 5s. 0d. per load, and during the year 1,656 tons 8 cwts. were so dealt with.

**DRAINAGE.**—With relatively few exceptions every house in the Borough is connected with the water-carriage system.

New drainage and extensive reconstruction of old systems are supervised by the Borough Engineer. In all other instances alterations are inspected by the sanitary staff. During the year 68 complaints were received with regard to the defective action of combined drains. On investigation, it was found that 370 houses in all were affected. In every case the drains were cleared. In all the systems, except seven, the obstruction was of a temporary nature. In 22 instances choked interceptors were found. Costs recovered from the owners amounted to £5 9s. 0d. In the following seven instances reconstruction was necessary and the work was carried out by the owners after service of notices:—1-31, Camrose Street and 2-22, Church Manorway; 158-160, Brewery Road and 2-8, Parkdale Road; 34-46, Spray Street; 32-34, Lannoy Road; 64-80, Riverdale Road. Six private single drains were cleared at the request of the owners from whom the costs, totalling £1 18s. 6d., were recovered.

**Cesspools.**—The number of cesspools in the Borough is 14, 7 being in Plumstead and 7 in Eltham. This is an increase of 4 on last year.

**ACTION TAKEN WITH REGARD TO SMOKE ABATEMENT.**—Thirty-five observations were made of chimney shafts and one notice was served. Five offences were discovered and warning letters were sent in each instance. No legal proceedings were instituted.

COMPLAINTS.—During the year there were 2,427 complaints of nuisances made to the Health Department and investigated by the Sanitary Inspectors. Notices for the remedy or abatement of the defects or nuisances discovered were served upon the owner or other person responsible under the provisions of the Public Health (London) Act, 1891.

SANITARY INSPECTION OF THE AREA.—A summary of the inspections carried out by the Sanitary Inspectors will be found in Table No. 5. In connection therewith the number of Intimation and Statutory notices served was 2,695 and 578 respectively. The Statutory notices related to 494 premises and included 451 general, 60 ashpit, 25 water-closet and 32 paving notices. In addition to these notices under the Public Health (London) Act, 1891, 10 notices were served under London County Council Acts and under By-laws.

In 74 instances, where owners did not comply with the Statutory notices, the Town Clerk was asked to institute proceedings. It was only necessary, however, to issue summonses in five instances, as in all the other cases the necessary steps were taken on receipt of a letter from him.

In Table No. 6, will be found a summary of the nuisances abated and defects remedied.

TABLE No. 5.

## INSPECTIONS.

Housing Survey — Houses		Drainage Inspections ... ..	1,730
Inspected ... ..	1,293	Drains Tested by Smoke Test	370
Slum Clearance — Houses		Drains Tested by Water Test	58
Surveyed ... ..	169	New Houses ... ..	1,071
Complaints Investigated ...	2,632	Tents and Vans ... ..	114
Outworkers' Premises ...	255	Factories ... ..	255
Houses Let in Lodgings ...	587	Workshops ... ..	760
Houses <i>re</i> Infectious Disease ...	1,505	Workplaces ... ..	149
Houses <i>re</i> Smallpox Contacts... ..	148	Theatres and Cinemas... ..	21
Houses <i>re</i> Verminous cases ...	3,052	Rag and Bone Premises ...	7
Houses <i>re</i> Scabies Cases ...	110	Urinals Accessible to the Public	276
Houses <i>re</i> Other Diseases ...	290	Women's Lavatories ... ..	364
Overcrowding Investigated—		Smoke Observations ... ..	35
Rooms ... ..	20	Special Inspections <i>re</i> Rats ...	370
Common Lodging Houses ...	104	Miscellaneous ... ..	2,252
Underground Rooms Illegally		Re-inspections ... ..	8,406
Occupied ... ..	4		



TABLE No. 6.

## NUISANCES ABATED.

Cleansing—				Sinks Repaired or Provided ...	251
Interiors Cleansed ... ..	900			Wastes Cleansed ... ..	36
Rooms Cleansed ... ..	2,169			Wastes Trapped or Repaired...	339
Damp Conditions—				Water Closets—	
Walls ... ..	567			Flushing Apparatus Repaired	182
Sites ... ..	30			„ „ Renewed	89
Roofs ... ..	542			New Pans ... ..	243
Rain Water Pipes and Gutters	392			New Traps ... ..	230
Others ... ..	42			Foul Pans Cleansed by Owner	21
Dilapidations—				Foul Pans Cleansed by	
Walls ... ..	710			Occupier ... ..	69
Ceilings ... ..	582			Additional W.C.'s Provided	4
Floors and Hearths ... ..	212			Doors and Fastenings	
Coppers ... ..	139			Remedied ... ..	86
Stoves ... ..	204			Dust Bins Provided ... ..	328
Others ... ..	87			Underground Rooms Closed ...	2
Verminous Conditions—				Overcrowding—Cases Remedied	18
Rooms Cleansed ... ..	746			Water Supply—	
Defective Lighting—				Additional ... ..	—
Windows Repaired ... ..	53			Reinstated ... ..	42
„ Enlarged ... ..	—			Cisterns Cleansed ... ..	4
„ Additional ... ..	1			„ Covered ... ..	5
Defective Ventilation—				„ Removed ... ..	6
Windows Rendered Usable	430			Foul Accumulations—	
„ Additional Provided	1			Manure Removed ... ..	5
Other Means ... ..	5			Offensive Accumulations Re-	
Defective Paving				moved ... ..	19
Yards Re-paved ... ..	163			Back Yards Cleansed ... ..	45
„ Repaired ... ..	155			Dung Pits Provided ... ..	1
Scullery Floors Re-paved or				Rats—	
Repaired ... ..	86			Drains Repaired in Consequence	56
House Drains—				Premises Rat-proofed ... ..	16
Defective Drains Repaired	257			Other Effective Measures ...	21
Choked Drains Cleared ... ..	221			Rag and Bone Premises—	
Vent Pipes Repaired ... ..	48			Premises Cleansed ... ..	—
Soil Pipes Repaired ... ..	5			Rain-proof Premises Provided	—
Gullies Fixed ... ..	104			Vermin-proof Conditions	
New Drainage ... ..	6			Provided ... ..	—
Rain Water Tanks Repaired ...	4			Miscellaneous ... ..	12
Rain Water Tanks Abolished...	1				

FACTORY AND WORKSHOP ACT.—The following Table No. 7, is in the form adopted by the Secretary of State to provide for uniformity throughout the country in the presentation of certain particulars of this work which lend themselves to statistical treatment.

TABLE No. 7.

Factories, Workshops, Workplaces and Homeworkers' Premises.

1.—*Inspection.*

Including Inspections made by Sanitary Inspectors.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries) ...	255	14	—
Workshops (Including Workshop Laundries)	760	6	—
Workplaces (Other than Outworkers' Premises)	149	2	—
Homeworkers' premises ... ..	255	3	—

2.—*Defects Found.*

Description.	Number of Defects.			
	Found	Remedied.	Referred to H.M. Inspector.	Number of Prosecutions.
<i>Nuisances under Public Health Act :—</i>				
Want of Cleanliness ... ..	20	20	—	—
Want of Ventilation ... ..	1	1	—	—
Overcrowding ... ..	—	—	—	—
Want of Drainage of Floors ... ..	1	1	—	—
Other Nuisances ... ..	9	9	—	—
Sanitary Accommodation	Insufficient ... ..	3	—	—
	Unsuitable or Defective	19	—	—
	Not separate for Sexes	1	—	—
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal Occupation of Underground Bakehouse (S.101)... ..	—	—	—	—
Other Offences ... ..	—	—	—	—
Total ... ..	54	54	—	—



3.—*Outwork in Unwholesome Premises, Section 108.*

Nature of Work.	Instances.	Notices Served.	Prosecutions.
Wearing Apparel—Making, etc. ... ..	3	1	—
Racquet and Tennis Balls ... ..	—	—	—

THE RATS AND MICE (DESTRUCTION) ACT, 1919.—Each district Inspector is the rats officer for his area and investigates all complaints received. The total number of inspections made was 370. In 56 instances defective drains were repaired, 16 premises were rat-proofed, and other effective measures were taken in 21 instances. National Rat Week was held from the 6th to the 11th November, and during it co-operation was obtained from the Borough Engineer and many large firms in the Borough. The number of baits laid in old sewers in Woolwich and Plumstead, which were regarded as infested, was 9,416.

OFFENSIVE TRADES.—By the Transfer of Powers Order, 1933, consideration of, and decision on applications to the establishment anew or the enlargement of certain offensive businesses, or imposition, modification, or removal of conditions, was transferred from the London County Council to the Metropolitan Borough Councils. In Woolwich, however, there is only one offensive trade, namely, that of a slaughterer of poultry. The premises were approved by the London County Council in November, 1931.

RAG FLOCK ACT.—Four samples of rag flock were taken for analysis. Such material must comply with the Rag Flock Regulations, in which it is laid down that the soluble chlorine in the form of chlorides must not exceed 30 parts of chlorine in 100,000 parts of flock. Three of the samples complied with the Regulations, as the results of analysis show, the number of parts of chlorine being, respectively, 9, 10 and 5. In the other instance, where the figure was above the maximum, proceedings were instituted.

MORTUARIES.—The Public Mortuary is in Sun Street, Woolwich, and a temporary mortuary is provided in Eltham High Street. The following Table shows the use made of the mortuaries during the year:—

TABLE No. 8.

	Sun Street.	Sun Street (Infectious).	Eltham.	All Mortuaries.	
Number of Bodies Received :—				1932	1933
(a) For Inquest ... ..	—	—	—	—	—
(b) For Custody ... ..	14	—	2	22	16
	14	—	2	22	16
Number of Post-Mortem Examinations	—	—	—	—	—

CEMETERIES.—There are two cemeteries in the Borough, known as the Woolwich Cemetery and the Plumstead Cemetery, the Woolwich one being divided into two parts, the old and the new. Both are owned by the Council and both are in the parish of Plumstead.

In 1932, land at Eltham was purchased by the Council for a cemetery at Eltham and during the year the work of preparing this was continued and a general lay-out plan was approved.

Burials also take place in Eltham Churchyard and in a private burial ground within the grounds of Christchurch Priory in Eltham High Street.

Plumstead Churchyard was closed in 1930.

In the following Table is shown the number of interments in the different graveyards. The information in the case of the cemeteries is given through the courtesy of the Town Clerk, and, in the case of the Eltham Churchyard, through that of the Vicar of Eltham.

TABLE No. 9.

	Number of Interments.		
	1931	1932	1933
Woolwich Cemetery ... ..	597	560	545
Plumstead Cemetery ... ..	792	765	769
Eltham Churchyard ... ..	304	232	252

*Exhumations.*—During the year three exhumations under Home Office Licences were made in local graveyards.

REMOVAL OF INFIRM AND DISEASED PERSONS IN CERTAIN CASES.—Power is given by Section 28 of the London County Council (General Powers) Act, 1928, to remove infirm and diseased persons living under insanitary conditions to institutions. Usually such persons are persuaded to enter an institution but occasionally difficulty is experienced in this connection, and it was necessary on two occasions to make application to a Magistrate for an Order. In each case the application was granted.

In connection with the Council's powers under this Act, the London County Council drew attention to the unsatisfactory conditions under which certain blind persons in London were living and asked that Medical Officers of Health of Metropolitan Borough Councils should make use of these powers for such persons. No such case, however, came to my knowledge during the year.



LEGAL PROCEEDINGS.—The particulars of the various prosecutions instituted under the Public Health (London) Act, 1891, and kindred Acts are set out in detail in the following Table, No. 10.

TABLE No. 10.  
Prosecutions under Public Health and kindred Acts.

No.	Date of Hearing.	Offence.	Situation.	Result.
1	26th January...	Defective wall plaster near door of top front room; dirty walls and ceilings of top floor landing, staircase leading from ground floor and ground floor passage; defective wall plaster and wooden flooring of ground floor passage; foul leaking sink waste drain from sink in scullery; dangerous defective handrail from basement staircase and dangerous defective treads and risers in same staircase.	37, Rectory Grove	Work done. Summons withdrawn on payment of 10s.6d. costs.
2	26th January...	Insufficient Ashpit ... ..	25, Belson Road ...	Work done. Summons withdrawn on payment of 10s.6d. costs.
3	26th January...	Defective W.C. flushing apparatus.	25, Belson Road ...	Work done. Summons withdrawn on payment of 10s.6d. costs.
4	28th February	Broken leaking drain of W.C. which has recently been improperly repaired and the said drain is choked.	4, Inverness Place	Work done. Summons withdrawn on payment of 15s.0d. costs.
5	5th May ...	Defective stove and flue causing smoke to enter ground floor back room.	11, Blanmerle Road	Work done. Summons withdrawn on payment of 3s. 0d. costs.
6	5th May ...	Did fail to notify a case of Scarlet Fever to the Medical Officer of Health under the provisions of the Public Health (London) Act, 1891.	20, Rhea Street ...	Ordered to pay £2 2s. 0d. costs.
7	27th June ...	Did have in his possession Rag Flock containing 140 parts per 100,000 of soluble Chlorine.	148, Woolwich High Street.	Fined 20s. 0d., and £3 3s. 0d. costs.
8	27th October ...	Did fail to provide a sufficient ashpit.	117, Well Hall Road	Ordered to pay 20s. 0d. costs, and to provide dust bin within 7 days.

**SANDPITS IN CHILDREN'S PLAYGROUNDS.**—The bacteriological examination of the sand in these pits, three in number, having shown that periodic disinfection is necessary, the two Committees of the Council concerned (the Maternity and Child Welfare and Works Committees) decided on my recommendation to have such sand-pits disinfected at regular intervals throughout the year.

**PUBLIC BATHS AND WASHHOUSES.**—There are three bathing establishments in the Borough, one at Plumstead, one at Woolwich, and a small one at North Woolwich. At Plumstead there is a First Class Swimming Bath (capacity 120,000 gallons); a Second Class Swimming Bath (capacity 80,000 gallons); 64 Slipper Baths and a separate building for Turkish and Russian Vapour Baths. There is also a Public Washhouse. At Woolwich there is a First Class Swimming Bath (capacity 120,000 gallons); a Second Class Swimming Bath (capacity 90,000 gallons) and 60 Slipper Baths. At North Woolwich there are 22 Slipper Baths, an increase of eight on the previous year.

Through the courtesy of the Baths Superintendent I am able to say that the total number using the Swimming Baths during the year was 284,826; Turkish and Russian Vapour Baths, 19,705; Slipper Baths, 188,886, and the Public Washhouse, 18,669.

The North Woolwich baths were closed from the 15th April to the 3rd July, whilst alterations were being carried out.

The increase in the number using the Swimming Baths over 1932 (83,283) is no doubt accounted for largely by the hygienic conditions of the water due to the installation of filtration plants in 1932.



## SECTION IV.

### INSPECTION AND SUPERVISION OF FOOD.

The London County Council (General Powers) Act, 1932, requires the registration of premises used for the following purposes :—

- (a) The sale, manufacture or storage of ice cream or similar commodity ;
- (b) The manufacture of sausages ;
- (c) The preparation or manufacture of potted, pressed, pickled, or preserved meat, fish or other food.

So far as ice cream is concerned, power to register premises was given in the London County Council (General Powers) Act, 1928, but no power to refuse to register or to remove from the register was given. The new Act, however, gives this power, not only in respect of ice cream premises, but in respect of all others mentioned therein.

It is quite clear that any premises in which the following articles are manufactured, prepared, or canned, are registrable under the Act, and it may be that there are others :—

*Sausages and allied products.*—Large and small, with or without skins—

Saveloys.	Haggis.
Black Puddings.	Rissoles.
White Puddings.	Bladders of Lard.

*Meat.*—Potted, pressed, pickled, preserved—

Potted Meat or Head,	Faggots.
Tongues, etc.	Cooked Meats, Sheep's Head, etc., Pork.
Meat Pastes.	Dripping.
Meat Extracts.	Brisket (Pressed).
Brawn.	Meat Pies, Pork Pies.
Meat and Pork (Pressed).	Trotters (Pickled).
Meat and Pork (Pickled).	

Hams	} boiled, cooked, smoked or cured or otherwise preserved.
Bacon	

*Fish.*—Potted, pressed, pickled, preserved—

Pastes—various.	Pickled or Soused Fish.
Cured or Dried Fish.	Canned Fish.
Eel Pies and Jellied Eels.	Fried Fish.

*Other Foods.*—Potted, pressed, pickled, preserved—

Canned Soups containing Meat, Hors d'œuvres, if containing Meat or Fish.

Since July, 1932, 234 applications under heads (a) to (e) below for the registration of 143 premises have been received. Structural alterations and improvements have been regarded as necessary in some instances, and certain applications have been adjourned pending these. The number of premises so outstanding at the end of the year was 53.

The register of such premises is kept in five parts, and the numbers in each part at the end of the year, including those registered under the earlier Act, were as set out below :—

(a) Sale, manufacture or storage of Ice Cream ... ..	179
(b) Manufacture of Sausages ... ..	47
(c) Preparation or manufacture of Potted, Pressed, Pickled or Preserved Meat ... ..	55
(d) Preparation or manufacture of Potted, Pressed, Pickled or Preserved Fish ... ..	5
(e) Preparation or manufacture of Potted, Pressed, Pickled or Preserved other foods... ..	1

The total number of inspections made was 620.

In addition to the above, registers of other food premises in the Borough are kept, and the following Table shows the number of inspections made in respect of these during the year :—

TABLE No. 11.

Premises.	On Register 31st December.	Number of		Legal Proceedings.
		Inspec- tions.	Notices.	
Bakehouses ... ..	32	113	15	—
Cowsheds ... ..	9	85	2	—
Milkshops ... ..	80	291	5	—
Slaughterhouses ... ..	5	25	—	—
Fried Fish Shops ... ..	61	244	9	—
Butchers' Shops ... ..	101	274	—	—
Premises where food is prepared (other than above) ... ..	61	64	—	—
Shops and Markets ... ..	—	1,893	1	—





TABLE No. 13.

<i>Situation of Cowhouse.</i>	<i>No. of Sheds.</i>	<i>No. of Cows.</i>	<i>Licencee.</i>
Avery Hill Farm, Eltham ...	3	69	N. B. Grace.
Coldharbour Farm, Eltham ...	2	88	W. F. Fisher.
Eltham Palace Farm, Eltham...	1	6	W. J. Mitchell.
Pippenhall Farm, Eltham ...	1	20	N. B. Grace.
Chapel Farm, Eltham ...	3	59	C. U. Fisher.

*Designated Milks.*—Under the Milk (Special Designations) Order, 1923, the Council are authorised to grant licences to persons other than a producer to sell milk under special designations. Each licence automatically terminates on the last day of the year in which it is issued. In tabular form is shown below certain information relating to this Order :—

TABLE No. 14.

Number of dealers' licences issued to use the designation :—

(a) " Certified " ... ..	5
(b) " Grade A " (Tuberculin Tested) ... ..	6
(c) " Grade A " (Pasteurised) ... ..	2
(d) " Pasteurised " ... ..	14

Number of supplementary licences issued to sell :—

(a) " Certified " milk ... ..	2
(b) " Grade A " (Tuberculin Tested) ... ..	3
(c) " Grade A " (Pasteurised) ... ..	2
(d) " Pasteurised " ... ..	5

Twenty-nine samples of Pasteurised milk were bacteriologically examined during the year, including milk supplied to hospitals and schools in the Borough. The results of the examinations are shown below. Such milk must not contain more than 100,000 bacteria per cubic centimetre.

Bacteria per 1 c.c.

January ... ..	4,900	—	—	—	—
February ... ..	3,300	5,600	—	—	—
March ... ..	5,400	8,800	9,600	—	—
April ... ..	4,200	3,100	9,400	—	—
May ... ..	17,766	63,000	—	—	—
June ... ..	36,400	104,000	—	—	—
July ... ..	5,100	1,696,000	38,000	6,766	—
August ... ..	16,000	—	—	—	—
October ... ..	17,800	3,200	2,600	6,800	2,500
November ... ..	7,100	6,600	—	—	—
December ... ..	30,000	2,100	24,000	74,000	—



*Dried and Condensed Milks.*—Thirteen samples of condensed milk—four formal and nine informal—were submitted for analysis during the year. All were genuine. No samples of dried milk were examined.

AGRICULTURAL PRODUCE (GRADING AND MARKING) ACTS.—These Acts empower the Minister of Agriculture and Fisheries to make Orders for the grading and marking of agricultural produce. One mark—the National Mark—is used, or will be used, for all graded produce of England and Wales, and by law it conveys a guarantee that the produce is of the grade stated. It is not compulsory for all such food stuffs to be so marked, but, if marked, they must conform to the standard.

In London the local authority is the Metropolitan Borough Council concerned, and in Woolwich the Medical Officer of Health, the Chief Sanitary Inspector and three Sanitary Inspectors have been appointed Officers under the Act.

The following is a list of products regarding which Regulations were in force on the 31st December, 1933 :—

<i>Date of Regulations.</i>	<i>Produce.</i>
1929 ...	Potatoes.
1930 ...	Eggs; Glass-house grown Tomatoes and Cucumbers; Strawberries; Cherries.
1931 ...	Beef; Canned Vegetables.
1932 ...	Cider; Bottled Vegetables; Honey; Plums.
1933 ...	Apples; Cauliflower and Broccoli; Wheat Flour; Malt Extract and Malt Flour; Dressed Poultry; Canned Fruits; Bottled Fruits; Cabbage Lettuce; Asparagus; Blackcurrants; Gooseberries; Loganberries; Raspberries; Red Currants; Jam; Cheshire Cheese; Bunched Carrots; Green Peas; Brussels Sprouts; Celery; Pears.

During the year Regulations affecting Apples, Pears, Wheat Flour (1929), Broccoli, Dressed Poultry (1930), Canned Fruits (1931), Malt and Malt Flour, Bottled Fruits (1932), were revoked and the Regulations affecting Plums, Honey and Canned Vegetables were amended.

No offences were discovered during the year.

MERCHANDISE MARKS ACT, 1926.—Under the provisions of Section 9 of the above Act, Food and Drugs Authorities have power to execute any of the provisions of the Act, other than those relating to importation, in respect of foodstuffs which are subject to an Order in Council made under the Act. The Orders which so far have been made are as follows :—

The Merchandise Marks (Imported Goods)	Honey.
No. 3 Order, 1928 ... ..	Fresh Apples.
The Merchandise Marks (Imported Goods)	Currants.
No. 5 Order, 1928 ... ..	Sultanas.
	Raisins.
	Eggs in shell.
	Dried Eggs.
	Oat Products.
The Merchandise Marks (Imported Goods)	
No. 4 Order, 1929 ... ..	Raw Tomatoes.
The Merchandise Marks (Imported Goods)	
No. 5 Order, 1930 ... ..	Malt Products.
The Merchandise Marks (Imported Goods)	
No. 8 Order, 1931 ... ..	Salmon and Trout.
The Merchandise Marks (Imported Goods)	
No. 1 Order, 1932 ... ..	Butter.

These Orders prohibit the sale, or exposure for sale, respectively, in the United Kingdom, of the products mentioned above, unless the goods bear an indication of the country of origin. The term "sale" includes sale, wholesale, or sale by retail; and exposure for sale includes exposure for sale, wholesale, and exposure for sale by retail. As a general rule imported produce does not require marking when sold in quantities not exceeding 14 lbs. in weight.

THE PUBLIC HEALTH (MEAT) REGULATIONS, 1924.—Notice of intention to slaughter any animal must be given to the Council.

The following Table, No. 15, shows the number of animals slaughtered and inspected in the Borough during the year. In 1932 the number was 37,392.

