## [Report of the Medical Officer of Health for Fulham].

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Metropolitan Borough of Fulham.



# ANNUAL REPORT

of the

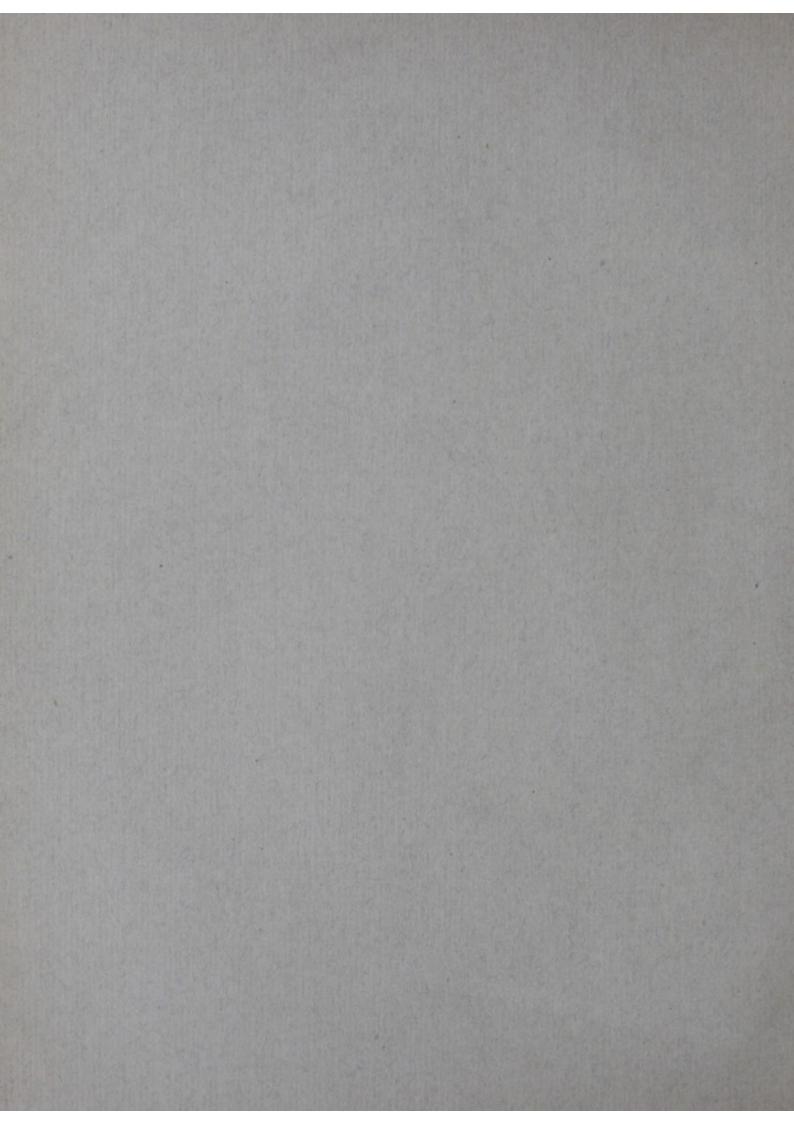
Medical Officer of Health

for the Year

1936.

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# Metropolitan Borough of Fulham.

# ANNUAL REPORT

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Medical Officer of Health

for the Year

1936.

JOHN ALEXANDER SCOTT, M.D., M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health.

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To the Mayor, Aldermen and Councillors of the Metropolitan Borough of Fulham. PUBLIC HEALTH DEPARTMENT, TOWN HALL,

FULHAM, S.W.6.

July, 1937.

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit the Annual Report on the health and sanitary conditions

of the Borough for the year 1936.

The year has been a reasonably healthy one, the most outstanding epidemiological event being the biennial outbreak of measles. The outbreak is dealt with in Section VI of the Report, the very low mortality being particularly noteworthy.

I dealt at some length last year with the effect of the trend of the birth rate on the future population and the vital statistics. In the light of the comments then made the slight

increase in the rate this year is therefore satisfactory.

Housing work has proceeded vigorously throughout the year and Clearance Orders have been confirmed by the Ministry for areas in Field Road, Carnwath Road, Sotheron Road, Buckler's Alley, Lanfrey Place and Hawes Buildings. In addition to these, intensive preparatory work for the Avenues Re-development Area has been completed.

I have devoted particular attention to the analysis of the results of the overcrowding

survey, the subject being discussed in Section IV of the Report.

Staff Changes. Mr. W. E. Dodd, part-time Dental Surgeon to the Maternity & Child Welfare Department, resigned his appointment in February and Mr. D. K. Gaskill was appointed

to the vacancy.

Changes among the clerical staff include the resignation of Mr. E. Thompson, consequent upon his obtaining an appointment under the London County Council as a temporary Sanitary Inspector and the transfer of Mr. A. E. R. Scott to the position of temporary Sanitary Inspector in October. To fill the vacancies created by these resignations, two junior clerks were appointed, the other clerks being promoted to more responsible work.

In June, Mr. Swinson was designated as housing administrative assistant to deal with the work involved in Clearance and Re-development Areas under consideration by the Council and an additional junior clerk was appointed to take over part of his general Public Health routine

work.