TABLE No. 15.

Month.	Cattle.	Sheep and Lambs.	Pigs.	Calves.	Total.
January ... ..	233	1,794	1,715	1	3,743
February ... ..	192	1,114	1,412	—	2,718
March ... ..	230	1,218	1,799	—	3,247
April ... ..	192	1,129	1,173	—	2,494
May ... ..	204	1,653	521	79	2,457
June ... ..	193	1,908	92	121	2,314
July ... ..	173	2,360	65	16	2,614
August ... ..	170	2,705	87	—	2,962
September ... ..	207	2,126	1,363	—	3,696
October... ..	226	2,423	1,774	—	4,423
November ... ..	229	2,074	1,864	—	4,167
December ... ..	265	1,347	2,316	—	3,928
	2,514	21,851	14,181	217	38,763



The number of whole carcasses condemned on account of disease or injury was 40 (26 pigs and 14 sheep). In 2,453 instances partial condemnation was necessary in respect of 1,895 pigs, 134 sheep and 424 cattle.

All shops and stalls where meat is sold are regularly inspected and, if any insanitary conditions are discovered, measures are taken to secure their abatement.

*Slaughterhouses.*—There is no public slaughterhouse in the Borough. Slaughterhouses are subject to annual licence and, in the Table which follows, are shown those licensed at the end of the year. Previous to 1933 such licences were issued by the London County Council, but in that year the licensing of these premises was transferred to Metropolitan Borough Councils by the Transfer of Powers Order, 1933. A special Licensing Sub-Committee was appointed which dealt with the applications received. The only change which took place was in respect of the ownership of the slaughterhouse at 38, Plumstead Common Road.

TABLE No. 16.

<i>Situation of Slaughterhouse.</i>			<i>Owner.</i>
Bostall Farm, Abbey Wood	...	...	Royal Arsenal Co-operative Society, Ltd.
14, Church Street	...	...	Portlock, T. W.
33, Herbert Road	...	...	Anderson, F.
6, Plumstead High Street	...	...	Reed, H., & Co., Ltd.
38, Plumstead Common Road	...	...	Reed, A. J.

*Inspection of Imported Meat.*—In Woolwich, as in other parts of the country, much imported meat is sold. In the usual way this meat comes from the London markets after inspection, and such inspection as it receives in Woolwich takes place in the butchers' shops where it is exposed for sale. Occasionally, however, the Port of London Sanitary Authority allows foreign meat to be removed from the Port of London without examination on the understanding that (a) the meat shall be taken to a wholesale depot; (b) none of it shall be removed without the permission of the local Medical Officer of Health; and (c) the consignees shall give the Medical Officer of Health notice as soon as the meat is received at the depot. Guarantees are obtained by the Port of London Authority before such permission is given. During the year, however, no such meat was inspected.

*BAKEHOUSES.*—There were at the end of the year 32 bakehouses in the Borough, of which 24 were factory and 8 underground. The inspections numbered 113, and 15 notices were served. The conditions on the whole were satisfactory.

*FRIED FISH SHOPS.*—There were 61 premises on the register. They were inspected on 244 occasions and 9 notices were served for breaches of the bye-laws.

OTHER FOOD PREMISES.—As a matter of routine a number of food premises, including eating houses, coffee stalls, butchers' shops and restaurants, are visited each week by the Food Inspector, and immediate action is taken in regard to any insanitary condition found. In addition, 1,893 visits were made to shops and stalls in the markets.

UN SOUND FOOD.—There were 574 instances of unsound food being surrendered. These compare with 327 instances in 1932. Included in the food surrendered were:—1 ton 5 cwts. Beef; 8 cwts. Mutton; 4 tons 2 cwts. Pork; 1 ton 4 cwts. Pig Offal; 11 cwts. Ox Livers; 4 cwts. Ox Lungs; 2½ cwts. Sheeps' Offal; 77 lbs. Fish; 19 Fowls; 2 cwts. Apples; 3 cwts. Split Peas, and smaller quantities of Tinned Salmon, Fruit, Ham, Bananas and Oranges.

Seizures of unsound food were made on 7 occasions, and included the following:—Beef, Mutton, Plums, Apples, Peaches, Sweets and a Fowl. On the Committee's recommendation offenders were cautioned by the Town Clerk in respect of two seizures and proceedings were taken in connection with four of the seizures, particulars of which are set out in the following Table No. 17. In the other instance, where meat was seized in a store, the owner could not be traced.

TABLE NO. 17.

No.	Date of Hearing.	Offence.	Result.
1	27th April... ..	Exposure for sale of 13½ lbs. of sweets which were unsound and unfit for human food ... ..	Fined £5 or 28 days.
2	27th April... ..	Exposure for sale of 1 fowl which was unsound and unfit for human food	Ordered to pay £1 1s. Costs.
3	27th April... ..	Exposure for sale of 8 peaches which were unsound and unfit for human food ...	Fined 40s.
4	8th September ...	Exposure for sale of 4 lbs. 4 ozs. of apples which were unsound and unfit for human food	Fined £3 and £2 2s. Costs.

SOPHISTICATION OF FOOD.—The following Table, No. 18, gives details of the various analyses made under the Food and Drugs (Adulteration) Act, Public Health (Condensed Milk) Regulations, Public Health (Dried Milk) Regulations and the Public Health (Preservatives, etc., in Food) Regulations. Four samples were taken on Sundays or public holidays and these were found to be genuine.



TABLE No. 18.

Article.	Formal Samples.	Informal Samples.	Number Analysed.	Number Adulterated.
Milk ... ..	214	41	255	14
Cream ... ..	—	10	10	—
Condensed Milk ... ..	4	9	13	—
Butter ... ..	29	14	43	1
Cheese ... ..	—	2	2	—
Margarine ... ..	2	1	3	—
Tea ... ..	1	2	3	—
Cocoa ... ..	2	—	2	—
Coffee Essence ... ..	—	1	1	—
Coffee and Chicory ... ..	1	2	3	1
Jam ... ..	8	16	24	8
Honey ... ..	—	4	4	—
Flour ... ..	—	1	1	—
Self-raising Flour ... ..	—	4	4	—
Suet ... ..	—	5	5	—
Lard ... ..	1	5	6	—
Mustard ... ..	—	1	1	—
Malt Vinegar ... ..	2	10	12	2
Pepper ... ..	1	2	3	—
Raisins ... ..	—	7	7	—
Sultanas ... ..	—	2	2	—
Dried Fruit ... ..	—	5	5	1
Dried Apricots ... ..	—	4	4	—
Figs ... ..	—	1	1	—
Dates ... ..	—	1	1	—
Ground Cinnamon ... ..	1	2	3	1
Ground Ginger ... ..	—	6	6	—
Ground Nutmegs ... ..	—	2	2	—
Nutmegs ... ..	—	2	2	1
Pickles ... ..	—	2	2	—
Mincemeat ... ..	1	3	4	—
Dried Mint ... ..	8	9	17	12
Sage ... ..	—	2	2	—
Bread and Butter ... ..	2	—	2	—

TABLE No. 18—*continued.*

Article.	Formal Samples.	Informal Samples.	Number Analysed.	Number Adulterated.
Sausages ... ..	17	1	18	1
Brawn ... ..	1	—	1	—
Meat Pie ... ..	2	—	2	—
Minced Meat ... ..	8	—	8	2
Ice Cream ... ..	7	—	7	—
Fish Paste ... ..	1	3	4	—
Meat Paste ... ..	—	2	2	—
Tinned Fish ... ..	—	7	7	—
Tinned Fruit ... ..	—	6	6	—
Tinned Asparagus ... ..	—	2	2	—
Tinned Tomatoes ... ..	—	6	6	—
Tinned Peas ... ..	—	4	4	—
Confectionery ... ..	—	8	8	—
Chocolate ... ..	—	3	3	—
Whisky ... ..	11	—	11	—
Rum ... ..	5	—	5	1
Gin... ..	2	1	3	2
Stout ... ..	—	1	1	—
Elderberry Wine... ..	—	1	1	—
Ginger ... ..	—	1	1	—
Ginger Beer ... ..	—	1	1	—
Mineral Waters ... ..	—	2	2	—
Lemonade... ..	—	1	1	—
Fruit Cordials ... ..	—	3	3	—
Cod Liver Oil ... ..	—	3	3	—
Oil of Turpentine ... ..	—	2	2	—
Tartaric Acid ... ..	—	1	1	—
Ammoniated Tincture of Quinine	—	6	6	—
Glycerine Honey Lemon ...	1	—	1	—
Glaubers Salt ... ..	—	5	5	—
Eucalyptol ... ..	—	1	1	—
Lysol Solution ... ..	—	1	1	—
Olive Oil ... ..	—	4	4	—
	332	254	586	47



The Public Analyst has furnished the following figures showing the percentages of fat found in each sample of milk submitted for analysis during the last three years :—

TABLE No. 19.

	1931	1932	1933
4·5 per cent. and over ... ..	1	3	4
4 per cent. and under 4·5 per cent. ...	19	12	8
3·5 per cent. and under 4 per cent. ...	112	121	116
3 per cent. and under 3·5 per cent. ...	57	68	124
Below 3 per cent. ... ..	5	7	3
	<u>194</u>	<u>211</u>	<u>255</u>

ADULTERATED SAMPLES—ACTION TAKEN.—The following Table, No. 20, shows the number of adulterated samples and the action taken in each instance where the sample was formal.

TABLE No. 20.

Sample No.	Article.	Formal or Informal.	Result of Analysis.	Result of Legal Proceedings or other Action.
434	Milk ... ..	Informal	9·56 per cent. added water...	—
446	Milk ... ..	Formal	1·33 per cent. deficient in fat and 8·47 per cent. added water	Fined £1 and £7 13s. Costs.
489	Milk ... ..	Formal	12·33 per cent. deficient in fat	Appeal to cow.
528	Milk ... ..	Formal	8·35 per cent. added water ...	Fined £2 or 14 days.
2	Ground Cinna- mon	Informal	Contained a piece of brass ...	—
13	Milk ... ..	Formal	Contained small proportion of added water	—
14	Milk ... ..	Informal	Do. do. ...	—
15	Milk ... ..	Informal	Do. do. ...	—
16	Milk ... ..	Informal	Do. do. ...	—
17	Milk ... ..	Informal	Do. do. ...	—
93	Milk ... ..	Formal	Contained 6 per cent. added water	Fined £2 and 21s. 0d. Costs.

TABLE No. 20.—*continued.*

Sample No.	Article.	Formal or Informal.	Result of Analysis.	Result of Legal Proceedings or other Action.
98	Blackcurrant Jam	Informal	About 12 per cent. deficient in blackcurrants	—
102	Milk ... ..	Formal	Small proportion of added water	—
112	Milk ... ..	Formal	1·8 per cent. added water ...	—
116	Jam ... ..	Formal	Excess sulphur dioxide (30 parts per million)	—
136	Butter ... ..	Informal	3 per cent. excess water ...	—
138	Jam ... ..	Formal	2·9 per cent. deficient in solids	—
144	Milk ... ..	Formal	4 per cent. added water and 5 per cent. deficient in fat	Costs 21s. 0d.
147	Blackcurrant Jam	Informal	10 per cent. deficient in blackcurrants	—
152	Sausage ... ..	Informal	Contained sulphur dioxide 190 parts per million	—
154	Blackcurrant Jam	Informal	11 per cent. deficient in blackcurrants	—
171	Coffee and Chicory Essence	Informal	Deficient in coffee extract ...	—
185	Jam ... ..	Formal	10 per cent. deficient in fruit content	—
186	Milk ... ..	Formal	4 per cent. added water ...	Fined £5 and £3 3s. Costs.
191	Milk ... ..	Formal	2 per cent. added water ...	—
208	Blackcurrant Jam	Formal	3 per cent. deficient in blackcurrants	—
210	Blackcurrant Jam	Informal	8 per cent. deficient in blackcurrants	—
217	Gin ... ..	Formal	Below standard 4·4 degrees	£3 3s. Costs.
218	Rum ... ..	Formal	4·6 degrees below standard...	£3 3s. Costs.
284	Malt Vinegar...	Informal	An artificial vinegar ... ..	—
285	Nutmegs ... ..	Informal	Unsound ... ..	—
301	Dried Peaches	Informal	Consisted of dried apricots ...	—
313	Minced Meat...	Formal	Contained ·004 per cent. sulphur dioxide	—
316	Minced Meat...	Formal	Contained ·001 per cent. sulphur dioxide	—



TABLE No. 20.—*continued.*

Sample No.	Article.	Formal or Informal.	Result of Analysis.	Result of Legal Proceedings or other Action.
362	Dried Mint ...	Informal	Contained 55 per cent. foreign leaf	—
367	Dried Mint ...	Formal	Contained 55 per cent. foreign leaf	Costs 10s. 6d.
369	Dried Mint ...	Formal	Contained 50 per cent. foreign leaf	Costs 10s. 6d.
370	Dried Mint ...	Formal	Contained 50 per cent. foreign leaf	Costs 10s. 6d.
371	Dried Mint ...	Informal	Contained 65 per cent. foreign leaf	—
372	Dried Mint ...	Informal	Contained 15 per cent. foreign leaf	—
373	Dried Mint ...	Formal	Contained 60 per cent. foreign leaf	Warranty proved Dismissed.
374	Dried Mint ...	Informal	Contained 40 per cent. foreign leaf	—
375	Dried Mint ...	Informal	Contained 40 per cent. foreign leaf	—
385	Dried Mint ...	Formal	Contained 15 per cent. foreign leaf	—
386	Dried Mint ...	Formal	Contained 35 per cent. foreign leaf	—
387	Dried Mint ...	Formal	Contained 30 per cent. foreign leaf	—
388	Malt Vinegar...	Formal	Consisted almost entirely of a coloured solution of acetic acid	Costs £1 1s.

The percentage of adulterated samples is higher than it has been for some years but this is possibly due to the fact that investigations into the composition of articles not previously sampled have been made, and when an adulterated sample has been found, further samples have been taken.

It will be noticed that four formal and four informal samples of jam were reported adulterated.

There is no legal standard for jam but a few years ago representatives of the Public Analysts and of the Jam Section of the Food Manufacturers' Federation agreed on certain standards for jam. Two standards were fixed—Full Fruit and Lower Fruit Standard—and jams conforming to the standards of these qualities bear one or other of the following labels :—

## FULL FRUIT STANDARD.

This jam is guaranteed to conform to the agreed full fruit standard of the Food Manufacturers' Federation.

## LOWER FRUIT STANDARD.

This jam is guaranteed to conform to the agreed lower fruit standard of the Food Manufacturers' Federation.

Twenty-four samples of jam in all were analysed and in 8 instances it was found that they did not comply with the description shown on the labels. After considering all the facts of the case the Committee decided not to take proceedings in the case of the formal samples.

It will be noted also that 5 informal and 7 formal samples of dried mint were reported as containing foreign leaf, in each case that of the *Ailanthus Glandulosa*—the "Tree of Heaven." This adulteration was noted in several areas throughout the country and proceedings were instituted in some areas. In Woolwich the Public Health Committee decided to take proceedings against those vendors where the adulteration was 50 per cent. or more. It appeared from the evidence that the mint in question had been imported and that the adulteration took place abroad. It is understood, now that attention has been drawn to this sophistication, that wholesalers and importers are ensuring by analysis that the dried mint they pack is what it purports to be.

FOOD POISONING.—The London County Council (General Powers) Act, 1932, requires every medical practitioner in London to notify to the Medical Officer of Health every person whom he suspects or finds to be suffering from food poisoning. In his certificate he must state the name, age and sex of the person, the full postal address and particulars of the food poisoning from which the person is suffering or suspected to be suffering.

This Act came into force in August, 1932, and during the remaining months of that year, 56 notifications were received. In 1933 only 45 cases were notified. This is in accordance with expectation. When a disease is first made notifiable it is usual for a large number of cases to be notified, but as time goes on cases are not notified so frequently, principally because medical practitioners forget the condition is notifiable. Because of this a circular letter was sent to all medical practitioners in the area, reminding them of the new duty placed upon them.

Of the 45 cases notified, only in one instance, when three people were affected, did more than one case occur.

The age and sex distribution of the cases notified is shown in the following Table No. 21:—



TABLE NO. 21.

Cases of Food Poisoning Notified during 1933 :—

Age Periods.	Male.	Female.	Total.
Under 1 ... ..	—	—	—
1 and under 2 ... ..	—	—	—
2 and under 3 ... ..	—	—	—
3 and under 4 ... ..	—	—	—
4 and under 5 ... ..	—	—	—
5 and under 10 ... ..	2	1	3
10 and under 15 ... ..	1	—	1
15 and under 20 ... ..	4	3	7
20 and under 35 ... ..	9	5	14
35 and under 45 ... ..	4	2	6
45 and under 65 ... ..	5	7	12
65 and over ... ..	2	—	2
	27	18	45

The medical practitioner notifying is required to state on his certificate the food he suspects. In 17 instances meat, in one or other form—pork, rabbit, sausage, beef, minced ham, meat pie, etc.—was suspected; in 19 instances fish—fresh, fried or tinned; in one instance, tinned beans, and in four instances fruit—fresh or tinned. In two instances the medical practitioner notifying was unable to state the cause. Most of the cases were slight in character and there were no deaths.

Bacteriological investigations were made in two instances :—

(a) A girl, aged 17, ate some liver sausage, (purchased on the 1st February at 7.30 a.m.), on the 2nd February. Two-and-a-half hours later she had pains, sickness and rash. A specimen of the sausage was submitted for analysis and the bacteriologist reported as follows :—

“The liver sausage contains large numbers of organisms of the subtilis and staphylococcal group. These, however, are not pathogenic. It is possible, of course, that certain individuals may be sensitive to them and that they react in them as an ‘allergic’ phenomenon.”

(b) A family, consisting of a mother and two children, had some boiled ham for breakfast. Two hours later the elder child, a girl aged 9 years, was ill with diarrhoea and vomiting; half-an-hour later the younger child, a boy aged 5 years, had the same symptoms, and two hours later the mother became ill. When enquiries were

made it appeared that the ham had been in the shop since the 25th May, small portions being sold daily until the 7th June. The shop-keeper surrendered the remains of the ham and this, with some minced ham from the house, was submitted for bacteriological examination. The bacteriologist reported as follows:—

“The ham is undoubtedly “bad.” The organisms obtained in culture are those associated with pus and must have been introduced into the meat. The staphylococci were predominant in number. Further, the organisms, I should think must have obtained access to the meat after cooking, or else the cooking must have been very inefficient.”

CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.—In addition to the bacteriological examination of milk already referred to, a few other samples of food, particularly in connection with the notification of food poisoning, were submitted for bacteriological examination. The results of the chemical examinations are found in Table No. 18, and of the bacteriological examinations of milk, after Tables Nos. 12 and 14, whilst those in connection with food poisoning are dealt with on the previous page.

In connection with an outbreak of food poisoning in another Metropolitan Borough certain samples of split peas were bacteriologically examined. The bacteriologist reported as follows:—

“The peas are contaminated with organisms of animal origin to a serious degree. There is also present an organism apparently of the *Anthracoïdes* type which possesses toxic properties. This organism is not *B. Anthracis*.”

NUTRITION.—Dissemination of knowledge and instruction on matters affecting nutrition is part of the Council's general scheme of health propaganda, *q.v.*

At the end of the year the Public Health Committee were considering a scheme for the instruction of the wives and mothers of the tuberculous in the buying and cooking of simple, cheap and nutritious articles of food and the preparation of suitable dishes.

BYE-LAWS.—The power was given to the London County Council in the General Powers Act, 1932, to make bye-laws with regard to food premises. At the end of the year none had been made but it is understood that draft bye-laws were under consideration.



## SECTION V.—HOUSING.

The following Table shows the main housing figures for the year set out under the headings given in Circular 1,346, issued by the Ministry of Health for securing uniformity in the presentation of these statistics.

TABLE No. 22.

### *1.—Inspection of Dwelling Houses during the Year.*

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	5,583
Inspections made	...	...	...	...	14,403
(2) Number of dwelling houses (included under sub-head (1) above) which were inspected and recorded under the Housing (Consolidated) Regulations, 1925	...	...	...	...	1,293
Inspections made	...	...	...	...	3,879
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	163
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	...	...	...	...	2,310

### *2.—Remedy of Defects during the Year without Service of Formal Notices.\**

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	...	...	...	2,165
---	-----	-----	-----	-------

\* Includes intimation notices.

### *3.—Action under Statutory Powers during the Year.*

(a) Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:—

(1) Number of dwelling houses in respect of which notices were served requiring repairs	...	...	...	...	1
---	-----	-----	-----	-----	---

(2) Number of dwelling houses which were rendered fit after service of formal notice :—

(a) By Owners	...	...	...	...	...	—
(b) By Local Authority in default of owners	...	...	...	...	...	—

(b) Proceedings under the Public Health Acts :—

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied ... 494

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

(a) By Owners	...	...	...	...	...	441
(b) By Local Authority in default of owners	...	...	...	...	...	1

(c) Proceedings under Sections 19 and 21 of the Housing Act, 1930 :—

(1) Number of dwelling houses in respect of which Demolition Orders were made ... 5

(2) Number of dwelling houses demolished in pursuance of Demolition Orders ... 4

(d) Proceedings under Section 20 of the Housing Act, 1930 :—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... 2

(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement, or room having been rendered fit ... —

(e) Proceedings under Section 3 of the Housing Act, 1925 :—

(1) Number of dwelling houses in respect of which notices were served requiring repairs ... —

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(a) By Owners	...	...	...	...	...	—
(b) By Local Authority in default of owners	...	...	...	...	...	—

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... —



INSPECTION OF HOUSES.—In accordance with the provisions of the Housing (Consolidated) Regulations, 1925, the systematic inspection of houses in the district was continued during the year. In all, 1,293 houses were surveyed house-to-house and their condition was recorded on special survey cards. It is the practice to secure the abatement of such nuisances as are found to exist by serving notices under the provisions of the Public Health (London) Act, 1891, but in certain instances demolition orders were applied for.

Certain areas of the Borough were specially surveyed with a view to their being included in slum clearance schemes.

In tabular form is shown below a detailed statement of specific action (except action taken in respect of clearance areas) taken under the Housing Acts during the year.

TABLE No. 23.  
Action under the Housing Acts.

Premises.	Action Taken.	Date.
Powis Street, 178 ... ..	Demolition Order ... ..	4th January.
Powis Street, 180 ... ..	do. ... ..	do.
Godfrey Street, 17 ... ..	do. ... ..	3rd May.
Woolwich High Street, 95 ...	Representation ... ..	10th May.
*Rope Yard Rails, 9 ... ..	Closing Order ... ..	31st May.
Beresford Street, 62A ... ..	Demolition Order ... ..	do.
Godfrey Street, 16... ..	do. ... ..	do.
*Elm Street, 123 ... ..	Closing Order ... ..	4th October.
*Woolwich Common, 35 ... ..	Representation ... ..	11th October.
†Woolwich Common, 51 ... ..	do. ... ..	17th October.
Church Street, 30 ... ..	do. ... ..	5th December.
*Rectory Place, 21 ... ..	do. ... ..	do.

\* Underground room. † Part of a house.

SLUM CLEARANCE.—In accordance with a request of the Minister of Health the Council in July considered reports on certain areas in the Borough and informed the London County Council that they proposed to deal with 18 small areas, including 187 houses, as clearance areas in the course of the next five years. Following on this, in November, I represented 69 hutments, all of which with the exception of 4 were owned by the Council, as unfit for human habitation, and subsequently the Council declared the area to be a clearance area. These hutments are in Eltham,



are known as the Shepherds Farm hutments, and are situated in or adjoin the following roads :—

Ashwood Road,	Barleycorn Street,	Bilberry Road,	Elderberry Road,
Elmbrook Street,	Marlfield Road,	Rochester Way,	Well Hall Road.

At the end of the year other areas were being systematically inspected and will be the subject of reports in due course.

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACTS.—There were only two applications for a certificate under these Acts during the year, but after consideration the Council were unable to grant the applications.

TENTS AND VANS.—Bye-laws regulating the use of these were made by the Council in 1903. All tents and vans (which are few in number) were inspected regularly and steps were taken to ensure that the bye-laws were being observed. The total number of inspections made was 114.

HOUSES LET IN LODGINGS.—No register is now kept of houses let in lodgings but as the records of this Department in respect of individual houses are kept on cards, such houses are kept prominently before the district sanitary inspectors by means of " signals " on the cards which serve as reminders to the inspectors that they are dealing with houses that would formerly have been registered. During the year 587 inspections of such houses were made.

NEW HOUSES.—The following Table, No. 24, shows the number of certificates of a proper and sufficient supply of water for new houses granted by the Public Health Committee at each of their meetings. Of these, 262 were in respect of houses built by the Council.

TABLE No. 24.

Date of Meeting.	Woolwich.	Plumstead.		Eltham.	Total.
		West.	East.		
11th January ... ..	1	4	13	51	69
8th February ... ..	—	1	25	10	36
8th March ... ..	—	—	38	21	59
5th April ... ..	—	5	17	102	124
10th May ... ..	1	—	38	65	104
14th June ... ..	—	4	49	30	83
6th July ... ..	—	1	28	22	51
26th July ... ..	—	4	31	26	61
13th September ... ..	—	5	53	54	112
11th October ... ..	—	7	33	42	82
8th November ... ..	—	20	20	89	129
6th December ... ..	—	13	16	100	129
	2	64	361	612	1,039



**COUNCIL'S HOUSES.**—During the year the Council erected 300 houses, 6 on the Page Estate and 294 on the Middle Park Estate. At the end of the year 208 houses were in course of erection on the Middle Park Estate.

**COMMON LODGING HOUSES.**—By the Transfer of Powers Order, 1933, the licensing of these premises was transferred from the London County Council to the Metropolitan Borough Councils. The following Table shows details of the accommodation available in each common lodging house in the Borough:—

TABLE No. 25.

<i>Premises.</i>	<i>Accommodation Men.</i>
60, Beresford Street ... ..	50
50, Woolwich High Street ... ..	22
93, Woolwich High Street ... ..	24
102, Woolwich High Street ... ..	22
4, Rope Yard Rails ... ..	15
7, Rope Yard Rails ... ..	24
10, Rope Yard Rails ... ..	51
10A and 11, Rope Yard Rails ... ..	62
21 and 21A, Rope Yard Rails ... ..	42
	312

**BUG INFESTATION OF HOUSES.**—In 1932 the Council decided that it would take active steps to enforce its powers enabling it to secure the disinfection of houses infested with bugs and that it would, at its own expense, disinfect any articles infested with vermin or likely to be so infested by reason of being used by any person so infested, and instructed the Medical Officer of Health accordingly.

Many claims have been put forward by various interested persons as to the efficacy of various disinfestants for this purpose, but from a study of the literature which was available it appeared that sulphur dioxide, if used in sufficient quantity and for a sufficiently lengthy period, was likely to be the most practicable disinfestant when combined with a thorough cleansing afterwards. Other chemicals, such as hydrogen cyanide which is said to be the most effective fumigant known at the present time, were rejected because of the possible danger consequent upon their use to persons occupying adjoining houses.



In London the responsibility for disinfesting houses is placed upon the owner of the house, and for disinfesting articles upon the sanitary authority.

The Council's scheme for co-operation with the landlord and the technique used for sulphur disinfestation were fully described in my Annual Report for last year. No change took place in so far as co-operation was concerned and only minor alterations were made in the method of disinfestation. The changes which took place in the technique related only to the method of application of the sulphur. When sulphur candles are used for disinfesting a room the diffusion takes place slowly. Immediately above the candle the sulphur gas is most dense, but the density gets less until it reaches the ceiling and it appears to fall away slantingly. It was thought, therefore, that if half-pound candles were used and placed in different parts of the room the saturation with the sulphur vapour would become more rapidly uniform, and furthermore, if some of the sulphur candles were placed at table height the gas would reach the ceiling quicker. It is not necessary to worry about its reaching the floor because as it is heavier than air it will ultimately come to rest at the lowest point.

The Council's scheme also provides for the periodic re-inspection by the woman sanitary inspector of houses which have been disinfested. During the year it was found that 75 rooms were re-infested, all of which were treated again. In the case of the second disinfestation, however, we do not ask the owner to co-operate; we content ourselves with a further sulphur treatment of the room.

At the beginning of 1934 every house which had been disinfested was specially inspected in order to ascertain in what percentage recurrence of infestation took place.

Since the scheme started in August, 1932, 846 rooms, occupied by 444 families in all, have been disinfested. Of these, 742 were disinfested by sulphur once, 75 on two separate occasions because of re-infestation, and the remaining 29 by other chemicals. Thirty-three rooms disinfested by sulphur once, were found to be re-infested, and 17 of those disinfested twice were found to be re-infested. These figures would seem to show that the scheme for sulphur disinfestation described in my annual report for last year is efficacious in one treatment in approximately 85 per cent. of cases.

In October my attention was drawn to a chemical used for the treatment of wood infested with the Death Watch Beetle—Ortho-dichlor-benzene—and it seemed to me that it might be possible to use this chemical for "debugging." It was accordingly tried. It is in liquid form but as it dries in a room it gives off a vapour which affects the eyes and throat and so it is necessary for the disinfestors to use masks. It is obnoxious to the bugs. It seems to be capable of driving them from behind the skirting boards and architraves if the adjoining walls are sufficiently



well sprayed with it, and when the bug gets on to the wet surface of the walls and floors it crumples up and dies. It is too early, however, to say much about the efficacy of this chemical because the effect of the vapour on the egg is not yet known and we have not been able to try it during the breeding season. If the subsequent experiments substantiate the earlier work, however, this is indeed a very valuable chemical for ridding structures of bugs because of its power of bolting them from their crevices in the same way that a ferret bolts rabbits.

After the rooms are opened the odour hangs about the house for a week or ten days, but occupants do not find it unpleasant. So far it has only been used in empty houses, prior to re-occupation by new tenants.

Bugs are to be found on the Council's housing estates, obviously brought from old houses or by means of second-hand furniture, and the method of construction of some of these houses renders their disinfection extremely difficult. In consequence of this the Council, at the end of the year, were considering whether it was not possible to devise a scheme to ensure that no bug-infested articles were removed from the old house. Such a scheme has been put into practice in Manchester and other towns, and Mr. Couch, who is in charge of this work, was sent to Manchester to study the scheme, on which he has prepared a report. At the end of the year the report was still under consideration by the Public Health Committee.

As the Council are aware, the Ministry of Health set up a Committee to study the question of bug infestation, one of the members of which was Mr. McKenny Hughes, the entomologist, who has been very interested in this work in Woolwich and who has been most helpful on many occasions.

It so happened that amongst some houses which the Council had purchased for street widening purposes there was one which was infested with bugs and, at Mr. McKenny Hughes' request, the Council allowed him to be present whilst its demolition was taking place and instructed the Borough Engineer to give him every facility for investigating bug infestation in this particular house. Mr. McKenny Hughes subsequently reported as follows :—

"On Tuesday, 24th October, and on the three subsequent days, I visited Woolwich for the purpose of watching the demolition of an old house known to be verminous, with a view to examining the extent to which the bed-bug will penetrate the fabric. After having pulled down large portions of plaster, wallpaper, timber and so on, myself, I have come to the following conclusions, though these can only be considered as tentative, being based on the demolition of one house only :—

(1) Bed-bugs do not penetrate far into the fabric unless travelling from one house to another or remaining in a crack between the two so as to have the advantages of feeding in either.



(2) Bed-bugs are unlikely to penetrate into the brickwork of an outside wall to any great distance as it is too cold. They may, however, follow the nail hole into the structure.

(3) Bed-bugs will take advantage of cracks in the plasterwork, more especially where the moulding of a ceiling is cracked.

(4) Bed-bugs are mostly found behind wallpaper which has come slightly away from the wall and woodwork. They may also be found in the supports of the mantle-piece which get nicely warm but not too hot.

(5) Taking the habitats in the structure of a house as a whole, irrespective of the furniture, I should put them in the following order :—

(a) Behind wallpaper.

(b) Behind woodwork, such as architrave round door, moulding round window, gas bracket, picture rail, wainscoting, floorboards (relatively in that order).

(c) In plaster work.

(d) In nail holes going into brickwork and so on.

As a general conclusion, it seems that the woodwork is more likely to be a disseminator than anything else in the house."

This is a very valuable report and it is, I believe, the first time that such an investigation has been placed on record.

In reporting on bug-infestation last year I said that people did not like their neighbours to know they had bugs, and suggested that a bug campaign might lead to a change in public opinion with regard to bugs. I also suggested that the average housewife would pay more attention to the eradication of bed-bugs by the usual household methods. It is interesting to record, therefore, that, after 17 months work, it is more difficult to find really badly bug-infested houses compared with what it was when the scheme started.

It looks, therefore, as if the public conscience is being awakened to bug infestation and housewives are taking more interest in keeping their numbers down. In proof of this we find that bed-springs have frequently been treated, not by the useless method of sprinkling one of the so-called insecticide powders on them, but by taking them to pieces or by pouring boiling water over them. The springs look cleaner and there is much less dirt and dust about than was formerly the case.



## SECTION VI.—MATERNITY AND CHILD WELFARE.

The Council's Maternity and Child Welfare scheme is comprehensive in its arrangements for the care and comfort of expectant and nursing mothers and for children under 5 years of age. Its various branches are reported on in detail below, but the following service, transferred from the London County Council under the Transfer of Powers (London) Order, 1933, is reported on for the first time—Infant Life Protection.

STAFF.—Three whole-time medical officers are in medical charge of the clinics. One of these devotes her whole time to Maternity and Child Welfare, and the other two, part-time. One part-time medical officer takes charge of the Toddlers' examination clinic, and two consultants have been appointed—one for the Artificial Sunlight Clinic and one for consultation in connection with cases of Puerperal sepsis and difficult obstetric conditions occurring at home. The dental staff—two dentists and an anæsthetist—are part-time and are appointed by the School Treatment Committee subject to the approval of the Council. The health visiting staff now consists of eleven whole-time health visitors: two of these are part-time sanitary inspectors, two are part-time Infant Life Protection visitors and one is the Artificial Sunlight Clinic nurse.

Miss K. Latham, who entered the service of the Council on the 7th May, 1917, retired on the 25th September, 1933, on superannuation. Miss A. Carey, who was appointed to the vacancy so created, commenced duties on the 2nd June, 1933. Miss W. Adams, who was appointed consequent upon the transfer of Infant Life Protection duties from the London County Council to the Borough Councils, commenced duty on the 2nd October, 1933.

NOTIFICATION OF BIRTHS ACTS, 1907-15.—Every birth occurring in the Borough requires to be notified to the Medical Officer of Health within thirty-six hours of birth. As a matter of fact, only a very small percentage of births are so notified. As soon as a notification is received pamphlets dealing with the care and comfort of mothers and infants are sent by post to every mother. Subsequently, between the tenth and fourteenth day, a visit is paid to the home by the health visitor who decides on her first visit the necessity for subsequent visits. It may be stated, however, that, broadly, the general basis of visiting is as follows:—three visits during the first year and one visit in each subsequent year up to the age of five years, or until the child goes to school.

THE WORK OF THE HEALTH VISITORS.—The work performed by these officers during the year, with regard to maternity and child welfare, is summarised in the following Table :—

TABLE No. 26.

Births—First visits	...	...	...	...	1,816
„ Revisits	...	...	...	...	15,783
Infant deaths investigated	...	...	...	...	35
Still-births investigated	...	...	...	...	27
Expectant mothers—home visits	...	...	...	...	707
Infectious diseases :—					
Ophthalmia Neonatorum—First visits	...	...	...	...	9
„ „ Revisits	...	...	...	...	15
Measles—First visits	...	...	...	...	102
„ Revisits	...	...	...	...	23
Puerperal fever—First visits	...	...	...	...	4
„ „ Revisits	...	...	...	...	4
Puerperal Pyrexia—First visits	...	...	...	...	33
„ „ Revisits	...	...	...	...	3
Zymotic Enteritis—First visits	...	...	...	...	3
„ „ Revisits	...	...	...	...	1
Pneumonia	...	...	...	...	48
Anterior Poliomyelitis	...	...	...	...	—
Encephalitis Lethargica	...	...	...	...	—
Infant Life Protection	...	...	...	...	421
Visits unclassified	...	...	...	...	724
Visits unsuccessful	...	...	...	...	2,561
					<u>22,319</u>

In 1933 the Council paid the class fees and expenses in connection with the visits to approved institutions of two health visitors who attended refresher courses for health visitors.



THE WORK OF THE WELFARE CENTRES.—These are eight in number and are now all municipal. Infant welfare sessions are held at all of them and ante-natal sessions are held at four, in three instances, twice weekly and in one instance once a month. With the addition of the monthly ante-natal session at North Woolwich, at the end of the year 6.25 ante-natal sessions and 21 infant consultation and weighing sessions were being held each week.

In tabular form below are shown detailed statistics for 1933 and the consolidated statistics for the previous year :—

TABLE No. 27.

Centre.	No. on Roll of Centre.			No. of Attendances.		
	Mothers.		Children.	Mothers.		Children
	Expectant	Nursing.		Expectant	Nursing.	
Town Hall ... ..	365	422	1,581	872	926	10,863
Plumstead ... ..	247	286	1,120	686	490	7,714
Eltham ... ..	319	232	1,109	900	541	6,422
Slade ... ..	2	97	441	3	157	3,892
New Eltham ... ..	3	57	382	3	113	4,251
St. Luke's ... ..	1	41	300	1	56	2,226
North Woolwich ...	13	32	136	21	62	1,436
Beresford Street ...	29	58	141	46	129	939
Totals, 1933 ...	979	1,225	5,210	2,532	2,474	37,743
Totals, 1932 ...	1,076	1,302	5,182	2,624	2,609	38,562

Two important changes took place during the year :—(a) Consequent upon the alterations at the North Woolwich Baths, a portion of the building became redundant for the purposes of the Baths Committee and the Committee and the Council resolved to alter it for the purposes of a maternity and child welfare centre. The new building was opened on the 1st June. It consists of a large waiting and weighing hall, a large consulting room and a commodious pram shed, and it replaces the rooms which were used for so many years at St. John's Church Hall; (b) As Plumstead Centre had become too small for the work of the Maternity and Child Welfare Committee and the School Treatment Committee, it was decided early in the year to enlarge it, and the new Centre was opened in October. It now consists of a set of rooms for maternity and child welfare purposes on the ground floor and a set of rooms for school medical purposes and dental purposes on the upper floor.

Agreements have been entered into with the East Ham Borough Council for the part-time use of the new North Woolwich Centre and the School Medical Treatment Committee for the use of the upper floor of the Plumstead Centre.

The opening of the Plumstead Centre marks another stage in the co-ordination of health services in Woolwich—the treatment of all children of school age and under being carried out in the one building. Thus Plumstead now comes into line with Eltham. East Ham Borough Council use the North Woolwich Centre for both services.

The next Table, No. 28, shows the number of children classified by year of birth and the number of attendances made by them during the year.

TABLE No. 28.

## CHILDREN IN ATTENDANCE AT EACH CENTRE.

Year of Birth.	Town Hall.	Plumstead.	Eltham.	New Eltham.	Slade.	St. Luke's.	N. Woolwich.	Beresford St.	Totals.
1933	442	292	259	97	122	67	40	35	1,354
1932	477	312	268	111	133	80	41	39	1,461
1931	309	232	212	86	80	55	25	27	1,026
1930	192	155	176	44	55	51	17	20	710
1929	111	88	129	34	36	36	8	20	462
1928	50	41	65	10	15	11	5	—	197
	1,581	1,120	1,109	382	441	300	136	141	5,210

## ATTENDANCES.

1933	3,381	2,140	1,966	1,159	1,121	551	349	121	10,788
1932	4,399	3,098	2,414	1,980	1,661	1,007	714	398	15,671
1931	1,799	1,400	762	699	560	293	210	239	5,962
1930	796	722	713	204	359	232	112	116	3,254
1929	347	282	386	187	143	119	42	65	1,571
1928	141	72	181	22	48	24	9	—	497
	10,863	7,714	6,422	4,251	3,892	2,226	1,436	939	37,743



These figures, which do not include attendances at the special Toddlers' Clinic or the Sunlight Clinic, show a decrease over 1932, but are higher than any other year. The numbers on the roll, however, show a slight increase.

*Feeding of Infants in Woolwich.*—In midsummer the usual enquiry was made, as in previous years, as to the type of feeding adopted in the case of infants attending the welfare centres. The method used was as follows :—

(a) On the card of every child under one year of age attending a welfare centre between the 19th June and the 28th July, was inserted once, and once only, the terms "Breast," or "Breast and Hand," or "Hand Fed."

(b) The child's age was taken on the day on which this note was made.

(c) At the end of the period the results were summarised for the whole Borough and the appropriate percentages worked out.

The results of the enquiry are shown in Table No. 29 on the adjoining page.

**ARTIFICIAL SUNLIGHT CLINIC.**—This clinic was opened in October, 1927. The total number of patients treated during the year, including 164 whose course of treatment was not completed at the end of 1932, was 469. The total number of treatments given was 9,534 : of these, 6,333 were by carbon arc, 2,476 by mercury vapour lamp, and 725 by radiant heat lamp.

The clinic is under the medical supervision of Dr. J. E. A. Lynham, who has furnished the following report on the year's work :—

"The work of the Sunlight Clinic has been continued on the same lines as before. The number of new cases admitted is smaller than in the previous year, but is partly compensated by a larger number carried forward from the end of 1932.

The number of cases of rickets is appreciably less, and the average of improvement considerably greater. The largest group is still that which includes anæmia and general debility or mal-nutrition. The percentage of cases cured or improved is better, and credit for this must be given to the medical officers and to the efficiency of the staff.

The clinic continues to do good work and there have been a number of instances of children brought back for further treatment after the lapse of a year or more."

TABLE No. 29.  
Feeding of Infants attending Welfare Centres—19th June to 28th July, 1933.

Method of Feeding.	AGE IN MONTHS.													
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-7	8-9	Total	9-10	10-11	11-12	Grand Total
Breast ... ..	45	56	67	47	36	31	26	19	10	337	3	2	—	342
Breast and Hand ... ..	4	19	11	10	9	7	9	23	20	112	18	8	2	140
Hand ... ..	5	10	24	25	32	38	39	42	36	251	36	47	58	392
	54	85	102	82	77	76	74	84	66	700	57	57	60	874
	PERCENTAGES.													
Breast ... ..	83.3	65.9	65.7	57.3	46.7	40.8	35.1	22.6	15.2	48.1	5.3	3.5	—	39.1
Breast and Hand ... ..	7.4	22.3	10.8	12.2	11.7	9.2	12.2	27.4	30.3	16.0	31.6	14.0	3.3	16.0
Hand ... ..	9.3	11.8	23.5	30.5	41.6	50.0	52.7	50.0	54.5	35.9	63.1	82.5	96.7	44.9



In tabular form are shown below the number and types of cases treated during the year :—

TABLE No. 30.

Cases treated at Sunlight Clinic, 1933.

	Brought forward from 1933	New Cases.	Total.	Much Improved or Cured	Improved.	I.S.Q.	Ceased Treatment.	Treatment not yet complete
Rickets ... ..	57	94	151	46	35	7	20	43
Anæmia, Debility and Malnutrition	55	111	166	38	47	7	26	48
Catarrhal Children	20	30	50	15	10	6	5	14
Septic Conditions	4	9	13	11	—	—	1	1
Nervous Children	6	3	9	1	2	1	2	3
Enlarged Glands ...	9	29	38	11	12	1	2	12
Miscellaneous Nervous Conditions	1	3	4	—	3	—	—	1
Miscellaneous Skin Conditions	1	9	10	3	2	1	1	3
Other Conditions	8	6	14	5	3	1	1	4
Mothers ... ..	3	11	14	3	3	—	4	4
	164	305	469	133	117	24	62	133

TODDLERS' CLINIC.—This was inaugurated in 1930 as a scheme for the supervision of the health of the pre-school child. Children are examined in their birthday month, aged 2 years, 3 years and 4 years, and three sessions are held weekly—one at Woolwich, one at Plumstead and one at Eltham. The clinic is under the medical charge of Dr. Margaret Emslie, and she reports below on the year's working :—

“The figures in the appended Table are self-explanatory. A total of 1,440 cases was seen including 1,105 full annual inspections and 335 re-visits, compared with a total of 1,106 full inspections and 449 re-visits last year.

The total number of sessions was 133, as compared with 138 in 1932. The percentage of total toddlers reaching the age of 2 in 1933 who attended was 24·5, as compared with 20·5 in 1932. As more children come under the regular observation of the clinic at an early age, it is anticipated that the number of intermediate re-inspections will decline.



The chief points that may be noted are as follows :—

#### A. GENERAL.

*Nutritional conditions*, including sub-normal nutrition and anæmia but excluding rickets, show an agreeable diminution in 1933, following an almost uniform rate for the previous three years. The figures for sub-normal nutrition work out at 16 per cent. of the total cases, compared with 25 per cent. in 1932. Anæmia is rated at 17 per cent. as compared with 24 per cent. last year.

*Anaemia* this year shows an equal incidence in boys and girls (17 per cent.) and is recorded at the following rates according to age :—19 per cent. at the age of 2 ; 13 per cent. at the age of 3, and 17 per cent at the age of 4. This curve shows some variation from the curve observed last year for all cases examined between 1930 and 1932, which declined steadily from infancy towards school age, but the deviation probably is of no great significance.

*Rickets*, with its undiminished showing at 30 per cent., is one of the less satisfactory conditions observed. So high an incidence (based on the clinical evidence available) would seem to show that neither from the point of view of prevention nor treatment has this condition so far been satisfactorily plumbed. Its general significance may be adduced from the fact that it is associated not only with bony deformities apparent to the eye, but with profound disturbance of the metabolic system that affects health and well-being in many less obvious directions. The prevalence of such a condition is a factor of high importance in the public health and it may be that the public health clinic typically offers one of the best opportunities for its closer, more purposive study, since children of all grades and in all conditions of health are there brought under review. But special methods are required and at the moment no more can be done than draw attention to this condition, known elsewhere as "the English disease," that seems to pervade our child community throughout this country, not less widely, possibly more widely than in the old days when lack of facilities allowed it sometimes to advance to an extreme grade before treatment was instituted.

In the present group of cases, 30 per cent. were marked as definitely rachitic, but 34 per cent. of the remaining children showed minor signs that might have developed into florid rickets if not recognised, or that might remain from early rickets treated, a total of 14 per cent. This figure corresponds with findings in other parts of this country where careful routine observations have been made. As a comment on the ultimate significance of rickets may be quoted one fact, interesting in maternity and child welfare, that the existing high rate of maternal mortality throughout the country, which has so far not yielded to treatment, has been abundantly proved to be due in a majority of cases to instrumental delivery, the chief cause of which is old rachitic deformity of the mother's pelvis, of various types and degrees, causing bony contraction. Our mothers of to-day are suffering from the minor rickets of a generation ago and the infants of these births suffer concurrently.



*Worms*, an infestation due to poor bodily resistance coupled with defective methods of hygiene, show the remarkably low figure, in contrast, of less than 1 per cent.

Other evidence of a high level of general care shown by the children is found in the low figure of  $4\frac{1}{2}$  per cent. for unsatisfactory clothing (including clothing in any degree of raggedness) and 8 per cent. for lack of perfect cleanliness, the cases showing actual flea-marks numbering only 2.

*Impetigo and Scabies*, two highly contagious conditions associated with lack of cleanliness, were found respectively in only 7 and 1 children.

To conclude the general conditions, *Rheumatism* was diagnosed this year in 5 children, equal to a percentage of .45 per cent.

#### B. SPECIAL CONDITIONS.

*Dental caries* showed a general percentage of 25, including 9 per cent. of cases seen at the age of 2, 28 per cent. at the age of 3, and 45 per cent. at the age of 4. The low figure of 9 per cent. for the two-year-old children contrasts favourably with the 16 per cent. shown in previous years. The rate amongst children nearing school age does not appear to diminish, but the mothers are alive to the importance of treatment and almost every child seen reaches school with a perfectly clean mouth. A word is said later on in this report on the possible need for orthodontic treatment for certain children.

*Enlarged tonsils and adenoids* were observed in 48 per cent., for only a small percentage of whom operation was recommended. This condition again does not appear to show much variation. Only one per cent. of children showed otorrhœa.

Enlarged cervical glands, a condition associated with infections of the nose, throat and mouth, usually due to carious teeth or infected tonsils, were found in 31 per cent. of the total children, a finding in accordance with the immediately preceding figures.

*Nervous (or behaviour) symptoms* were recorded in 22 per cent. of the total. In this regard only one special condition will be noted this year, namely, the physical symptoms of malocclusion of the jaws with failure in proper alignment of the teeth due in most cases to unwise thumb, finger, or dummy sucking in the indulged or nervous child. Such malocclusion was noted in 12 per cent. of the total children, a higher figure than the percentage in which the sucking habit was acknowledged, but sufficient evidence of the unpleasant æsthetic and other effects that may result from injudicious management on the purely "behaviour" side. The deformity produced, existing in one child in eight, is one that yields to simple orthodontic correction by the dentist in early youth and one that would seem, for hygienic as well as cosmetic reasons, to be worth attention.



An attempt has been made this year in all cases in which behaviour symptoms of any kind appeared at all severe, to send the children for treatment to one of the Child Guidance Clinics established in London, and certain mothers have attended these satisfactorily over a considerable period.

*Functional heart murmurs* (for which further reference may be made to the appendix in the Annual Report last year) were noted in 24 per cent. of the total examinations. Organic heart disease was noted in 9 cases = .8 per cent.

Two mentally deficient children only were seen, a percentage of .18.

In conclusion, no new outstanding condition has been made evident by the report this year and no special investigation has been undertaken, but the results show a very satisfactory maintenance, on the whole, of the health of the children observed. Two suggestions are made:—(a) From the evidence available here and the statistics published for like-aged children elsewhere, the prevalence, prevention and successful treatment of rickets merit further attention and closer intensive study as a public health measure amongst children in this susceptible period of life; (b) that a useful and interesting adjunct to the ordinary work of the dental clinic might be the initiation of some measure of orthodontic treatment for children with deformed mouths.

The following Table shows the results of the examinations.

TABLE No. 31.  
Medical Inspection of Toddlers, 1933.

Disease, Defect or Condition.	BOYS. Age last Birthday.				GIRLS. Age last Birthday.				Total
	1	2	3	4	1	2	3	4	
Total Children Examined	—	245	159	148	—	257	158	138	1,105
NUTRITION—									
(a) Excellent ...	—	120	52	31	—	162	72	34	471
(b) Normal ...	—	102	73	61	—	80	69	72	457
(c) Sub-normal ...	—	23	34	55	—	15	16	31	174
(d) Bad ...	—	—	—	1	—	—	1	1	3
MUSCULAR TONE—									
(a) Excellent ...	—	139	111	118	—	161	124	120	773
(b) Good ...	—	103	48	29	—	96	34	17	327
(c) Sub-normal ...	—	3	—	1	—	—	—	1	5
CLOTHING AND FOOTGEAR—									
(a) Satisfactory	—	231	147	141	—	249	152	133	1,053
(b) Unsatisfactory	—	14	12	7	—	8	6	5	52



Medical Inspection of Toddlers, 1933—*Continued.*

Disease, Defect or Condition.	BOYS. Age last Birthday.				GIRLS. Age last Birthday.				Total
	1	2	3	4	1	2	3	4	
CLEANLINESS—									
(a) Excellent ...	—	220	141	133	—	233	151	129	1,007
(b) Fair ...	—	24	17	15	—	24	7	9	96
(c) Dirty ...	—	1	1	—	—	—	—	—	2
ANÆMIA ...	—	43	22	28	—	54	20	22	189
LUNGS—									
Bronchitis ...	—	9	10	13	—	5	3	10	50
Asthma ...	—	—	—	—	—	—	—	—	—
NERVOUS SYSTEM—									
Behaviour									
Symptoms—									
Thumb, Finger or									
Dummy Sucking	—	25	4	2	—	32	7	6	76
Other Conditions	—	48	25	18	—	47	21	7	166
Organic Disease									
Infantile									
Convulsions ...	—	—	1	—	—	—	—	1	2
Facial Palsy ...	—	—	1	1	—	—	—	—	2
Epilepsy ...	—	1	—	—	—	2	1	—	4
ALIMENTARY									
SYSTEM—									
Worms ...	—	2	2	1	—	2	2	1	10
Other Conditions	—	5	1	3	—	5	2	1	17
GENITO-URINARY									
SYSTEM—									
Enuresis ...	—	18	8	8	—	16	10	7	67
Other Conditions	—	10	4	2	—	—	2	—	18
RICKETS—									
Active ...	—	85	49	47	—	65	52	29	327
Healed ...	—	1	2	2	—	—	—	2	7
SKIN—									
Boils ...	—	—	1	—	—	—	—	1	2
Eczema ...	—	2	—	—	—	4	—	—	6
Herpes ...	—	—	1	—	—	—	—	—	1
Ichthyosis ...	—	—	1	—	—	—	—	—	1
Impetigo ...	—	1	2	2	—	—	2	—	7
Nævus ...	—	1	—	—	—	3	1	1	6
Scabies ...	—	—	—	—	—	—	—	1	1
Urticaria...	—	14	3	4	—	11	3	—	35
EYE—									
Blepharitis ...	—	—	2	—	—	1	4	1	8
Conjunctivitis ...	—	—	—	—	—	1	—	1	2
Corneal Scar ...	—	—	—	—	—	1	—	—	1
Nystagmus ...	—	—	1	—	—	—	—	—	1
Squint ...	—	10	5	9	—	7	5	4	40
EAR—									
Earache ...	—	1	1	2	—	1	1	4	10
Otorrhœa ...	—	1	5	3	—	2	2	1	14
Other Conditions	—	1	—	2	—	—	—	1	4

Medical Inspection of Toddlers, 1933—*Continued.*

Disease, Defect or Condition.	BOYS. Age last Birthday.				GIRLS. Age last Birthday.				Total.
	1	2	3	4	1	2	3	4	
Nose and Throat—									
Enlarged Tonsils	—	131	90	74	—	108	78	54	535
Enlarged Tonsils and Adenoids									
Adenoids...									
TEETH—									
Caries ...	—	23	48	75	—	23	42	64	275
Hypoplasia ...	—	2	10	4	—	4	2	1	23
Malocclusion ...	—	42	10	8	—	52	16	6	134
HEART AND CIRCULATION—									
Heart Disease—									
(a) Functional	—	43	47	49	—	49	40	41	269
(b) Organic ...	—	3	1	3	—	2	—	—	9
GENERAL—									
Rheumatism ...	—	1	2	2	—	—	—	—	5
Umbilical Hernia	—	—	1	—	—	1	4	1	7
Acidosis ...	—	1	—	—	—	—	—	1	2
Others ...	—	4	4	4	—	2	6	2	22

PROVISION OF MATERNITY OUTFITS.—In 1930 the Council agreed to supply sterilised maternity outfits for the use of necessitous mothers in order to ensure the necessary cleanliness in domestic midwifery and with a view to minimising the risks of maternity. They are supplied free, half cost, or cost price, according to the family income, the Council's economic scales being used as tests of necessity. During the year 79 applications were received; 79 were supplied—60 free, 4 at half cost and 15 at cost price.

COMPENSATION OF MIDWIVES.—Whenever an assistant medical officer finds it necessary to recommend hospital treatment for expectant mothers referred to the Council's ante-natal clinics for ante-natal examination by midwives, the midwife loses her patient if the mother accepts the advice of the medical officer and is admitted to hospital. In these cases the Council make a payment of 10s. by way of compensation to the midwife subject to certain conditions, which are referred to in detail in my Annual Report for 1931, being complied with. During the year compensation was paid in 7 instances.

ADMINISTRATION OF THE PUBLIC HEALTH (PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926.—The Council's scheme under these regulations was



fully described in the Annual Report for 1928. The extent to which they were made use of is reported on fully in that part of the Infectious Disease Section of the report which deals with the notification of these diseases.

OBSTETRIC COMPLICATIONS IN PRIVATE PRACTICE.—In September, 1931, the Council arranged for the services of Mr. Harold Taylor, F.R.C.S., the Council's Consultant under the Puerperal Fever and Puerperal Pyrexia Regulations, to be available in such exceptional cases, and to pay him a fee of £5 5s. 0d. for each such case. No case was dealt with under this scheme during the year.

HOME HELPS.—During the year 22 applications were considered by the Committee and 19 home helps were provided. The total cost of this service was £66 0s. 0d.

TREATMENT OF MINOR AILMENTS.—Children requiring medical or surgical treatment for certain minor ailments are referred to the School Clinics at Brewer Street, Woolwich or to the Eltham and Plumstead Health Centres; to a private practitioner or to a hospital. During the year 189 were sent to these clinics and for each case the Council paid 5s. 0d. Children referred to them suffered from the following conditions :—

TABLE No. 32.

		<i>Eltham</i>				
		<i>Brewer Street.</i>		<i>Health Centre.</i>		<i>Plumstead.</i>
Impetigo	...	12	...	46	...	1
Ear Discharge	...	6	...	32	...	1
Eyes	...	8	...	28	...	4
Miscellaneous	...	4	...	42	...	5
		<hr/>		<hr/>		<hr/>
		30		148		11
		<hr/>		<hr/>		<hr/>

DENTAL TREATMENT.—Mothers and children requiring dental treatment are referred from the Welfare Centres to the School Clinics at Brewer Street, Woolwich, at Westhorpe Avenue, Eltham, and at Plumstead High Street. This service has been established at Woolwich for many years but it was only started at Eltham in 1932, when two dental sessions per month were arranged for. During the year it was necessary to increase these to once weekly, with the understanding that, when the

alterations at Plumstead Centre were complete, the sessions would be held on alternate weeks at Plumstead and Eltham. Under this arrangement, sessions were held at Plumstead in November and December.

The following Table, No. 33, shows the cases attending and the total attendances during the year. The number of sessions was 88, excluding anæsthetic days.

TABLE No. 33.

	Expectant Mothers.		Nursing Mothers.		Children under 5.	
	No.	Attendances.	No.	Attendances.	No.	Attendances.
Woolwich ... ..	88	151	42	110	219	237
Eltham ... ..	—	—	—	—	161	269
Plumstead ... ..	—	—	—	—	17	23
	88	151	42	110	397	529

Dentures are provided free, at part cost, or at cost price, according to ability to pay, and payment is spread over many weeks. In consequence, the income received during the year includes money received in respect of dentures supplied in previous years. Twenty-eight sets (complete or partial) of artificial teeth were supplied during the year at a total cost of £138 0s. 0d. Payments by mothers amounted to £57 15s. 7d.

ORTHOPÆDIC TREATMENT FOR CHILDREN UNDER FIVE YEARS OF AGE.—Children requiring orthopædic treatment are sent to the remedial clinic of the Woolwich Invalid Children's Aid Association in accordance with the scheme adopted in 1925. The Council pay for children under five years of age sent by their medical officers to the clinic, 2s. 0d. per attendance for cases requiring massage or electrical treatment and 1s. 6d. per attendance for any other form of treatment. The cost of these services for the year was £195 3s. 6d. Only cases recommended by the Medical Officer of Health are included in this scheme, and payment is only made for the number of attendances approved by him. In detail, the children referred to the clinic required treatment for the following conditions :—



TABLE No. 34.

Cases treated at Orthopædic Clinic, 1933.

Type of Case.	Number remaining over from 1932.	New Cases.	Total Cases.	Number who completed treatment by end of year.	Number with treatment not completed.
Talipes (Club Foot)...	2	6	8	8	—
„ (Flat Foot) ...	1	4	5	3	2
Rickets—					
General ...	8	38	46	41	5
Genu Valgum (Knock Knee)	6	28	34	30	4
Genu Varum (Bow Leg) ...	8	21	29	27	2
Infantile Paralysis ...	1	—	1	1	—
Erb's Paralysis ...	1	—	1	1	—
Bad Posture ...	2	7	9	8	1
Muscular Weakness ...	1	2	3	2	1
Mouth Breathers ...	—	4	4	3	1
Torticollis ...	—	3	3	3	—
Other Deformities ...	—	1	1	—	1
Other Diseases ...	3	3	6	2	4
	33	117	150	129	21

PROVISION OF NURSING ASSISTANCE FOR CERTAIN DISEASES.—In Section 1 of the report the general scheme of nursing assistance is described in full. The extent to which these services have been made use of in respect of specific diseases is dealt with under these diseases, *q.v.*

DAY AMBULANCE.—In accordance with an agreement entered into with the London County Council, ambulances are hired from that body for the conveyance of mothers to maternity hospitals between the hours of 8 a.m. and 11 p.m., and, except in rare instances, the cost is recovered from the patient. During the year this service was used on 9 occasions.

CHILDREN'S BEDS.—Twelve beds have been reserved by the Council in the Woolwich War Memorial Hospital for the treatment of children under 5 years of age suffering from such conditions as are usually admitted to general or children's

hospitals. Including those remaining in hospital at the beginning of the year, the number of children who received treatment during the year was 149. Of these 130 were discharged cured or very much improved in health, 4 were discharged as improved, and 3 died. Two children were transferred to other hospitals, six others were discharged showing no improvement, and the number remaining in hospital at the end of the year was four. The surgical conditions for which these children were admitted included :—enlarged tonsils and adenoids, phimosis, hernia, abscess, tuberculous glands and nasal obstruction, and those admitted for medical treatment included children suffering from :—pneumonia, malnutrition, nephritis, diarrhoea and enteritis.

INSTITUTIONAL MIDWIFERY.—(1) *British Hospital for Mothers and Babies*. There are 42 beds in this hospital, and I am informed by Miss Gregory, the Secretary of the Hospital, that 734 babies were born during the year. At the ante-natal clinics in connection with this hospital, 7,256 attendances were made, and at the infant clinics, 2,693 attendances. In addition there were 183 extern cases. The number of mothers admitted under the Council's scheme was 142, the nett cost to the Council being £976 19s. 6d.

(2) *War Memorial Hospital*.—There are 7 maternity beds in this hospital and I am indebted to Mr. R. S. G. Hutchings, the Secretary, for the following information regarding the admissions to the maternity unit during the year. The number of children born in the hospital was 173, and 42 mothers were admitted for ante-natal or emergency treatment. The number of attendances made at the ante-natal clinic was 1,171. The number of cases admitted under the Council's scheme was 56, the nett cost to the Council being £509 8s. 6d.

ANTE-NATAL TREATMENT AND EMERGENCIES.—The number of cases admitted for ante-natal or emergency treatment under the Council's scheme was 6. The reasons for admission were :—Albuminuria, 3 ; Mammary Abscess, 1 ; Heart Trouble, 2.

CONVALESCENT HOME TREATMENT FOR CHILDREN UNDER 5 YEARS OF AGE.—The necessary arrangements for this treatment are made by the Woolwich Invalid Children's Aid Association to whom the Council give grants-in-aid for this purpose. During the year such grants were made in respect to 50 children, the total cost of whose convalescent treatment amounted to £439 15s. 1d. The Council's grants amounted to £150. The children were sent away for periods varying from 3 to 38 weeks, and payment was only made in respect of children sent to homes approved by the Medical Officer of Health.

CONVALESCENT HOME TREATMENT FOR EXPECTANT AND NURSING MOTHERS.—In June, 1931, the Council decided to make provision under their maternity and child welfare scheme for the convalescent treatment of expectant and nursing



mothers. The scheme included payment of railway fares where necessary. It was resolved also to recover some of the cost from patients after consideration of each case on its merits. During the year four mothers were sent away.

**SUPPLY OF MILK, ETC., TO NECESSITOUS MOTHERS AND CHILDREN.**—Under the provisions of the Maternity and Child Welfare Act, 1918, milk, etc., is provided by the Council for necessitous expectant and nursing mothers, and children under the age of five years, under the conditions laid down in Circular 185, issued by the Ministry of Health, in March, 1921. The approximate cost of these services during the year was as follows :—

Dried milk, £2,297 11s. 8d. Fresh milk, 15s. 2d. Dinners, Nil.

**COLLECTIVE TEACHING TO EXPECTANT AND NURSING MOTHERS.**—Mothercraft classes were started in 1925 at Woolwich. They were transferred in 1926 to more suitable premises at Plumstead Centre, where they continued until 1931. In that year, owing to the Centre being required for additional clinics, the classes were transferred to the Old Town Hall Centre at Woolwich. They have not been too successful and during the last few years the attendances have been steadily falling. The object of these classes was to demonstrate to mothers suitable articles of attire for baby, and to provide facilities for making them under expert supervision. Now-a-days, however, it is possible to buy all kinds of ready-made baby garments at low prices and it would appear that many mothers prefer to do so. In these circumstances the Committee decided in November to discontinue these classes and so enable the Health Visitor who took charge of them to spend her time on other work. The attendances during the part of the year the classes were open were 151.

**BLIND PERSONS ACT, 1920.**—The Council, at the request of the London County Council, have arranged that home visiting of blind children under five years of age should be carried out by the Council's health visitors, and reports are furnished to the County Council, as the occasion arises, when the home conditions are unsuitable for blind children or it is advisable that the child should be admitted into a suitable institution. During the year one new case came to the knowledge of the department.

**WIDOWS' ORPHANS' AND OLD AGE CONTRIBUTORY PENSIONS ACT, 1925.**—The local authority may, in case of desertion of a child who is an orphan, administer the payments on behalf of the child. No case under the provisions of this Act was dealt with during the year.

**INFANT LIFE PROTECTION.**—From the 1st April the Metropolitan Borough Councils became responsible in London for Infant Life Protection. In due course the powers of the Council were delegated to the Maternity and Child Welfare Committee. The Council appointed two of their existing Health Visitors—Miss Campbell and Miss Frederick—to act as Infant Life Protection Visitors, and appointed another



Health Visitor for general work. They also, in accordance with the practice of the London County Council, decided that all legal enquiries in connection with this work should be done by a male inspector, and they appointed one of their Inspectors—Mr. Kersey—for this purpose.

When the Council took over on the 1st April there were 67 foster children in the Borough and 46 foster mothers. On the 31st December there were 104 foster children and 76 foster mothers. These figures do not, however, tell the whole story, as 142 foster children were added to the register and 105 foster children were removed. The following Table shows the ages of the children under supervision on the 31st December :—

TABLE No. 35.

Under 1 year.	1 -	2 -	3 -	4 -	5 -	6 -	7 -	8 -
20	11	10	15	11	10	4	13	10

The number of visits paid by the Infant Life Protection Visitors was 421, and the number paid by the male Inspector was 187. Of his visits, 80 were made for the purpose of ascertaining the sanitary conditions of premises and 107 were made in connection with infringements, fixing the number of children, etc. The number of, and nature of the various legal infringements discovered during the year was as follows :—

TABLE No. 36.

<i>Nature of Infringement.</i>	<i>No.</i>
Keeping a nurse child without giving timeous notice ...	24
Change of address by foster mother without giving timeous notice ... ..	2
Infant removed from care of foster mother without giving timeous notice ... ..	12
Infant kept in premises or by persons prohibited from receiving same ... ..	1
Infant kept in excess of number fixed ... ..	1

Cautionary letters were sent in 32 cases. No action was taken in 8 cases and there were no prosecutions. In 7 instances insanitary conditions were discovered and in 1 instance there was overcrowding. In all cases appropriate action was taken to secure the abatement of the nuisances. Nurse infants who are kept under unsatisfactory conditions may be removed to a place of safety, but it was not necessary to remove any such during the year.



All foster mothers are urged to attend the Council's welfare centres with the children in their charge, and it is pleasing to record that, with very few exceptions, every child is now regularly attending an infant welfare centre. Special care is taken to see that children who are weak and ailing attend the centres. During the year one nurse infant died from gastritis. No inquest was held.

Under the Children's Act, 1932, general hospitals are not exempt as they were under the Children's Act of 1908. An application was received from the Management of the Woolwich War Memorial Hospital asking for exemption and the Council decided to grant a certificate of exemption.

SCHEME UNDER LOCAL GOVERNMENT ACT, 1929.—Under Section 101 (6) of the above Act, a scheme providing for payment to voluntary institutions is made every three years by the Minister of Health. The scheme made in 1932, like the one in 1929, includes two schedules—the first defining the Associations to which the London County Council shall contribute, and the second, those to which the Metropolitan Borough Councils contribute. In tabular form is set out below the reference to Woolwich in the scheme :—

#### FIRST SCHEDULE.

Name of Association.	Services in respect of which contribution is payable.	Amount of annual contribution to be paid by the London County Council.
British Hospital for Mothers and Babies	(a) Maternity Hospital ... ..	£1,070
	(b) District Midwifery and Maternity Nursing ... ..	£54
	(c) Infant Welfare Centre ... ..	£230

#### SECOND SCHEDULE.

NIL.

## SECTION VII.

## PREVALENCE AND CONTROL OF INFECTIOUS DISEASE.

In addition to food poisoning (which is reported on in Section IV) the following diseases are notifiable in the Borough :—

Anthrax	Ophthalmia Neonatorum
Cerebrospinal Meningitis	Pneumonia—Acute Primary
Cholera	Pneumonia—Acute Influenzal
Continued Fever	Poliomyelitis
Diphtheria	Plague
Dysentery	Puerperal Fever
Encephalitis Lethargica	Puerperal Pyrexia
Erysipelas	Relapsing Fever
Enteric (or Typhoid) Fever	Scarlet Fever
Glanders	Smallpox
Hydrophobia	Tuberculosis
Malaria	Typhus Fever
Membranous Croup	Zymotic Enteritis

So far as London is concerned, the authority for institutional treatment is the London County Council. Woolwich cases are usually admitted to the Brook Hospital, Greenwich, the Park Hospital, Lewisham, or the Joyce Green Hospital, Dartford, but the more uncommon types of infectious disease may be admitted to any of the County Council's infectious disease hospitals.

The total number of primary notifications, excluding cases of tuberculosis, which are dealt with later in this Section, was 1,764, compared with 1,172 in 1932. Measles was not present in epidemic form during the year.

In tabular form are shown in the next five Tables statistics relating to the incidence of infectious disease in the Borough in 1933 and previous years.



TABLE No. 37.

Notification of Infectious Disease, 1933.

Diseases	Total Cases Notified.	Admissions to Hospital.	Total Deaths.
Diphtheria ... ..	370	368	15
Scarlet Fever ... ..	1,004	952	—
Enteric Fever (including Para-Typhoid Fever)	5	5	—
Puerperal Fever ... ..	4	3	2
Puerperal Pyrexia ... ..	36	35	—
Erysipelas ... ..	67	29	6
Smallpox ... ..	2	2	—
Pneumonia ... ..	249	138	86
Malaria ... ..	2	2	—
Ophthalmia Neonatorum ... ..	9	4	—
Encephalitis Lethargica ... ..	—	—	3
Dysentery ... ..	—	—	—
Cerebro-spinal Meningitis ... ..	9	9	5
Poliomyelitis ... ..	2	2	—
Zymotic Enteritis ... ..	5	1	—
* Measles (including German Measles)	354	5	1
	2,118	1,555	118

\* Not notifiable.

TABLE No. 38.  
Notification of Infectious Diseases (Including Tuberculosis), 1901 to 1933.

Year.	Smallpox.	Diphtheria and Mem. Croup.	Erysipelas.	Scarlet Fever.	Enteric Fever.	Continued Fever.	Puerperal Fever.	§Puerperal Pyrexia.	Pneumonia Primary.	Influenza Pneumonia.	Malaria.	Dysentery.	Anthrax.	Ophthalmia Neonatorum.	Encephalitis Lethargica.	Cerebro-spinal Meningitis.	Polio-myelitis.	†Zymotic Enteritis.	*Pulmonary Tuberculosis.	*Tuberculosis Non-pulmonary	†Measles.	× Chicken Pox.
1901 ...	21	216	72	311	68	1	8	—	—	—	—	—	—	—	—	—	—	—	—	—	323	—
1902 ...	228	233	98	267	50	1	11	—	—	—	—	—	—	—	—	—	—	—	189	—	646	301
1903 ...	6	186	58	389	42	3	2	—	—	—	—	—	—	—	—	—	—	—	165	—	661	—
1904 ...	6	163	74	472	25	1	5	—	—	—	—	—	—	—	—	—	—	—	186	—	1,240	—
1905 ...	7	273	83	513	27	1	12	—	—	—	—	—	—	—	—	—	—	212	145	—	465	—
1906 ...	—	387	97	528	40	—	8	—	—	—	—	—	—	—	—	—	—	366	176	—	825	—
1907 ...	—	275	110	1,023	27	—	6	—	—	—	—	—	—	—	—	1	—	93	150	—	1,453	—
1908 ...	—	362	90	596	19	—	6	—	—	—	—	—	—	—	—	1	—	173	154	—	519	—
1909 ...	—	268	113	1,027	13	—	9	—	—	—	—	—	—	—	—	—	—	149	206	—	768	—
1910 ...	1	171	89	524	10	—	7	—	—	—	—	—	—	—	—	1	—	102	196	—	396	—
1911 ...	—	239	82	518	16	—	16	—	—	—	—	—	—	8	—	1	3	866	375	—	801	—
1912 ...	3	429	87	474	20	—	2	—	—	—	—	—	—	20	—	1	3	129	689	—	775	—
1913 ...	—	321	70	626	14	—	8	—	—	—	—	—	—	14	—	—	1	338	532	143	387	—
1914 ...	—	416	107	714	18	—	7	—	—	—	—	—	—	18	—	1	—	199	400	98	967	—
1915 ...	—	286	138	601	31	—	6	—	—	—	—	—	—	19	—	50	2	173	420	69	1,179	—
1916 ...	1	271	95	232	9	—	16	—	—	—	—	—	—	33	—	17	—	80	392	77	1,590	—
1917 ...	—	277	79	147	12	—	12	—	—	—	—	—	—	41	—	22	1	101	448	95	1,710	—
1918 ...	—	240	61	222	12	—	14	—	—	—	—	—	—	23	—	11	3	118	563	97	800	—
1919 ...	4	398	63	243	26	—	7	—	123	—	61	7	1	34	3	7	1	123	394	80	1,886	—
1920 ...	1	427	82	538	6	—	13	—	136	—	29	1	—	29	3	6	—	31	359	69	1,013	—
1921 ...	—	592	59	1,351	11	—	14	—	187	49	10	4	—	32	9	2	—	454	285	71	481	—
1922 ...	—	437	37	511	8	1	11	—	212	133	11	—	—	26	3	2	4	31	245	60	2,698	—
1923 ...	—	152	40	334	16	—	8	—	196	46	4	1	—	18	1	5	6	49	245	66	194	—
1924 ...	—	195	45	440	11	—	7	—	249	105	3	1	—	27	17	12	5	13	273	69	2,679	—
1925 ...	—	299	44	364	16	—	9	—	237	40	5	1	—	31	10	5	1	13	246	54	1,916	—
1926 ...	—	393	46	411	8	1	4	7	259	33	5	—	—	18	7	9	5	23	287	52	1,246	—
1927 ...	—	278	65	478	9	—	8	30	280	36	3	1	—	19	6	4	3	12	269	84	457	—
1928 ...	3	300	89	529	17	—	20	28	216	14	12	1	—	14	8	3	3	5	263	62	2,418	—
1929 ...	5	496	80	567	7	—	15	38	293	90	5	—	1	17	4	9	4	8	250	52	151	—
1930 ...	10	497	77	627	8	—	5	31	262	21	2	1	—	8	—	2	2	22	244	55	2,702	597
1931 ...	3	281	80	387	3	—	8	41	327	44	3	—	—	7	2	12	6	3	229	51	113	672
1932 ...	7	233	44	554	3	—	5	35	199	48	2	1	—	7	2	15	6	11	235	48	3,135	—
1933 ...	2	370	67	1,004	5	—	4	36	181	68	2	—	—	9	—	9	2	5	207	45	354	—

§Notification of Puerperal Pyrexia commenced October, 1926.

† Measles notifiable from 1/1/1916 to 31/12/1919.

\*Voluntary notification to 1910; partial to 1912; all cases thereafter.

‡ Compulsory notification of Zymotic Enteritis commenced 1913.

×Chicken Pox was again made notifiable from April, 1930, to 30th September, 1931.



TABLE No. 39.

Ward Incidence of Infectious Diseases (excluding Tuberculosis), 1933.

DISEASES	Borough.	Dockyard.	St. Mary's.	River.	St. George's.	Burridge.	Herbert.	Glyndon.	St. Margaret's.	Central.	St. Nicholas.	Abbey Wood.	Well Hall.	Avery Hill.	Sherard.
Diphtheria ... ..	370	15	7	22	12	10	9	9	20	7	12	49	48	13	137
Scarlet Fever ... ..	1,004	35	40	77	49	54	56	35	60	23	52	66	173	77	207
Enteric Fever (including Paratyphoid Fever) ... ..	5	1	—	1	—	—	1	—	—	1	—	—	—	—	1
Puerperal Fever ... ..	4	1	—	—	—	—	—	—	1	—	—	—	—	—	2
Puerperal Pyrexia ... ..	36	—	2	7	—	3	4	4	1	2	6	2	1	—	4
Erysipelas ... ..	67	—	8	3	3	7	4	4	8	4	8	3	6	2	7
Smallpox ... ..	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Pneumonia ... ..	249	15	9	22	13	11	8	12	19	13	36	28	14	12	37
Malaria ... ..	2	—	—	1	—	—	—	—	—	—	—	—	1	—	—
Ophthalmia Neonatorum ... ..	9	2	1	1	1	—	—	2	—	—	—	—	—	—	2
Encephalitis Lethargica ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis ... ..	9	1	1	2	2	—	—	—	—	—	2	—	—	—	1
Poliomyelitis ... ..	2	—	—	1	—	—	—	—	—	1	—	—	—	—	—
Zymotic Enteritis ... ..	5	—	—	—	—	—	1	—	1	—	—	—	—	—	3
*Measles (including German Measles)	354	6	6	34	69	19	10	7	12	7	6	3	52	—	123
	2,118	76	74	171	149	104	93	73	122	58	122	151	295	104	526

\* Not notifiable.

TABLE No. 40.

Cases of Infectious Diseases Notified 1933 (excluding Tuberculosis).

DISEASES.	Number of Cases Notified.												
	Age Groups.												
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 35 years.	35 and under 45 years.	45 and under 65 years.	65 and over.
Diphtheria ... ..	370	4	7	16	33	23	150	70	19	33	7	7	1
Scarlet Fever... ..	1,004	3	18	40	60	77	409	257	56	59	20	5	—
Enteric Fever (including Para-typhoid Fever)	5	—	—	—	—	—	—	1	—	3	—	1	—
Puerperal Fever ... ..	4	—	—	—	—	—	—	—	—	4	—	—	—
Puerperal Pyrexia ... ..	36	—	—	—	—	—	—	—	1	28	7	—	—
Erysipelas ... ..	67	2	—	1	—	—	2	4	3	14	12	25	4
Smallpox ... ..	2	—	—	—	—	—	—	—	1	—	—	1	—
Pneumonia ... ..	249	16	10	7	2	9	37	8	19	30	31	47	33
Malaria ... ..	2	—	—	—	—	—	—	—	—	1	1	—	—
Ophthalmia Neonatorum	9	9	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis	9	1	—	—	2	1	2	1	1	1	—	—	—
Poliomyelitis ... ..	2	—	2	—	—	—	—	—	—	—	—	—	—
Zymotic Enteritis ... ..	5	3	—	—	—	—	1	1	—	—	—	—	—
*Measles (including German Measles)	354	5	3	5	9	14	215	38	45	19	1	—	—
	2,118	43	40	69	106	124	816	380	145	192	79	86	38

\* Not notifiable.



TABLE No. 41.

Deaths from Infectious Diseases (excluding Tuberculosis) 1933.

DISEASES.	Number of Deaths.											
	All Ages.	Age Groups.										
		Under 1	1-	2-	5-	15-	25-	35-	45-	55-	65-	75-
Diphtheria ... ..	15	—	1	2	10	1	—	—	1	—	—	—
Scarlet Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever (inc. Para-typhoid Fever)...	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever ... ..	2	—	—	—	—	—	2	—	—	—	—	—
Puerperal Pyrexia ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas ... ..	6	2	—	—	—	—	—	—	2	1	—	1
Smallpox ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia ... ..	86	19	6	3	2	5	2	4	8	14	14	9
Malaria ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis Lethargica ... ..	3	—	—	—	—	—	1	—	1	1	—	—
Dysentery ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Meningitis ... ..	5	1	2	—	1	1	—	—	—	—	—	—
Poliomyelitis ... ..	—	—	—	—	—	—	—	—	—	—	—	—
Zymotic Enteritis ... ..	—	—	—	—	—	—	—	—	—	—	—	—
*Measles (including German Measles) ...	1	—	—	—	1	—	—	—	—	—	—	—
	118	22	9	5	14	7	5	4	12	16	14	10

\* Not notifiable.

## DIPHTHERIA.

*Notification.*—During the year 370 cases were notified, compared with 233 in 1932 and 281 in 1931. The number of military cases was six. The number of notifications received each quarter was as follows:—

First quarter	70	Second quarter	62
Third quarter	95	Fourth quarter	143

*Multiple cases.*—The following Table, No. 42, shows the house distribution in wards. The term "House" is synonymous with the term "family" except in one case, where two families were involved.

TABLE No. 42.

## Diphtheria—Multiple Cases.

	Dockyard.	St. Mary's.	River.	St. George's.	Burrage.	Herbert.	Glyndon.	St. Margaret's.	Central.	St. Nicholas.	Abbey Wood.	Well Hall.	Avery Hill.	Sherard.	Total Houses.	Total Cases
Number of Houses in which																
1 case occurred	13	7	16	6	6	7	7	14	5	9	47	29	13	82	261	261
2 cases occurred	1	—	3	—	2	1	1	3	1	—	1	5	—	11	29	58
3 " "	—	—	—	—	—	—	—	—	—	1	—	3	—	4	8	24
4 " "	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	16
5 " "	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	5
Total houses...	14	7	19	6	8	8	8	17	6	10	48	47	13	102	303	364
Military ...	—	—	—	6	—	—	—	—	—	—	—	—	—	—	—	6
																370

*Return cases.*—Four cases gave rise to four return cases. In one instance the primary case was again notified after discharge from hospital and re-admitted to hospital.

*Deaths.*—There were 15 deaths from Diphtheria, compared with 8 in 1932 and 6 in 1931. Three of these deaths were in children under five years of age and 10 were in school children.



*Home Isolation.*—Two cases were isolated at home. Frequent visits are made by the district sanitary inspectors to all cases isolated at home in order to ensure that proper precautions are being taken for preventing the spread of the disease. Employees of the Royal Arsenal are not allowed to remain at work unless cases are removed to hospital or a certificate of efficient home isolation is issued by the Medical Officer of Health. No certificates were issued during the year.

*Antitoxin.*—A supply of Diphtheria Antitoxin is kept at the Town Hall, the Plumstead Library and the Eltham Library, and is available for medical practitioners on application, at cost price, or free where there is inability to pay. The amount supplied during the year was 84,000 units. The total cost to the Council was £5 8s. 0d., all of which, with the exception of 12s. 0d., was recovered.

Antitoxin, under pressure, can now be obtained in serules. As part of the cover of the serule consists of a sterilised hypodermic needle in a glass tube, to use it it is only necessary to break the glass covering the needle, insert the needle into a vein and release the serum. The only other thing the medical practitioner in attendance has to do is to sterilise the skin. The advantages of serum stored by such a method are obvious: the general practitioner can carry one of these serules in his bag and he can administer it to a patient immediately, as contrasted with the old method when he probably had to get the serum from the Council and then go home to get his serum syringe and steriliser. More general use of this method would probably increase the number of cases treated with antitoxin before admission to hospital—a most important factor in treatment, as it is well known that the case mortality from Diphtheria increases with every day's delay in the commencement of specific treatment.

*Schick Test.*—There are no clinics in the area where Schick testing and immunisation are carried out:

#### SCARLET FEVER.

*Notification.*—During the year 1,004 cases were notified, compared with 554 in 1932 and 387 in 1931. There were 25 military cases. The number of notifications received each quarter was as follows:—

First quarter	202	Second quarter	220
Third quarter	213	Fourth quarter	369

*Multiple Cases.*—The following Table, No. 43, shows the house distribution by wards. The term "house" is synonymous with the term "family" except in two instances, where two families were involved.

TABLE No. 43.  
Scarlet Fever—Multiple Cases.

	Dockyard	St Mary's	River.	St. George's.	Burrage.	Herbert.	Glyndon.	St. Margaret's.	Central.	St. Nicholas.	Abbey Wood.	Well Hall.	Avery Hill.	Sherard.	Total Houses.	Total Cases.
Number of Houses in which																
1 case occurred	29	29	60	20	32	36	29	44	17	41	41	116	50	138	682	682
2 cases occurred	3	5	1	1	11	6	1	7	3	5	7	17	10	24	101	202
3 " "	—	—	5	1	—	1	—	—	—	1	1	6	1	3	19	57
4 " "	—	—	—	—	—	—	1	—	—	—	2	—	1	3	7	28
5 " "	—	—	—	—	—	1	—	—	—	—	—	1	—	—	2	10
Total houses ...	32	35	66	46	43	44	31	51	20	47	51	140	62	168	836	979
Military cases...	—	1	—	24	—	—	—	—	—	—	—	—	—	—	—	25
																1004

*Return Cases.*—The following Table, No. 44, shows the number of return cases, the dates of admission to hospital, the dates of discharge from hospital, and some notes of the condition of the primary case on discharge. It will be noted that in over half these cases the primary case was less than five weeks in hospital.

TABLE No. 44.  
Scarlet Fever—Return Cases.

No. in Register	Date Admitted to Hospital.	Date Discharged.	Total Days in Hospital.	Onset of Secondary Case.	Remarks on Primary Case.
1932.					
454	2/11/32	3/ 1/33	62	20/ 1/33	—
487	19/11/32	28/ 1/33	69	23/ 1/33	—
512	9/12/32	21/ 1/33	42	10/ 2/33	—
525	18/12/32	25/ 1/33	37	22/ 1/33	—
				23/ 2/33	Swollen glands and nasal discharge.
1933.					
11	7/ 1/33	16/ 2/33	39	11/ 3/33	—
38	21/ 1/33	25/ 2/33	34	6/ 3/33	—
46	25/ 1/33	25/ 2/33	30	13/ 3/33	—
43	25/ 1/33	8/ 3/33	41	12/ 3/33	Nasal discharge.
45	25/ 1/33	20/ 2/33	25	3/ 3/33	—
97	13/ 2/33	16/ 3/33	30	8/ 4/33	—
99	11/ 2/33	20/ 4/33	36	24 /4/33	Nasal discharge.
112	22/ 2/33	21/ 3/33	26	2/ 4/33	Nasal discharge.
116	24/ 2/33	29/ 3/33	32	5/ 4/33	Nasal discharge.



TABLE No. 44—*Continued.*

No. in Register	Date Admitted to Hospital.	Date Discharged.	Total Days in Hospital.	Onset of Secondary Case.	Remarks on Primary Case.
1933. 120	—	—	—	25/ 4/33	Nursed at home. Disinfected 20/3/33.
139	7/ 3/33	8/ 4/33	31	18/ 4/33	Desquamation not complete.
144	11/ 3/33	1/ 4/33	20	3/ 4/33	—
151	13/ 3/33	15/ 4/33	32	21/ 4/33	Nasal discharge.
163	14/ 3/33	8/ 4/33	24	18/ 4/33	Desquamation not complete.
176	18/ 3/33	18/ 4/33	30	18/ 4/33	Nasal discharge.
178	19/ 3/33	16/ 5/33	57	1/ 6/33	—
197	27/ 3/33	1/ 5/33	34	11/ 5/33	—
210	5/ 4/33	1/ 5/33	25	17/ 5/33	Desquamation not complete.
237	11/ 4/33	26/ 6/33	75	2/ 7/33	Otorrhœa on discharge.
245	17/ 4/33	11/ 5/33	25	11/ 7/33	Desquamation not complete.
276	28/ 4/33	18/ 5/33	19	29/ 5/33	—
322	27/ 5/33	30/ 6/33	32	21/ 6/33	Nasal discharge.
346	3/ 6/33	6/ 7/33	32	8/ 7/33	Nasal discharge.
349	3/ 6/33	5/ 8/33	62	22/ 7/33	—
353	9/ 6/33	24/ 6/33	14	9/ 8/33	—
366	13/ 6/33	14/ 7/33	30	17/ 7/33	—
456	9/ 7/33	11/ 9/33	32	17/ 9/33	—
479	15/ 7/33	17/ 8/33	32	22/ 8/33	—
488	19/ 7/33	22/ 8/33	35	13/ 9/33	—
489	19/ 7/33	9/ 9/33	41	29/10/33	—
596	17/ 9/33	20/10/33	32	9/11/33	—
602	19/ 9/33	1/11/33	42	20/11/33	Desquamation not complete.
611	23/ 9/33	4/11/33	41	—	—
640	2/10/33	15/12/33	73	23/12/33	—
663	11/10/33	18/12/33	67	25/12/33	—
664	10/10/33	25/11/33	75	8/12/33	—
673	13/10/33	15/11/33	32	28/11/33	—
680	15/10/33	16/11/33	31	8/12/33	—
682	16/10/33	24/11/33	38	7/12/33	—
715	24/10/33	16/12/33	52	18/12/33	—
730	29/10/33	21/11/33	22	26/11/33	—
731	28/10/33	14/11/33	16	22/11/33	Desquamation not complete.
764	6/11/33	9/12/33	32	27/11/33	Sore nose.
783	11/11/33	15/12/33	33	26/12/33	—
849	24/11/33	21/12/33	26	22/12/33	—
				25/12/33	—

*Deaths.*—There were no deaths from scarlet fever during the year. In 1932 the number of deaths was three.

*Home Isolation.*—Fifty-two cases, or 5·17 per cent., were isolated at home, and in one instance a return case occurred. The same procedure as in Diphtheria was carried out. Three certificates of efficient home isolation were issued.

*Dick Test.*—This has not been employed in the neighbourhood so far as I am aware.

*Non-notification of a Case of Scarlet Fever.*—During the year proceedings were taken against a medical practitioner who failed to notify a patient suffering from this disease. He pled guilty and the summons was dismissed on payment of two guineas costs.

#### SMALLPOX.

Two cases were notified, the diagnosis being confirmed in each instance. There were no deaths. The smallpox shelter was not in use during the year. No person was vaccinated by the Medical Officer of Health under the provisions of the Public Health (Smallpox Prevention) Regulations, 1917. In each instance vaccination or re-vaccination was offered to all contacts by the Public Vaccinators.

#### ERYSIPELAS, MALARIA AND DYSENTERY.

The number of notifications of Erysipelas received was 67, compared with 44 in 1932. Two cases of Malaria were notified (including one induced). No case of Dysentery was notified.

#### ENTERIC FEVER.

Five cases were notified, all of which were treated in hospital. There were no deaths. The following Table, No. 45, gives details of each case notified.

TABLE No. 45.

No.	Date Notified.	Sex.	Age.	Diagnosis.	Final Diagnosis.	Remarks.
1	19/ 5/1933	F.	26	Paratyphoid Fever...	Paratyphoid Fever...	—
2	25/10/1933	M.	20	Enteric Fever ...	Subphrenic Abscess	—
3	31/10/1933	F.	28	Paratyphoid Fever...	Paratyphoid Fever...	—
4	21/11/1933	M.	12	Paratyphoid Fever...	Paratyphoid Fever...	—
5	25/11/1933	F.	46	Typhoid Fever ...	Typhoid Fever and Paratyphoid Fever	—

#### ANTERIOR POLIOMYELITIS.

Two notifications were received and both cases were admitted to hospital. In one instance the diagnosis was not confirmed. It was not necessary to provide nursing assistance. There were no deaths.

#### CEREBRO-SPINAL MENINGITIS.

Nine cases were notified, all of which were admitted to hospital. In three instances the diagnosis was not confirmed. There were five deaths. The following Table, No. 46, gives details of each case.



TABLE No. 46.

No.	Date Notified.	Sex.	Age.	Ultimate Diagnosis.	Remarks.
1	24th January ...	M.	14	Cerebro-spinal Meningitis ...	Military case.
2	1st February ...	F.	3	do. do. ...	—
3	21st February ...	F.	6	do. do. ...	—
4	22nd April ...	F.	4/12	do. do. ...	Died.
5	16th June ...	M.	19	do. do. ...	Military case.
6	15th July ...	F.	3	Tuberculous Meningitis ...	Died.
7	1st September ...	M.	22	Acute Septic Meningitis ...	—
8	21st September ...	M.	6	Pneumococcal Meningitis ...	—
9	24th September ...	M.	4	Cerebro-spinal Meningitis ...	—

## ENCEPHALITIS LETHARGICA.

Three deaths were certified as due to this disease. None of these had been previously notified but in each instance the illness started some years previously. In 1932 there were two cases notified.

## PUERPERAL FEVER AND PUERPERAL PYREXIA.

Forty cases were notified, compared with 40 in 1932 and 49 in 1931. In 36 instances the notification was in respect of Puerperal Pyrexia. In five instances the disease was a sequel to abortion.

*Treatment.*—The Council's scheme for the treatment of these diseases provides for a Consultant, for hospital treatment, for bacteriological examination where necessary, and for nursing assistance. Specific sera may also be supplied. No cases were seen by Mr. Harold Taylor during the year. It was not necessary to provide nursing assistance and no bacteriological examinations were carried out. Only two cases did not receive hospital treatment.

*Deaths.*—There were two deaths, compared with four in 1932 and six in 1931.

## OPHTHALMIA NEONATORUM.

Nine cases were notified, three of which were admitted to hospital. Six cases were nursed at home under the Council's scheme, 209 visits in all being paid. The cost of this service was £10 9s. 0d. The following Table, No. 47, gives details of each case.

TABLE No. 47.

Date Notified.	Cases Treated.		Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
	Home.	Hospital.				
30th January ...*	Yes	—	Yes	—	—	—
28th February ...	—	Yes	Yes	—	—	—
21st July ...	Yes	—	Yes	—	—	—
11th August ...	Yes	—	Yes	—	—	—
22nd August ...	—	Yes	Yes	—	—	—
31st August ...	Yes	—	Yes	—	—	—
5th September...	Yes	—	Yes	—	—	—
30th September...	Yes	—	Yes	—	—	—
13th December ...	—	Yes	Yes	—	—	—

## ZYMOTIC ENTERITIS.

Five cases were notified during the year, compared with eleven cases in 1932 and 3 in 1931. The number of deaths in children under two years of age, certified to be due to diarrhoeal diseases, was 11. None of the notified cases died.

## WHOOPIING COUGH.

During the year 514 cases of Whooping Cough came to the knowledge of the Department, compared with 233 in 1932 and 192 in 1931. As this disease is not notifiable in the Borough, knowledge is usually obtained through the School Medical Service, but, exceptionally, cases are notified by medical practitioners and occasionally cases are discovered by the health visitors in their routine visits.

*Deaths.*—There were 9 deaths certified to be due to this disease, compared with 8 in 1932.

## MEASLES.

The two main sources of our knowledge of the incidence of Measles in the Borough are the School Medical Service and the health visitors. Occasionally, however, information comes through the local nursing associations and from parents. During the year 354 cases (including 213 cases of German Measles) were discovered. In 1932 and 1931 the corresponding figures were 3,135 and 113.

*Home Nursing.*—Only in one case was nursing assistance provided during the year, eleven visits in all being paid. The cost to the Council was 11s. 0d.

*Hospital Treatment.*—The number of children admitted to fever hospitals was 5.

*Deaths.*—There was one death from Measles during the year.



## PNEUMONIA.

The number of cases notified was 249, compared with 247 in 1932. Of these, 68 were influenzal. The number of deaths certified to be due to lobar or broncho pneumonia was 86, and to acute influenzal pneumonia 14. The ward incidence of the Pneumonias is shown in Table No. 39.

The following Table, No. 48, shows the number of notifications of Pneumonia received each month, classified by sex and according to type. It also shows the number of deaths occurring from acute primary pneumonia and influenzal pneumonia.

TABLE No. 48.  
Monthly incidence of Pneumonia.

Month.	Male.	Female.	Total.	Type.				No. of Deaths.	
				Lobar.	Broncho.	Influenzal.	Acute Primary (not specified)	Acute Primary Pneumonia.	Influenzal Pneumonia.
January ...	38	29	67	11	7	36	13	13	7
February...	21	21	42	8	6	21	7	11	5
March ...	13	12	25	8	2	4	11	7	—
April ...	8	4	12	3	2	1	6	8	1
May ...	7	4	11	4	—	1	6	4	—
June ...	9	5	14	6	—	—	8	5	—
July ...	7	3	10	5	—	—	5	1	—
August ...	1	5	6	1	—	1	4	10	—
September	5	3	8	—	—	—	8	2	—
October	12	7	19	10	3	1	5	4	—
November	6	4	10	1	1	1	7	8	—
December	18	7	25	5	3	2	15	13	1
	145	104	249	62	24	68	95	86	14

*Nursing.*—Nursing assistance is provided by the Council for cases of Pneumonia and during the year 37 cases were nursed, 839 visits being paid by the nurses of the local nursing associations. The total cost to the Council was £52 8s. 9d.

*Anti-Pneumococcal Serum.*—During the year the Council provided, free of charge, anti-pneumococcal serum (mainly Felton's) for the treatment of persons suffering from Pneumonia to those medical practitioners who considered this form of treatment suitable. The total cost to the Council was £69.

## TUBERCULOSIS.

The Council's Tuberculosis service has the following ramifications :—

- The administration of the Tuberculosis Regulations of 1925 and 1930.
- The supply and supervision of shelters at the homes of patients.
- Bacteriological examination of specimens of sputum.
- The provision of Tuberculosis Dispensaries.
- Home visiting of tuberculous cases.
- Visiting and medical examination of cases for the Ministry of Pensions.
- Arrangements for securing the examination and systematic supervision of home contacts.
- An agreement with the War Memorial Hospital for X-ray examinations in doubtful cases.
- Arrangements for following up cases where the diagnosis is doubtful.
- Co-operation with the medical staff of St. Nicholas Hospital, the Tuberculosis Officer acting as Consultant for tuberculous patients.
- Co-operation between the Tuberculosis Officer and the local medical practitioners.
- Co-operation with the School Medical Service.
- Provision of extra nourishment for tuberculous persons.
- An agreement with the School Treatment Committee for the provision of dental treatment.
- An agreement with the London Hospital for Finsen Light treatment of lupus.
- An agreement with the Brompton Hospital for the induction of artificial pneumo-thorax.
- The formation of a Care Committee.
- Institutional treatment through the London County Council.

Details of the Council's Tuberculosis Service are given in the following pages, but before dealing with them it is convenient to deal here with the mortality statistics.

*Deaths.*—The deaths from pulmonary tuberculosis during 1933 numbered 116, giving a death-rate of 0·79 per 1,000 of the population. The corresponding figures for 1932 were 139 and 0·95 respectively. Deaths from other forms of tuberculosis numbered 19, as against 15 in the preceding year, the death-rate being 0·13 per 1,000 of the population. The total number of deaths from tuberculosis during the year was 135, and the combined mortality rate 0·92. The deaths and death-rates from tuberculosis, classified by type of disease, annually since 1929, have been as follows :—



TABLE No. 49.  
Tuberculosis—Deaths and Death-Rates.

Year.	Deaths.			Death-Rates.		
	All Forms.	Pulmonary.	Non-Pulmonary.	All Forms.	Pulmonary.	Non-Pulmonary.
1929 ...	159	143	16	1·12	1·01	0·11
1930 ...	165	150	15	1·17	1·06	0·11
1931 ...	168	148	20	1·14	1·00	0·14
1932 ...	154	139	15	1·05	0·95	0·10
1933 ...	135	116	19	0·92	0·79	0·13

In addition to the 135 deaths mentioned above, one person who had been notified as suffering from pulmonary tuberculosis died during the year, and detailed information as to this is given in the following Table, No. 50.

TABLE No. 50.

Case No.	Date Notified as Tuberculosis.	Cause of Death.
1	24/2/1930	Broncho-Pneumonia.

The period which elapsed between notification and death is shown below.

TABLE No. 51.

			Pulmonary.	Percentage.	Non-Pulmonary.	Percentage.
Not notified	...	...	9	7·76	7	36·84
0- 1 month	...	...	14	12·07	7	36·84
1- 3 months	...	...	4	3·45	—	—
3- 6 months	...	...	12	10·35	—	—
6-12 months	...	...	19	16·38	—	—
1- 2 years	...	...	17	14·66	2	10·53
2- 5 years	...	...	18	15·51	—	—
Over 5 years	...	...	23	19·82	3	15·79
			116	100·00	19	100·00

The ratio of non-notified tuberculosis deaths was as one is to eight. In 1932 it was as one is to twelve, and in 1931 it was as one is to eight.

The following Table, No. 50, shows the site of the disease in patients notified each year since 1929.

TABLE No. 52.

Year.	Lungs.	Meninges.	Intestines and Peri- toneum.	Glands.	Joints.	Spine.	Other Forms.	All Causes.
1929	250	7	7	16	11	6	5	302
1930	244	6	5	18	15	3	8	299
1931	229	11	5	18	8	2	7	280
1932	235	6	6	11	8	5	12	283
1933	207	7	4	14	10	4	6	252

*Administration of the Tuberculosis Regulations.*—(A) The Public Health (Tuberculosis) Regulations, 1930, provide for the notification of Tuberculosis, for the correct maintenance of the notification register, and for the sending of returns to the County Medical Officer.

(1) *Notification.*—It happens that duplicate notifications of cases of tuberculosis are received, so that the figure for the year (330) is misleading, and for this reason the following Table, No. 53, has been prepared to show the actual number of new cases notified during the year. It also shows the corresponding case rates.

TABLE No. 53.

	Woolwich.	Plumstead.	Eltham.	The Borough.
Pulmonary Tuberculosis :				
Cases ... ..	48	101	58	207
Rates ... ..	1.48	1.46	1.30	1.41
Non-Pulmonary Tuberculosis :				
Cases ... ..	9	21	15	45
Rates ... ..	0.28	0.30	0.34	0.31



In Table No. 54 appears a summary of the cases coming to the knowledge of the Department during the year. It includes all notifications except those received on admission or discharge from institutions and duplicate notifications. It includes also cases not notified but included in the Death Returns. Deaths during the year are classified in the same Table by age and sex groups.

TABLE No. 54.

Tuberculosis—New Cases and Mortality, 1933.

Age Periods.	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1 year ...	—	—	—	—	—	—	—	—
1-5 years ...	—	2	1	4	1	1	1	2
5-10 years ...	3	3	8	1	—	—	1	1
10-15 years ...	2	3	1	3	—	1	—	1
15-20 years ...	10	17	6	—	5	5	2	—
20-25 years ...	16	16	2	6	7	7	2	—
25-35 years ...	30	29	3	4	14	20	4	—
35-45 years ...	17	15	—	2	12	10	—	1
45-55 years ...	10	8	1	—	9	8	1	1
55-65 years ...	15	5	—	2	11	2	—	1
65 and upwards	5	1	—	1	3	—	1	—
Totals ...	108	99	22	23	62	54	12	7

(2) *Transfer of information to other areas.*—In accordance with the Regulations, 26 notifications were sent to other Medical Officers and 19 were received.

(3) *Deletions.*—In addition, deletions have been made from the register in the case of patients who have died ; who have been lost sight of ; who have been cured, and in whom the diagnosis was not confirmed.

(4) *Returns to County Medical Officer.*—A return similar to that in Table No. 55, which shows the figures for the whole year, was made each quarter to the County Medical Officer. It will be seen from this Table that the total number on the register was 1,035, and of this number 86·66 per cent. were on the Dispensary register. In 1932 the corresponding percentage was 92·91.

TABLE No. 55.

	Pulmonary.		Non-Pulmonary.		Totals.
	M.	F.	M.	F.	
Number on register on 1st January, 1933 ...	466	347	104	113	1,030
Number of new cases notified... ..	105	102	19	22	248
Number of cases restored ... ..	9	7	2	3	21
Other additions ... ..	18	6	3	2	29
Deletions ... ..	127	106	33	27	293
Number on register on 31st December, 1933	471	356	95	113	1,035

(B) The County of London (Tuberculosis) Regulations, 1930, enable the County Council to maintain or arrange for the maintenance, otherwise than in their homes, of children living in London in houses where, owing to overcrowding or otherwise, they are, in the opinion of the County Medical Officer, in danger of being infected with tuberculosis ; or whose parent or parents are receiving institutional treatment for tuberculosis and for whose care adequate arrangements cannot otherwise be made. During the year such arrangements were made for four children.

(C) The Regulations of 1925 provide for the compulsory discontinuance of a person suffering from infectious respiratory tuberculosis from employment involving the handling or treatment of milk, and are enforceable by the local authority. No action was taken under them during the year.

*Shelters.*—Twelve shelters are maintained by the Council for patients returning from sanatoria who are able and willing to continue this form of treatment.

*Sputum Examinations.*—During the year 461 specimens of sputum were examined at the Dispensary. Of these, 58 were positive and 403 negative. Facilities for general practitioners are provided at the Woolwich War Memorial Hospital and 342 specimens were examined during the year, 74 being positive and 268 negative.



*Tuberculosis Dispensaries.*—The Council's Dispensary is situated in Maxey Road, Plumstead, and there is a branch Dispensary at 179, Well Hall Road, Eltham, but in accordance with the Minister of Health's instructions, the figures are shown for the Borough as a whole and not for individual Dispensaries.

The main Dispensary is open every week-day but an evening session is held, instead of an afternoon one, on Thursdays. Eight separate clinical sessions in all are held for men, for women and for children.

The branch Dispensary is open on three half-days a week—Monday afternoons for men, and Wednesday and Friday mornings for women and children.

At the end of the year the staff consisted of one whole-time Tuberculosis Officer, two part-time Tuberculosis Officers, three Tuberculosis Visitors, one Secretary-Dispenser and one Clerk. During the year Mrs. Morrison, who had been Lay Organiser since February, 1922, resigned, and in filling the vacancy the Council decided to make the Clerk-Dispenser, who was specially trained for the purpose, responsible for all the clerical work and social services of the Tuberculosis scheme as well as for dispensing, and to appoint a whole-time girl clerk. Mrs. M. Prestige, one of the Tuberculosis Visitors, resigned her appointment on 31st October, and Miss E. N. Little was appointed to the vacancy so created but did not commence duty until 1st January, 1934. During the year one of the Tuberculosis Visitors attended a refresher course.

The total number of attendances at the Dispensaries was 4,446. In this connection it is interesting to point out that 68·25 per cent. of the persons notified during 1933 attended the Dispensaries. The corresponding percentage in 1932 was 89·7, and in 1931, 78·93. A return of the work of the Dispensaries is given in Table No. 56.

TABLE No. 56.

Return showing the Work of the Dispensaries for 1933.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY.				TOTAL.				GRAND TOTAL.	
	Adults.		Children.		Adults.		Children.		Adults.		Children.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding contacts) :—														
(a) Definitely tuberculous ... ..	63	63	3	5	6	6	6	6	69	69	9	11	158	
* (b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	2	1	—	—	3	
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	167	196	118	90	571	
B.—CONTACTS examined during the year :—														
(a) Definitely tuberculous ... ..	7	5	—	1	1	—	—	—	8	5	—	1	14	
* (b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	1	—	—	1	2	
(c) Non-tuberculous ... ..	—	—	—	—	—	—	—	—	59	101	87	125	372	
C.—CASES written off the Dispensary Register as :														
(a) Recovered ... ..	26	16	7	3	3	8	9	1	29	24	16	4	73	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ... ..	—	—	—	—	—	—	—	—	235	303	207	218	963	
D.—NUMBER OF CASES on Dispensary Register on 31st December :—														
(a) Definitely tuberculous ... ..	374	313	18	18	44	49	31	45	418	362	49	63	892	
(b) Diagnosis not completed ... ..	—	—	—	—	—	—	—	—	3	1	—	1	5	



Return showing the Work of the Dispensaries for 1933—*Continued.*

1. Number of cases on Dispensary Register on January 1st	...	...	...	...	...	957
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	...	...	...	...	...	11
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	...	...	...	...	...	47
4. Cases written off during the year as Dead (all causes)	...	...	...	...	...	108
5. Number of attendances at the Dispensary (including Contacts)	...	...	...	...	...	4446
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	...	...	...	...	...	247
7. Number of consultations with medical practitioners :—						
(a) Personal	...	...	...	...	...	65
(b) Other	...	...	...	...	...	1010
8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	...	...	...	...	...	539
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	...	...	...	...	...	4944
10. Number of :—						
(a) Specimens of sputum, etc., examined	...	...	...	...	...	461
(b) X-ray examinations made in connexion with Dispensary work.	...	...	...	...	...	412
11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	...	...	...	...	...	5
12. Number of "T.B. plus" cases on Dispensary Register on 31st December	...	...	...	...	...	345

Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment) :—

Provided by Council	...	...	...	...	...	2
Provided by Voluntary Bodies	...	...	...	...	...	Nil

The above Table gives all the figures required by the Minister of Health. It shows also the number of contacts examined during the year and it shows the extent of co-operation locally with medical practitioners.

*Home Visiting of Tuberculosis Cases.*—On receipt of every notification the home is visited by the Tuberculosis Visitor, who advises as to any re-arrangement that seems possible and desirable in the interests of the patient and other members of the family. In the case of patients notified by the Tuberculosis Officer a visit is also made by one of the medical staff, who thus gains a knowledge of the home



circumstances of the patient. The Tuberculosis Visitor endeavours to visit each home in her district once in three months, but, in the case of patients with recent and more active disease, visits are more frequent.

*Work for the Minister of Pensions.*—The amount of work done under this head is falling. The numbers of reports furnished during the year was four.

*Examination of Home Contacts.*—On receipt of each primary notification every effort is made to induce people living in the same house as the patient to present themselves for examination. In many cases, however, it is very difficult to persuade them of the necessity for examination. During the year under review 388 contacts were examined.

*X-Ray Examinations.*—Experience shows that X-ray examinations are indispensable in a thorough examination of a patient suspected to be suffering from Tuberculosis. In the later stages of the disease this examination is also necessary for the efficient control of treatment by artificial pneumo-thorax, and is essential if surgical measures are under consideration. The number of these examinations was not so great in 1933, however, as in 1932, owing to the fact that the Tuberculosis Officer is now able to make use of the apparatus in St. Nicholas Hospital when cases are sent in there for institutional treatment. X-ray examinations are carried out at the War Memorial Hospital and during the year 412 examinations were so carried out, compared with 533 in 1932.

*Observation Cases.*—Observation cases are those in which no definite diagnosis has been arrived at during the first month. A number of these fail to continue in attendance but a check is kept upon these cases by going through their case-papers at the end of each month, and, if they are not attending, the Tuberculosis Visitors endeavour to get them to visit again.

*Co-operation with St. Nicholas Hospital (L.C.C.).*—Since July, 1926, the Tuberculosis Officer has visited St. Nicholas Hospital weekly in accordance with an arrangement made with the late Board of Guardians. The London County Council, in pursuance of their policy of uniformity throughout London, during the year terminated the appointment of all Consultants in their service, and subsequently made re-appointments. Included in these appointments were Tuberculosis Officers as Consultants at the Poor Law Hospitals for their respective areas.

*Co-operation with Local Practitioners.*—During the year 65 new cases were seen by the Tuberculosis Officer at the homes of the patients, and 298 were referred to the Dispensary by medical practitioners in the Borough.

*Co-operation with the School Medical Service.*—There is intimate relationship between the School Medical Service and the Dispensary. Many cases are referred to the Dispensary by the School Medical Officers, and the child contacts of tuberculous



patients are referred to the School Medical Service for special observation and supervision. The Divisional School Medical Officer and the Tuberculosis Officer in personal consultation, discuss these contacts and decide on the supervision, desirable. Other children, whose condition is unsatisfactory, are referred to the School Clinic for the treatment of minor ailments and dental caries, or to the School Care Organiser, with a recommendation as to the provision of milk and cod-liver oil to be given at school.

*Extra Nourishment.*—Extra nourishment in the form of butter, eggs and milk, is supplied to tuberculous patients on the certificate of the Tuberculosis Officer. The object of this measure is to help the ex-sanatorium patient and other suitable cases by the provision of such extra nourishment as will make the difference between progress and relapse: it is not intended for advanced cases of tuberculosis where real improvement cannot be expected. The expenditure on this service is limited to £2 per 1,000 of the population.

*Dental Treatment.*—Dental treatment is carried out under the Council's scheme at the School Clinic, Brewer Street. During the year 21 cases received treatment the number of attendances being 52. The only charge made to patients is in connection with the supply of dentures, and then patients are assessed according to their means. Dentures were supplied in 5 cases at a cost of £22 18s. 6d., and payments by patients amounted to £20 7s. 3d. In assessing patients due regard is given to dental benefits they may be entitled to from approved societies.

*Finsen Light Treatment.*—In 1921 the Council entered into an agreement with the London Hospital for the treatment of persons suffering from Lupus in the Finsen Light Department of the Hospital. A fee of 5s. is paid for each attendance. During the year 21 attendances were made.

*Artificial Pneumo-thorax.*—This treatment consists of collapsing the diseased lung and so putting it at rest. This is done by introducing gas or air through a needle into the pleural cavity of the affected side. The air so introduced becomes absorbed and has to be replaced at varying intervals. These refills have to be maintained over a period varying from two to five years. In 1921 the Council agreed to pay 10s. 6d. a refill to the Brompton Hospital, where this work was carried out, in the case of patients recommended by the Tuberculosis Officer, but since that date payments have been made in respect of patients so treated at other special hospitals and at hospitals belonging to the London County Council. The number of patients who received such treatment during the year was 23, and the number of refills was 308.



*Woolwich Tuberculosis Care Committee.*—At the end of the year the Committee was constituted as follows :—

<i>Bodies.</i>				<i>Representatives.</i>
Woolwich Borough Council ...	...	...	...	Councillors B. A. G. Beaten, J. S. Barry, Mrs. L. E. Driver. Miss C. K. Lambeth, Mrs. E. L. Reeves, Miss G. E. Walters, J.P.
Trade Unions ...	...	...	...	Mr. W. H. Fairchild, Mr. E. Ware.
Employers ...	...	...	...	Miss L. Ames, Miss Fletcher, Mr. C. N. McLaren.
Friendly Societies ...	...	...	...	Mr. W. A. Lyon, Mr. A. J. Rourke, Mr. F. Smyth.
London County Council ...	...	...	...	Dr. H. R. Kidner, Miss C. F. Aves.
London County Council (Public Assistance Committee) ...	...	...	...	Miss C. K. Lambeth, Mrs. E. M. Newman, (one vacancy).
London Insurance Committee ...	...	...	...	Mr. S. H. Brown.
Panel Committee for the County of London				Dr H M Wise.
British Red Cross Society ...	...	...	...	Mr. J. O'Connell.
War Pensions Committee ...	...	...	...	Mr. A. R. Loader.
Woolwich Invalid Children's Aid Association				Mrs. J. B. Great Rex.
Late Tuberculosis Dispensary Committee...				Mr. W. Dashwood, Mr. E. G. Dixon, J.P.
United Services Fund ...	...	...	...	Mrs. A. Evans.
<i>Ex-Officio.</i>				
Voluntary Visitors ...	...	...	...	Mr. G. F. Brazier. Miss D. A. Frye, Miss M. Ross.
Tuberculosis Officer ...	...	...	...	Dr. F. J. C. Blackmore.
Medical Officer of Health ...	...	...	...	Dr. J. MacMillan, D.S.O., M.C.

The Committee undertakes all the care and after-care work of the Borough in regard to the tuberculous. It helps by the provision of clothing for necessitous patients entering institutions ; for the purchase of surgical apparatus and nursing requisites ; by supplementing financial assistance given by the voluntary organisations for in-patient treatment ; by paying fares for varying periods in the case of patients going to and from hospital for out-patient treatment, and in many other ways. It assesses patients' payments for admission to London County Council institutions and for dentures under the Borough Council scheme. It supervises the provision of extra nourishment under the Council's scheme. In all, during the year, it dealt with 755 applications.

*Institutional Treatment.*—The following Table, No. 57, shows the number of admissions to special hospitals, sanatoria, public general hospitals, institutions and training colonies :—

TABLE No. 57.  
Admissions to Hospitals, etc.

	Special Hospitals.	Sanatoria.	Public General Hospitals.	Training Colonies.
Insured ...	115	58	103	4
Uninsured ...	41	21	46	1
Children ...	34	10	6	—
	190	89	155	5



These figures refer to 328 patients and the monthly admissions were as follows :—

January	... 30	February	... 48	March	... 40
April	... 30	May	... 36	June	... 54
July	... 36	August	... 43	September	... 41
October	... 24	November	... 41	December	... 16

### ARRANGEMENTS FOR DISINFECTION AND DISINFESTATION AND THE EXTENT OF THEIR USE.

*Disinfection.*—The Council's Disinfecting Station is situated at White Hart Road, Plumstead, where there are installed two Washington Lyon steam disinfectors, one high-pressure steam washing disinfecter, and one room for disinfecting articles which cannot be subjected to heat.

The Station was used very much more during the year than previously owing to the amount of bug-infested bedding and articles removed there for disinfection. The Station is sometimes used for special disinfection at the request of inhabitants. A small charge is made for these disinfections and during the year 29 such disinfections were carried out, and charges amounting to £9 1s. 0d. were paid.

In tabular form is shown below the amount of disinfection which was carried out during the year.

TABLE No. 58.

Rooms disinfected after	ordinary fevers	...	...	1,338
"	"	"	tuberculosis	196
"	"	"	verminous cases	674
"	"	"	for other reasons	14
Articles disinfected	...	...	...	60,282

*Disinfestation.*—In accordance with the terms of an agreement with the London County Council, disinfestation of school children is carried out at the Cleansing Station, White Hart Road. In recent years the number of children so sent has fallen considerably. Disinfestation of adults is carried out at times when the children are not there.

The following Table shows the number of persons cleansed each year since 1929 :—

TABLE No. 59.

Year.	CHILDREN.			ADULTS.			Grand Total.
	Boys.	Girls.	Total.	Males.	Females.	Total.	
1929	416	1,451	1,867	26	32	58	1,925
1930	477	1,386	1,863	11	10	21	1,884
1931	483	1,543	2,026	14	4	18	2,044
1932	560	1,613	2,173	8	4	12	2,185
1933	550	1,579	2,129	7	11	18	2,147

A report on disinfestation of bug-infested premises will be found in the Housing Section.

## SECTION VIII.—GENERAL STATISTICS.

TABLE No. 60.

Area	...	...	...	...	...	...	(acres)	8,282
Population, estimated to middle of 1933	...	...	...	...	...	...	...	146,200
Population, Census 1931 :—								
Total (including military)	...	...	...	...	...	...	...	146,881
Civilians	...	...	...	...	...	...	...	141,504
Number of inhabited houses, 1931	...	...	...	...	...	...	...	29,870
Number of families or separate occupiers, 1931	...	...	...	...	...	...	...	38,176
Rateable value (April, 1933)	...	...	...	...	...	...	...	£1,066,911
Sum represented by a penny rate (April, 1933)	...	...	...	...	...	...	...	£4,445

## POPULATION.

The Registrar-General estimates the population of the Borough at the middle of the year as 146,200, a decrease of 700 on last year. This figure includes non-civilians in accordance with a decision of the Registrar-General to return to pre-war practice in this respect as from the 1st January, 1932. In comparing the vital statistics of the old parish (including individual wards) of Woolwich with those of previous years, regard should be had to this fact. The estimated population in each of the wards of the Borough at the middle of 1933 is shown in the following Table.

TABLE No. 61.

<i>Wards</i>							<i>Population</i>
Dockyard	...	...	...	...	...	...	6,784
St. Mary's	...	...	...	...	...	...	6,021
River	...	...	...	...	...	...	11,425
St. George's	...	...	...	...	...	...	8,169
Burrage	...	...	...	...	...	...	7,728
Herbert	...	...	...	...	...	...	8,162
Glyndon	...	...	...	...	...	...	8,431
St. Margaret's	...	...	...	...	...	...	12,193
Central	...	...	...	...	...	...	7,684
St. Nicholas	...	...	...	...	...	...	13,645
Abbey Wood	...	...	...	...	...	...	11,475
Well Hall	...	...	...	...	...	...	12,797
Avery Hill	...	...	...	...	...	...	12,569
Sherard	...	...	...	...	...	...	19,117

In the old parishes the estimated populations are therefore :—

Woolwich	...	...	...	...	...	32,399
Plumstead	...	...	...	...	...	69,318
Eltham	...	...	...	...	...	44,483



## SOCIAL CONDITIONS.

The following Table, No. 62, sets out under generalised headings the total number of males and females engaged in occupations at ages of 14 years and upwards as shown by the Census of 1931.

TABLE No. 62.

Occupations of Woolwich Inhabitants (over 14 years).

Occupations.	Males.	Females.
I. Fishermen ... ..	—	—
II. Agricultural occupations ... ..	426	11
III. Mining and quarrying occupations... ..	13	—
IV. Workers in non-metalliferous mine and quarry products...	74	1
V. Makers of bricks, pottery and glass ... ..	168	51
VI. Workers in chemicals, paints, etc.... ..	926	13
VII. Metal workers ... ..	6,471	237
VIII. Workers in precious metals ... ..	69	9
IX. Electrical apparatus makers, fitters, etc. ... ..	1,696	1,086
X. Makers of watches, clocks, etc. ... ..	162	6
XI. Workers in skins and leather ... ..	135	34
XII. Textile workers ... ..	22	48
XIII. Makers of textile goods ... ..	597	1,633
XIV. Makers of foods, drinks and tobacco ... ..	480	114
XV. Workers in wood and furniture ... ..	1,696	44
XVI. Workers in paper and cardboard ... ..	32	48
XVII. Printers and Photographers... ..	505	110
XVIII. Builders, Bricklayers, etc. ... ..	2,485	2
XIX. Painters and Decorators ... ..	1,182	46
XX. Workers in other materials ... ..	124	80
XXI.* Workers in mixed or undefined materials (not enumerated elsewhere)... ..	156	181
XXII. Transport Workers ... ..	5,547	463
XXIII. Commercial and Financial occupations ... ..	5,221	1,926
XXIV. Public administration and defence... ..	5,129	12
XXV. Professional occupations ... ..	1,432	1,358

TABLE No. 62—*Continued.*

Occupations.							Males.	Females.
xxvi.	Persons employed in entertainment, etc.	...	...	...	...	...	326	61
xxvii.	Persons employed in personal service	...	...	...	...	...	1,876	5,057
xxviii.	Clerks and Draughtsmen	...	...	...	...	...	5,130	3,985
xxix.	Warehousemen, Storekeepers and Packers	...	...	...	...	...	1,258	430
xxx.	Stationary Engine Drivers, etc.	...	...	...	...	...	625	1
xxxi.	Other and undefined workers	...	...	...	...	...	7,519	704
TOTAL OCCUPIED							51,482	17,751
xxxii.	Total unoccupied	...	...	...	...	...	5,313	39,963
TOTAL OCCUPIED AND UNOCCUPIED							56,795	57,714

Compared with 1921, nearly 1,000 more men are now employed as builders and bricklayers; nearly 1,000 more as transport workers; nearly 2,000 more in commercial and financial occupations and nearly 3,000 more as clerks and draughtsmen. On the other hand there are over 2,000 less metal workers and nearly 2,000 fewer engaged in public administration and defence. So far as females are concerned, the number engaged in personal service has increased by nearly 600, and as clerks and draughtsmen by 1,500.

In 1921, the total number of males occupied was 47,719, and of females 15,763, whilst the total occupied and unoccupied were 54,136 and 55,631 respectively.

#### SICKNESS AND INVALIDITY.

There was no unusual or excessive mortality during the year which calls for any comment under this head.

#### PHYSICAL FEATURES AND GENERAL CHARACTERISTICS OF THE AREA.

In the physical configuration of the Borough the outstanding feature is Shooters Hill, which rises over 400 feet above sea-level. At a little lower level, on the Woolwich and Plumstead side, there is a well-marked plateau of Woolwich and Plumstead Commons, due to the erosion of local clay from off the pebble beds. Lower down still is the level plain of the Thames. Southward, in Eltham and Lee, the land, after sloping downwards from Shooters Hill, rises slightly again in Eltham and then falls away towards New Eltham and Lee, but rises again as it approaches Chislehurst. In the main this area is composed of London clay although there is a considerable amount of sand and gravel in Avery Hill Ward.



## SECTION IX.—VITAL STATISTICS.

In accordance with the requirements of the Ministry of Health, the following extracts from the vital statistics of the year are shown below :—

TABLE No. 63.

Births—Legitimate	...	...	...	...	...	1,789	
Births—Illegitimate	...	...	...	...	...	68	1,857
Still-births	...	...	...	...	...	...	54
Still-births—Rate per 1,000 total births	...	...	...	...	...	...	28·2
Birth Rate	...	...	...	...	...	...	12·7
Deaths	...	...	...	...	...	...	1,634
Death Rate	...	...	...	...	...	...	11·2
Percentage of total deaths occurring in public institutions	...	...	...	...	...	...	56·9
Number of women dying in, or in consequence of, Child Birth :—							
(a) From Sepsis	...	...	...	...	...	...	2
(b) From other causes	...	...	...	...	...	...	4
Deaths of Infants under one year :—							
(a) Legitimate	...	...	...	...	...	...	103
(b) Illegitimate	...	...	...	...	...	...	13
Infantile Mortality Rate	...	...	...	...	...	...	62
Deaths from Measles (all ages)	...	...	...	...	...	...	1
Deaths from Whooping Cough (all ages)	...	...	...	...	...	...	9
Deaths from Diarrhoea (under 2 years of age)	...	...	...	...	...	...	11

The chief Vital Statistics since 1901 are given in the following Table :—

TABLE No. 64.

YEAR.	Population estimated to middle of each Year.	Births.		Nett Deaths belonging to the District.			
		Nett.		Under 1 year.		At all Ages.	
		Number.	Rate.	Number.	Rate per 1,000 Nett Births.	Number.	Rate.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1901	117,652	3,536	30·1	457	129	1,709	14·6
1902	119,285	3,734	31·3	467	125	1,837	15·4
1903	117,842	3,684	31·3	398	108	1,638	13·9
1904	118,456	3,535	29·8	477	135	1,763	14·9
1905	118,589	3,546	29·9	362	102	1,604	13·5
1906	119,143	3,549	29·8	388	109	1,668	14·0
1907	119,704	3,330	27·8	373	112	1,616	13·5
1908	122,258	3,176	26·0	300	94	1,516	12·4
1909	120,227	2,947	24·5	242	82	1,587	13·2
1910	121,197	2,842	23·6	242	85	1,418	11·7
1911	121,487	2,810	23·1	272	97	1,566	12·9
1912	121,932	2,776	22·8	208	75	1,456	11·9
1913	122,382	2,833	23·1	228	80	1,549	12·7
1914	122,431	2,838	23·2	241	85	1,706	13·9
1915 <i>a</i>	138,200	2,839	21·9	268	94	1,837	14·2
<i>b</i>	129,505						
1916 <i>a</i>	141,783	3,068	23·5	213	69	1,704	13·1
<i>b</i>	130,313						
1917 <i>a</i>	147,078	2,718	20·6	216	79	1,566	11·9
<i>b</i>	131,942						
1918 <i>a</i>	150,650	2,548	19·0	270	106	2,100	15·6
<i>b</i>	134,453						
1919 <i>a</i>	141,918	2,737	20·1	235	86	1,679	12·3
<i>b</i>	136,237						
1920 <i>a</i>	140,000	3,658	26·9	224	61	1,487	10·9
<i>b</i>	135,904						
1921 <i>a</i>	141,700	3,197	23·2	197	62	1,594	11·6
<i>b</i>	137,604						
1922 <i>a</i>	142,350	2,941	21·3	184	63	1,603	11·6
<i>b</i>	138,254						
1923 <i>a</i>	143,530	2,867	20·5	123	43	1,387	9·9
<i>b</i>	140,000						
1924 <i>a</i>	144,400	2,590	18·5	168	65	1,543	11·0
<i>b</i>	139,980						
1925 <i>a</i>	145,440	2,582	18·3	141	55	1,519	10·8
<i>b</i>	140,740						
1926 <i>a</i>	146,200	2,463	17·4	107	43	1,450	10·2
<i>b</i>	141,900						
1927 <i>a</i>	144,770	2,242	15·9	95	42	1,491	10·6
<i>b</i>	140,770						
1928 <i>a</i>	146,600	2,269	16·1	114	50	1,554	11·0
<i>b</i>	141,100						
1929 <i>a</i>	146,800	2,312	16·3	144	62	1,780	12·6
<i>b</i>	141,600						
1930 <i>a</i>	146,800	2,188	15·5	91	42	1,547	10·9
<i>b</i>	141,600						
1931 <i>a</i>	147,400	2,155	15·1	128	59	1,654	11·6
<i>b</i>	142,600						
1932 <i>a</i>	146,400	2,054	14·0	123	60	1,635	11·1
1933 <i>a</i>	146,200	1,857	12·7	116	62	1,634	11·2

*a* Total Population.

*b* Civil Population.



The chief Vital Statistics for 1933 for the Wards of the Borough are given in the following Table :—

TABLE No. 65.

Wards.	Popu- lation.	Births.		Deaths under 1.		Deaths at all Ages	
		Number	Rate.	Number	Rate.	Number	Rate.
Dockyard ... ..	6,784	106	15·6	4	37	93	13·7
St. Mary's ... ..	6,021	91	15·1	9	99	69	11·4
River ... ..	11,425	155	13·5	12	77	156	13·6
St. George's ... ..	8,169	113	13·8	9	79	62	7·6
<b>Woolwich</b> ... ..	<b>32,399</b>	<b>465</b>	<b>14·3</b>	<b>34</b>	<b>73</b>	<b>380</b>	<b>11·7</b>
Burrage ... ..	7,728	94	12·1	3	32	111	14·3
Herbert ... ..	8,162	116	14·2	5	43	114	13·9
Glyndon ... ..	8,431	116	13·8	8	69	110	13·0
St. Margaret's ... ..	12,193	140	11·5	6	43	135	11·0
Central ... ..	7,684	106	13·8	5	47	122	15·9
St. Nicholas ... ..	13,645	163	11·9	12	73	151	11·0
Abbey Wood ... ..	11,475	108	9·4	10	92	110	9·6
<b>Plumstead</b> ... ..	<b>69,318</b>	<b>843</b>	<b>12·2</b>	<b>49</b>	<b>58</b>	<b>853</b>	<b>12·4</b>
Well Hall ... ..	12,797	132	10·3	7	53	125	9·8
Avery Hill ... ..	12,569	137	10·9	8	58	119	9·5
Sherard ... ..	19,117	280	14·6	18	64	157	8·2
<b>Eltham</b> ... ..	<b>44,483</b>	<b>549</b>	<b>12·3</b>	<b>33</b>	<b>60</b>	<b>401</b>	<b>9·0</b>
<b>BOROUGH</b> ... ..	<b>146,200</b>	<b>1,857</b>	<b>12·7</b>	<b>116</b>	<b>62</b>	<b>1,634</b>	<b>11·2</b>

If the rates in St. Mary's, River and St. George's Wards and in Woolwich parish are compared with those of previous years, it must be borne in mind that from 1915 to 1931 these rates were calculated on the civilian population and not on the total population.

#### BIRTHS.

During the year 2,162 births were registered in the Borough, 1,082 being males and 1,080 females. Corrected by outward (237 males and 224 females) and inward (79 males and 77 females) transfers, these numbers become 1,857, 924 and 933 respectively.

The birth rate was 12·7, compared with 14·0 in 1932 and 15·1 in 1931.

*Illegitimate Births.*—The number of illegitimate births registered was 65. There were 11 inward transfers and 8 outward transfers, making a nett figure of 68 equivalent to 36 per 1,000 births.

*Natural Increase of Population.*—This term means the excess of births over deaths. In 1929 it was 532; in 1930, 641; in 1931, 501; in 1932, 419; and in 1933, 223.

*Notification of Births.*—During the year 2,154 births were notified. This is at the rate of 99·6 per cent. of the registered births and compares with 97·5 per cent. last year. The births were notified as shown in the following Table:—

TABLE No. 66.

British Hospital for Mothers and Babies	...	...	718
Midwives	...	...	603
St. Nicholas Hospital	...	...	274
Military Families' Hospital	...	...	204
War Memorial Hospital	...	...	165
Medical Practitioners	...	...	75
Parents	...	...	44
Eltham Cottage Hospital	...	...	32
Midwives' Homes	...	...	20
Other persons	...	...	19

In addition to these, 24 notifications were received from the Medical Officer of Health, Lewisham, and 33 from other Medical Officers of Health. Fifty-nine still-births were notified. It is known that 1,100 Woolwich births took place in institutions either within or without the Borough, so that the percentage of institutional midwifery for the Borough as a whole was 59·52.

The following Table, No. 67, shows the number of corrected births each year since 1929; the number of live and still-births notified; the percentage of notified births and the birth rates for the same period for Woolwich, London, and England and Wales.

TABLE No. 67.

Year.	No. of Births.	No. of Live Births. Notified.	No. of Still-Births.	Per-centage of Births Notified.	Birth Rate.		
					Wool-wich.	London.	England and Wales.
1929	2,312	2,300	92	96	16·3	15·7	16·3
1930	2,188	2,272	74	98	15·5	16·3	15·7
1931	2,155	2,303	84	99	15·1	15·0	15·8
1932	2,054	2,209	78	98	14·0	14·3	15·3
1933	1,857	2,154	59	99	12·7	13·2	14·4



## MARRIAGES.

There were 1,248 marriages (1,160 in 1932). The marriage rate was 17·70, as compared with 15·79, 17·7, 14·1 and 15·3 in the four preceding years.

## DEATHS.

The total deaths registered in the Borough was 1,380. This figure includes 172 non-residents who died in the district, but does not include 426 residents who died outside the Borough. When allowance is made for inward and outward transfers the nett figure of 1,634 is obtained. The death-rate for the year was 11·2, compared with 11·1 in 1932 and 11·6 in 1931.

Only in three Metropolitan Areas, namely, Lewisham 10·2, City of London 10·9, and Hampstead 11·0 was a lower death rate recorded.

In 1933 the death-rate for England and Wales was 12·3, for London, 12·2, and the mean death-rate for 118 County Boroughs and Great Towns (including London) was 12·2.

The seasonal mortality in the four quarters of the year was as follows:—First Quarter, 15·0; Second Quarter, 9·0; Third Quarter, 8·7; Fourth Quarter, 11·1.

*Deaths in Public Institutions.*—In tabular form is shown below the number of deaths of Woolwich residents which took place in various institutions during the year.

TABLE No. 68.

<i>Hospitals or Institutions</i>	<i>Number of Deaths</i>			
Public General Hospitals ...	...	...	...	640
Voluntary General Hospitals	...	...	...	116
Mental Hospitals ...	...	...	...	51
Special Hospitals ...	...	...	...	46
Infectious Diseases Hospitals	...	...	...	29
Sanatoria and Tuberculosis Institutions	...	...	...	13
Cottage Hospitals and Nursing Homes	...	...	...	35
				<hr/> 930 <hr/>

The percentage of institutional deaths to total deaths was therefore 56·91.

The following Tables are self-explanatory.

TABLE No. 69.

Birth-Rates, Death-Rates, and Analysis of Mortality in the Year 1933.

	Rate per 1,000 Population.		Annual Death-rate per 1,000 Population.									Rate per 1,000 Live Births.		Percentage of Total Deaths.			
	Live Births.	Still-Births.	All Causes	Typhoid and Paratyphoid Fevers.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.	Diarrhoea and Enteritis (under 2 yrs.).	Total Deaths under 1 year.	Certified by Registered Medical Practitioners.	Inquest Cases.	Certified by Coroner after P.M. No Inquest.	Uncertified Causes of Death.
England and Wales	14.4	0.62	12.3	0.01	0.00	0.05	0.02	0.05	0.06	0.57	0.54	7.1	64	90.9	6.3	1.9	0.9
118County Boroughs and Great Towns, including London.	14.4	0.67	12.2	0.00	0.00	0.06	0.02	0.06	0.08	0.55	0.49	9.4	67	91.0	6.0	2.5	0.5
132 Smaller Towns (Estimated Resident Populations 25,000 to 50,000 at Census 1931).	14.5	0.63	11.0	0.00	0.00	0.04	0.02	0.04	0.04	0.53	0.44	4.9	56	91.7	5.8	1.5	1.0
London ... ..	13.2	0.45	12.2	0.00	0.00	0.02	0.02	0.08	0.08	0.51	0.58	11.6	59	88.3	6.3	5.4	0.0
<b>WOOLWICH</b> ...	<b>12.7</b>	<b>0.40</b>	<b>11.2</b>	—	—	<b>0.00</b>	—	<b>0.06</b>	<b>0.10</b>	<b>0.27</b>	<b>0.59</b>	<b>5.9</b>	<b>62</b>	<b>89.8</b>	<b>7.5</b>	<b>2.7</b>	—



TABLE No. 70.

Nett Deaths during the Calendar Year 1933, but including Non-Residents in Institutions in the Borough.

Causes of Death.		Nett Deaths at the subjoined ages of "Residents," whether occurring within or without the District.													Deaths in Public Institutions.		
		All Ages.	Under 1 year.	1 and under two years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 35 years.	35 and under 45 years.	45 and under 55 years.	55 and under 65 years.	65 and under 75 years.	75 years and upwards.	In Borough.		Outlying Institutions.	
														Resi- dents.	Non- Resi- dents.		
All Causes	...	1634	116	13	24	43	77	70	101	159	281	336	414	530	153	400	
Typhoid and Paratyphoid Fevers	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Measles	...	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	
Scarlet Fever	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Whooping Cough	...	9	4	1	4	—	—	—	—	—	—	—	—	1	—	5	
Diphtheria	...	15	—	1	2	10	1	—	—	1	—	—	—	6	3	14	
Influenza	...	40	—	—	1	—	3	1	5	5	2	11	12	—	—	8	
Encephalitis Lethargica	...	3	—	—	—	—	—	1	—	1	1	—	—	1	—	1	
Cerebro-spinal Fever	...	5	1	2	—	1	1	—	—	—	—	—	—	—	—	5	
Tuberculosis of Respiratory System...	...	116	—	—	2	1	24	34	22	17	13	2	1	40	8	33	
Other Tuberculous Diseases	...	19	—	—	3	3	4	4	1	2	1	1	—	6	3	10	
Syphilis...	...	5	2	—	—	—	—	—	—	1	—	1	1	3	1	1	
General Paralysis of the Insane, <i>Tabes</i> <i>Dorsalis</i>	...	9	—	—	—	—	—	—	2	2	3	2	—	3	—	4	
Cancer, Malignant Disease	...	208	—	—	—	—	4	—	13	35	58	54	44	74	24	55	
Diabetes	...	16	—	—	—	1	—	2	—	1	4	4	4	6	5	4	
Cerebral Hæmorrhage, etc.	...	86	—	—	—	—	1	—	4	6	13	22	40	29	3	14	
Heart Disease	...	397	—	—	—	2	3	8	13	28	77	108	158	102	20	50	
Aneurysm	...	8	—	—	—	—	—	—	1	1	6	—	—	1	1	1	
Other Circulatory Diseases	...	63	—	—	—	—	1	—	2	5	11	21	23	15	—	14	
Bronchitis	...	52	2	—	—	—	—	1	2	1	3	10	33	8	4	4	
Pneumonia (all forms)	...	86	19	6	3	2	5	2	4	8	14	14	9	28	11	26	
Other Respiratory Diseases	...	16	—	—	—	2	—	1	—	2	5	4	2	4	4	4	
Peptic Ulcer	...	21	—	—	—	—	3	—	1	8	5	4	—	12	3	5	
Diarrhoea	...	14	8	3	—	—	—	—	—	1	—	—	1	10	6	2	
Appendicitis	...	16	—	—	—	4	4	1	1	2	2	2	—	7	4	9	
Cirrhosis of Liver	...	4	—	—	—	—	—	—	1	—	1	1	—	—	1	—	
Other Diseases of Liver, etc....	...	8	—	—	—	—	—	—	1	—	4	1	2	2	1	5	
Other Digestive Diseases	...	36	4	—	2	2	1	1	5	4	5	8	4	11	9	17	
Acute and Chronic Nephritis...	...	41	—	—	1	—	2	4	5	2	11	10	6	11	3	13	
Puerperal Sepsis	...	2	—	—	—	—	—	2	—	—	—	—	—	1	2	1	
Other Puerperal causes	...	4	—	—	—	—	2	1	1	—	—	—	—	4	1	—	
Congenital Debility, Premature Birth, etc.	...	65	64	—	—	—	1	—	—	—	—	—	—	32	11	9	
Senility	...	45	—	—	—	—	—	—	—	—	—	9	36	14	3	14	
Suicide	...	17	—	—	—	—	—	—	3	2	4	5	3	5	—	1	
Other Violence	...	70	6	—	2	5	11	3	7	8	10	6	12	40	7	19	
Other defined Diseases	...	136	6	—	4	9	6	3	7	16	27	36	22	54	15	51	
Causes ill-defined or unknown	...	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	

TABLE NO. 71.  
 Nett Deaths during 1933, classified by Sex and Wards.

Causes of Death.	THE BOROUGH.		WOOLWICH.				PLUMSTEAD.							ELTHAM.		
	Males.	Females.	Dockyard.	St. Mary's.	River.	St. George's.	Burrage.	Herbert.	Glyndon.	St. Margaret's.	Central.	St. Nicholas.	Abbey Wood.	Well Hall.	Avery Hill.	Sherard.
All Causes ... ..	834	800	93	69	156	62	111	114	110	135	122	151	110	125	119	157
Typhoid and Paratyphoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ... ..	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Scarlet Fever ... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ... ..	1	8	—	1	1	—	—	—	—	1	—	—	3	1	—	2
Diphtheria ... ..	5	10	1	—	3	—	—	—	—	1	1	—	1	1	1	6
Influenza ... ..	20	20	2	—	5	1	1	4	1	7	1	3	3	5	4	3
Encephalitis Lethargica ...	2	1	—	—	1	—	1	—	—	—	—	1	—	—	—	—
Cerebro-spinal Meningitis ...	3	2	—	—	1	2	—	—	—	—	—	—	1	—	1	—
Pulmonary Tuberculosis ...	62	54	5	2	10	2	9	12	10	11	5	13	7	9	6	15
Non-Pulmonary Tuberculosis	12	7	3	—	3	—	—	—	1	—	2	2	2	—	1	5
Syphilis ... ..	3	2	1	—	1	—	—	—	—	—	2	—	—	—	—	1
General Paralysis of the Insane, <i>Tabes Dorsalis</i> ... ..	7	2	1	—	—	1	1	—	1	—	—	2	2	1	—	—
Cancer ... ..	105	103	9	15	17	7	9	13	14	15	20	14	18	20	17	20
Diabetes ... ..	7	9	—	—	2	2	2	—	2	3	1	—	—	—	3	1
Cerebral Hæmorrhage, etc. ...	31	55	6	2	15	2	7	11	9	7	1	8	4	7	3	4
Heart Disease ... ..	201	196	27	19	39	10	28	24	30	25	32	43	30	27	35	28
Aneurysm ... ..	8	—	1	—	—	2	1	1	—	—	—	—	1	1	—	1
Other Circulatory Diseases ...	29	34	3	2	4	1	5	3	3	5	9	6	3	6	7	6
Bronchitis ... ..	25	27	3	1	2	2	3	6	—	7	8	4	7	5	2	2
Pneumonia ... ..	52	34	6	5	8	6	8	3	7	6	3	7	5	9	5	8
Other Respiratory Diseases ...	10	6	2	1	1	1	1	—	—	2	2	3	1	1	1	—
Peptic Ulcer ... ..	16	5	2	—	2	1	1	3	—	2	—	4	—	1	1	4
Diarrhoea, etc. ....	8	6	1	2	1	2	1	1	—	—	1	2	1	—	—	2
Appendicitis ... ..	9	7	2	1	1	2	—	1	2	2	1	2	—	1	—	1
Cirrhosis of Liver ... ..	2	2	—	1	—	—	—	1	—	1	—	—	—	1	—	—
Other Diseases of Liver, etc.	4	4	—	—	2	—	—	1	3	1	—	—	—	—	—	1
Other Digestive Diseases ...	17	19	3	3	3	1	4	5	2	2	3	2	2	1	—	5
Acute and Chronic Nephritis	21	20	1	2	3	—	4	7	3	3	2	4	1	5	4	2
Puerperal Sepsis ... ..	—	2	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Other Puerperal causes ...	—	4	—	1	—	—	1	—	—	1	—	1	—	—	—	—
Congenital Debility, Premature Birth, Malformations, etc. ....	28	37	1	3	5	5	3	3	4	4	4	9	3	3	6	12
Senility ... ..	13	32	1	2	1	1	4	3	3	7	3	5	3	3	4	5
Suicide ... ..	8	9	3	—	3	1	1	2	1	1	—	1	2	1	1	—
Violence ... ..	46	24	3	2	9	2	4	4	9	9	3	5	3	4	6	7
Other Defined Diseases ...	79	57	6	4	12	7	12	6	5	12	17	10	7	12	11	15
Causes ill-defined or unknown	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—



*Causes of Death.*—Table No. 70 shows that 397 deaths were due to Heart Disease, 208 to Cancer, 135 to Tuberculosis, 86 to Pneumonia, 86 to Cerebral Hæmorrhage, etc., and 71 to diseases of circulation. There were 65 deaths from Congenital Debility and Prematurity. These figures differ but slightly from those of 1932, in some instances being slightly higher and in some instances slightly lower. There were 40 deaths from Influenza, compared with 49 in 1932. There was only one death from Measles, as against 25 in 1932 and 1 in 1931. Seventy-three per cent. of all deaths occurred in persons over 45 years of age.

*Respiratory Disease.*—The following Table, No. 72, shows the number of deaths each year since 1929 from respiratory diseases, the annual death-rate, the number of deaths under five years of age, and the percentage of deaths occurring in children under five years of age.

TABLE No. 72.

Year.	Bronchitis.	Pneumonia.	Other Respiratory.	Total.	Death-Rate.	Number under 5 years.	Percentage under 5 years.
1929	121	119	15	255	1·8	51	20·0
1930	61	101	19	181	1·3	35	19·3
1931	91	126	20	237	1·7	54	22·8
1932	67	81	21	169	1·2	40	23·6
1933	52	86	16	154	1·0	21	13·6

*Cancer.*—The total number of deaths was 208, of which 105 occurred in males and 102 in females. In the following Table, No. 73, is shown the number of deaths certified as due to Cancer and Malignant Disease, each year since 1929 :—

TABLE No. 73.

Deaths from Cancer and Malignant Disease.

Year.	Males.	Females.	Total.	Rate.	Percentage of Total Deaths.
1929	93	120	213	1·50	11·97
1930	107	94	201	1·42	12·99
1931	125	95	220	1·54	13·30
1932	108	102	210	1·43	12·84
1933	105	103	208	1·42	12·72

The following Table, No. 74, shows the seat of primary disease in all deaths from Cancer (including all other specified malignant tumours).

TABLE No. 74.  
Deaths from Malignant Disease.

Seat of Primary Disease.	Males.	Females.	Total.	Deaths in Hospital.
Tongue ... ..	2	—	2	1
Mouth and Tonsil ... ..	5	—	5	5
Jaw ... ..	1	2	3	1
Pharynx ... ..	—	1	1	—
Œsophagus ... ..	4	—	4	3
Stomach ... ..	17	16	33	19
Liver and Gall Bladder ... ..	4	12	16	3
Intestines ... ..	20	11	31	24
Rectum ... ..	15	2	17	11
Ovary ... ..	—	5	5	2
Uterus... ..	—	13	13	9
Breast ... ..	—	23	23	13
Skin ... ..	4	3	7	6
Larynx ... ..	8	—	8	5
Lung ... ..	5	2	7	5
Pancreas ... ..	4	5	9	6
Bones ... ..	—	2	2	2
Bladder ... ..	3	2	5	4
Prostate ... ..	5	—	5	3
Other specified Organs ... ..	2	1	3	3
Abdominal Cavity ... ..	—	2	2	2
Sarcoma ... ..	6	1	7	2
	105	103	208	129

*Maternal Mortality.*—The number of deaths from Puerperal Sepsis was 2, and from other accidents and diseases of pregnancy 4, making a total of 6 maternal deaths, the same number as in 1932. The maternal death-rate per 1,000 births was 3·29, as against 2·92 in 1932.



The following Table shows the causes of death each year since 1912 :—

TABLE No. 75.

Maternal Mortality, Woolwich, 1912-1933.

Year.	Abortion.	Ectopic Gestation	Placenta Prævia.	Other Puerperal Hæmorrhage.	Other Accidents of Child Birth.	Child Birth with Secondary Causes.	Puerperal Eclampsia	Puerperal Phlebitis and Embolism	Puerperal Fever.	Totals.
1912	1	—	—	—	—	—	1	1	1	4
1913	1	—	—	—	1	—	1	—	2	5
1914	1	—	1	2	—	1	1	1	4	11
1915	1	1	—	—	1	—	2	—	3	8
1916	—	1	1	1	4	—	1	—	7	15
1917	—	1	—	2	—	1	2	1	7	14
1918	1	—	—	2	1	—	1	1	9	15
1919	—	2	1	2	—	—	2	1	5	13
1920	—	1	—	—	1	—	1	3	5	11
1921	—	—	—	—	—	—	3	2	5	10
1922	—	—	—	1	—	—	2	—	3	6
1923	—	—	—	—	1	—	1	—	3	5
1924	—	—	2	1	1	—	3	1	2	10
1925	—	—	1	2	1	1	1	—	3	9
1926	—	1	—	2	—	—	—	1	2	6
1927	—	1	—	—	—	—	1	1	3	6
1928	—	2	1	—	1	—	1	—	8	13
1929	2	2	—	—	2	1	3	1	3	14
1930	1	—	—	—	—	1	2	—	4	8
1931	—	—	—	—	1	—	1	—	6	8
1932	—	—	—	1	—	—	1	—	4	6
1933	—	1	—	—	1	1	—	1	2	6
Totals	8	13	7	16	16	6	31	15	91	203

*Inquests.*—There were 121 inquests held on Woolwich residents during the year, compared with 155 in 1932.

*Deaths of Children, 1-5 Years of Age.*—The number of deaths of children between 1 and 2 years of age was 13, and between 2 and 5 years, 24. In 1932 these figures were 23 and 22. The causes of death are given in detail in Table No. 70.

The following Tables show the variation in rates of mortality in these ages in the last five years. These rates have been calculated on the estimated populations at these ages and in stated groups of diseases.

TABLE No. 76.

## Child Mortality (1—2 years).

Death-rates per 1,000 estimated age population from stated Groups of Diseases.

Period.	Estimated mean Population.	Infectious Fevers.	Tuber- culosis.	Respira- tory Diseases.	Diarr- hœal Diseases.	All other causes.	Total Deaths.
1929	2,141	4·20	·47	2·80	1·40	4·20	13·07
1930	2,190	5·48	·91	4·11	1·37	1·37	13·24
1931	2,071	1·45	1·45	6·76	·48	3·86	14·0
1932	2,016	6·45	—	1·99	·49	2·48	11·41
1933	1,927	2·07	—	3·11	1·55	—	6·75

TABLE No. 77.

## Child Mortality (2—5 years).

Death-rates per 1,000 estimated age population from stated Groups of Diseases.

Period	Estimated mean Population.	Infectious Fevers.	Tuber- culosis.	Respira- tory Diseases.	Diarr- hœal Diseases.	All other causes.	Total Deaths.
1929	6,822	1·91	·44	1·02	·14	1·91	5·42
1930	6,534	1·39	·46	·92	·00	·76	3·53
1931	6,373	·78	·62	·94	·16	2·20	4·70
1932	6,294	·79	·48	·79	—	1·43	3·49
1933	6,188	·97	·80	·48	—	1·62	3·88

## INFANTILE MORTALITY.

The number of deaths of infants under one year of age was 116, compared with 123 in 1932 and 128 in 1931. The rate of infant mortality resulting from these deaths (deaths under 1 year per 1,000 births) was 62, compared with 60 in 1932 and 59 in 1931. The rates for the different Wards in the Borough are shown in Table No. 65.



The rate for the Administrative County of London was 59, and for England and Wales 64.

The following Table, No. 78, shows the distribution of infantile mortality throughout the year, calculated on a varying year basis.

TABLE No. 78.

		<i>Deaths under</i>		
	<i>Births</i>	<i>1 year</i>	<i>Rate</i>	
First Quarter ...	468	36	...	71
Second Quarter ...	479	22	...	45
Third Quarter ...	468	28	...	59
Fourth Quarter ...	442	30	...	64

*Causes of Death.*—The causes of infantile mortality are set forth in Tables Nos. 80 and 81, which show the incidence of mortality from each cause for infants, distinguished by age, sex and wards. It will be noted from these Tables that the chief causes of death were :—Premature Birth, 37 ; Pneumonia, 19 ; Diarrhœal Diseases, 8 ; Congenital Malformation, 7, and injury at birth, 6. The neo-natal mortality rate (deaths under 4 weeks) was 33·87, compared with 24·82 in 1932 and 28·77 in 1931. Of the 63 neo-natal deaths, 35 were certified to be due to Premature Birth, 6 to Injury at Birth, 5 to Atelectasis and 4 to Congenital Malformation.

The number of deaths occurring in the first week of life was 48.

*Deaths of Illegitimate Children.*—Thirteen illegitimate children died, compared with 12 in 1932 and 8 in 1931. The infantile mortality rate figure for illegitimate children was 191, compared with 62 for legitimate children.

*Institutional Deaths.*—In tabular form is shown below the number of deaths of Woolwich infants which took place in various institutions during the year. These figures are included in those shown in Table No. 68.

TABLE No. 79.

<i>Hospitals or Institutions</i>	<i>Number of deaths</i>	
Public General Hospitals ...	...	44
Voluntary General Hospitals ...	...	13
Infectious Diseases Hospitals ...	...	4
Special Hospitals ...	...	5
Cottage Hospitals and Nursing Homes ...	...	11
		—
		77
		—

Tables are set out in the following pages which classify in various ways causes of infant deaths during 1933.

TABLE No. 80.  
 Infant Mortality, 1933.  
 Nett Deaths from stated causes at various Ages under one Year of Age.

CAUSES OF DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	1 month and under 3 months.	3 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total deaths under 1 year.
Measles ... ..	-	-	-	-	-	-	-	-	-	-
Scarlet Fever ... ..	-	-	-	-	-	-	-	-	-	-
Whooping Cough ... ..	-	-	-	-	-	2	2	-	-	4
Diphtheria and Croup... ..	-	-	-	-	-	-	-	-	-	-
Meningococcal Meningitis ... ..	-	-	-	-	-	-	1	-	-	1
Tubercular Meningitis... ..	-	-	-	-	-	-	-	-	-	-
Abdominal Tuberculosis ... ..	-	-	-	-	-	-	-	-	-	-
Other Tubercular Diseases ... ..	-	-	-	-	-	-	-	-	-	-
Syphilis ... ..	1	-	-	-	1	1	-	-	-	2
Bronchitis ... ..	-	-	-	-	-	-	1	-	1	2
Pneumonia ... ..	-	1	-	2	3	6	6	1	3	19
Laryngitis ... ..	-	-	-	-	-	-	-	-	-	-
Diarrhœa, etc ... ..	-	-	-	-	-	4	4	-	-	8
Injury at Birth ... ..	5	-	1	-	6	-	-	-	-	6
Atelectasis ... ..	4	-	1	-	5	1	-	-	-	6
Congenital Malformation ... ..	2	-	2	-	4	2	1	-	-	7
Premature Birth ... ..	29	4	2	-	35	2	-	-	-	37
Atrophy, Debility and Marasmus ... ..	-	1	-	-	1	-	3	-	-	4
Icterus Neonatorum ... ..	1	-	-	-	1	-	-	-	-	1
Melæna Neonatorum ... ..	3	-	-	-	3	-	-	-	-	3
Erysipelas ... ..	-	-	-	-	-	-	1	-	1	2
Convulsions ... ..	-	1	-	-	1	-	-	-	-	1
Rickets ... ..	-	-	-	-	-	-	1	-	-	1
Other Causes ... ..	3	-	-	-	3	3	2	1	3	12
	48	7	6	2	63	21	22	2	8	116

Nett Births registered during the calendar year ... Legitimate, 1,789 ; Illegitimate, 68.  
 Nett Deaths registered during the calendar year ... Legitimate, 103 ; Illegitimate, 13.



TABLE No. 81.  
 Nett Infant Deaths, Classified by Sex and Wards.

CAUSES OF DEATH.	THE BOROUGH.		WOOLWICH.				PLUMSTEAD.							ELTHAM.		
	Males.	Females.	Dockyard.	St. Mary's.	River.	St. George's.	Burrage.	Herbert.	Glyndon.	St. Margaret's.	Central.	St. Nicholas.	Abbey Wood.	Well Hall.	Avery Hill.	Sherard.
Measles ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough ... ..	1	3	-	1	-	-	-	-	-	-	-	-	2	-	-	1
Diphtheria and Croup ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal Meningitis ... ..	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Tuberculous Meningitis ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abdominal Tuberculosis ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Tuberculous Diseases...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis... ..	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-	-
Bronchitis ... ..	1	1	-	-	-	-	-	-	-	1	-	-	1	-	-	-
Pneumonia ... ..	12	7	2	1	1	2	-	1	1	1	-	2	1	2	2	3
Laryngitis ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diarrhoea ... ..	5	3	-	2	1	2	-	-	-	-	1	-	1	-	-	1
Injury at Birth ... ..	4	2	1	-	-	1	1	1	-	-	-	-	1	-	1	-
Atelectasis ... ..	5	1	-	-	2	1	-	-	2	-	-	-	-	-	1	-
Congenital Malformation ... ..	4	3	-	-	-	-	-	-	1	1	1	1	-	-	-	3
Premature Birth ... ..	14	23	-	1	3	3	2	1	1	2	1	7	2	3	4	7
Atrophy, Debility and Marasmus	-	4	-	1	-	-	-	-	-	1	-	1	-	-	-	1
Icterus Neonatorum ... ..	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Melæna Neonatorum ... ..	-	3	-	1	-	-	-	-	-	-	2	-	-	-	-	-
Suffocation (overlying) ... ..	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Erysipelas ... ..	1	1	-	1	-	-	-	-	1	-	-	-	-	-	-	-
Convulsions ... ..	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Rickets ... ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Causes ... ..	6	6	-	1	2	-	-	2	2	-	-	1	2	1	-	1
	55	61	4	9	12	9	3	5	8	6	5	12	10	7	8	18

## APPENDIX.

METEOROLOGICAL OBSERVATIONS TAKEN AT THE  
ROYAL OBSERVATORY, GREENWICH, DURING THE YEAR 1933.

Week ending.	Temperature of the Air.			Departure from average mean air temperature for 65 years.	Average temperature 4 feet below ground.	Number of days on which rain fell.	Rainfall in inches.
	Highest during week.	Lowest during week.	Mean temperature.				
Jan. 7	53.2	31.1	45.0	+ 6.7	46.4	6	0.33
" 14	51.2	27.1	39.0	+ 1.0	46.0	3	0.36
" 21	40.4	27.9	35.0	— 3.5	44.8	4	0.14
" 28	37.1	20.0	29.9	— 9.3	43.4	—	—
Feb. 4	54.2	28.0	42.5	+ 2.9	42.2	5	0.42
" 11	57.2	33.1	47.5	+ 8.3	43.4	4	0.49
" 18	45.2	26.1	37.8	— 1.5	43.7	—	—
" 25	43.0	22.2	33.7	— 6.1	42.8	5	0.49
Mar. 4	55.0	35.1	44.8	+ 4.4	42.2	6	0.86
" 11	57.7	32.7	46.4	+ 5.5	43.5	2	0.41
" 18	57.9	28.4	45.3	+ 3.6	43.9	3	0.89
" 25	59.7	28.7	44.5	+ 2.4	44.4	2	0.43
Apr. 1	66.1	25.9	46.6	+ 2.5	44.5	1	0.18
Apr. 8	72.8	35.5	52.3	+ 6.1	45.2	—	—
" 15	71.7	32.0	52.2	+ 6.0	46.6	1	0.02
" 22	66.1	31.2	42.7	— 5.5	47.1	2	0.22
" 29	66.6	30.5	50.9	+ 2.2	47.1	4	0.51
May 6	70.2	38.5	53.6	+ 3.8	48.2	4	0.45
" 13	67.8	44.3	52.6	+ 1.1	49.4	5	0.69
" 20	73.6	37.8	55.4	+ 2.2	50.2	1	0.09
" 27	79.2	44.8	58.3	+ 3.1	51.5	6	0.96
June 3	80.5	43.4	59.1	+ 2.0	52.3	1	0.06
" 10	86.0	51.0	66.4	+ 8.2	53.7	—	—
" 17	80.7	45.3	59.6	+ 1.0	54.5	3	0.70
" 24	77.4	44.0	57.5	— 2.7	55.1	4	0.87
July 1	78.9	50.1	61.5	— 0.0	55.7	—	—
July 8	86.9	53.6	67.8	+ 5.7	56.7	—	—
" 15	76.7	51.7	61.9	— 1.0	57.7	5	0.97
" 22	84.6	53.2	66.8	+ 3.6	58.1	2	0.32
" 29	95.0	56.0	70.3	+ 7.7	59.3	1	0.08
Aug. 5	85.1	54.0	68.6	+ 6.5	59.9	—	—
" 12	95.8	54.1	69.7	+ 7.4	60.7	1	0.07
" 19	79.5	50.2	64.2	+ 2.0	60.7	4	0.16
" 26	83.1	47.1	61.8	+ 0.8	60.3	2	0.17
Sept. 2	89.9	53.1	68.4	+ 8.3	60.2	1	0.13
" 9	80.8	50.1	65.3	+ 6.1	60.6	—	—
" 16	73.7	40.8	59.1	+ 1.2	60.2	2	0.70
" 23	78.2	48.1	58.7	+ 2.5	59.5	4	1.49
" 30	70.1	48.7	58.6	+ 3.7	58.7	4	0.48



APPENDIX—*continued.*

Week ending.	Temperature of the Air.			Departure from average mean air temperature for 65 years.	Average temperature 4 feet below ground.	Number of days on which rain fell.	Rainfall in inches.
	Highest during week.	Lowest during week.	Mean temperature.				
Oct. 7	69.6	41.9	55.6	+ 2.5	58.4	2	0.11
" 14	68.2	43.8	56.4	+ 5.4	57.7	5	0.46
" 21	58.8	33.8	49.7	+ 0.4	56.5	2	0.02
" 28	62.0	31.0	47.1	— 0.6	55.1	5	0.68
Nov. 4	52.7	38.3	45.1	— 1.8	53.2	5	0.28
" 11	56.1	33.4	43.9	— 1.1	52.1	2	0.19
" 18	49.9	32.2	41.9	— 1.1	50.7	5	0.44
" 25	55.2	35.0	45.2	+ 3.1	50.0	3	0.14
Dec. 2	41.6	30.4	37.7	— 3.6	49.0	2	0.03
" 9	40.1	25.1	33.1	— 8.1	47.2	1	0.02
" 16	42.2	25.0	33.6	— 7.0	45.5	—	—
" 23	44.5	28.0	36.9	— 2.2	44.2	2	0.02
" 30	41.5	31.0	36.5	— 2.2	44.0	4	0.31