Mr. A. E. Clutterbuck, Senior Sanitary Inspector, retired on superannuation on May 31st, after 34 years of efficient and effective service, and Mr. E. Drake was promoted to the position of Senior Sanitary Inspector. To fill the vacancy of district inspector Mr. E. H. Jenkins was

Mr. J. H. Crabtree resigned in May, on securing an appointment under the Holborn Borough Council, and Mr. J. W. Campbell was appointed as district inspector. In October three temporary Sanitary Inspectors were appointed to release members of the permanent inspectorial staff for duties in connection with Clearance Areas and the Overcrowding Survey under the Housing Act, 1936.

On April 1st three additional Health Visitors commenced duty, Miss P. M. Bucknell,

Miss A. S. Clark and Miss A. G. Fox.

It is a pleasure to express my thanks to the staff for their highly efficient work, and to the Committees for their interest and support during a year that has seen the initiation of many improvements in the public health services of the Borough.

I have the honour to be,

Mr. Mayor, Ladies and Gentlemen,

Your obedient Servant,

J. A. SCOTT, Medical Officer of Health.

# Fulham Borough Council

# PUBLIC HEALTH COMMITTEE, 1936-37.

HIS WORSHIP THE MAYOR (ALDERMAN C. LANCASTER, J.P., L.C.C.) Ex-Officio.

Chairman: Councillor Miss A. GILLIATT.

Vice-Chairman: Councillor J. H. WARD.

Alderman R. M. Gentry, J.P. Councillor Mrs. E. E. Hollingbery.

Councillor S. F. J. BALLANTYNE.

R. A. Bender.

Dr. T. J. Bokenham.

P. E. COLEMAN.

L. F. DEW.

H. DODIMEAD.

Mrs. F. Laski.

Mrs. J. Marsh.

J. S. MELVILLE.

Mrs. E. M. RANKIN.

Miss C. J. Sketchley.

# MATERNITY AND CHILD WELFARE COMMITTEE, 1936-37.

HIS WORSHIP THE MAYOR (ALDERMAN C. I ANCASTER, J.P., L.C.C.) Ex-Officio.

Chairman: Councillor Mrs. J. Marsh.

Vice-Chairman: Councillor Mrs. E. M. RANKIN.

Councillor H. DODIMEAD.

Councillor Miss C. J. Sketchley.

Mrs. E. E. HOLLINGBERY.

G. A. THESIGER.

Mrs. F. Laski.

\* Miss S. Baber.

Mrs. N. M. Phillips.

\* Mrs. R. M. French.

Miss K. I. POTTLE.

\* Mrs. E. M. RAE.

W. RANKIN.

\* Mrs. E. N. VANDERHOOK.

\* Miss C. M. L. WICKHAM.

\* Co-opted Members.

# STAFF.

## Medical Officer of Health:

\*John Alexander Scott, M.D., M.R.C.S., L.R.C.P., D.P.H. (Liverpool).

# Deputy Medical Officer of Health:

\*P. L. T. BENNETT, M.C., M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H. (Lond.), T.D.D. (Wales).

(Clinical Tuberculosis Officer and Medical Officer Borough Bacteriological Laboratory).

# Assistant Medical Officers of Health:

\*Ruby Thomson, M.B., Ch.B. (Edin.), D.P.H. (Edin. and Glas.), (Maternity and Child Welfare Officer).

\*Helena E. Barrett, B.A., M.B., Ch.B., B.A.O. (N.U.I.)., D.P.H. (Edin. and Glas.).

EDITH M. P. WILSON, B.Ch., (Camb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), (part-time).

# Medical Officer, Gynæcological Clinic:

HEMMANT, M.A. (Camb.), M.R.C.S. (Eng.), L.R.C.P. LYNETTE (Lond.), (part time).

# Consulting Obstetrician:

ALEX. GALLETLY, M.C., M.B., Ch.B. (Edin.), F.R.C.S.E.

# Medical Officer, Diphtheria Immunisation Clinic:

GUY W. J. BOUSFIELD, M.D., (Lond.), M.B., B.S. (part-time).

# Public Vaccinators:

North District: A. G. Wells, M.R.C.S. (Eng.), L.R.C.P. (Lond.), L.S.A. (part-time).

South District: T. Duff Miller, M.D. (Glas.), Ch.B. (Glas.), F.R.F.P.S. (part-time).

# Dental Surgeon:

\*W. E. Dodd, L.D.S. (part-time). (Resigned 31st January, 1936). \*D. GASKILL, L.D.S., R.C.S. (Eng.) (part-time). (Appointed 1st February, 1936).

# Public Analyst:

THOMAS McLachlan, A.C.G.F.C., F.I.C. (part-time).

#### Vaccination Officer:

HUGH DAVIES.

#### Clerical Staff:

A. T. HURFORD, Chief Clerk.

O. A. TRENDELL, D.P.A. (Lond.).

E. THOMPSON (Resigned 29th August, 1936). W. SWINSON, (Housing Assistant).

A. E. R. Scott (Resigned 5th October, 1936). L. Burrows.

E. J. SHARP.

S. FIRSHT. J. PASCO (Appointed 4th August, 1936).

C. J. Guy (Appointed 17th August, 1936). J. E. Burton (Appointed 12th October, 1936).

I temporary shorthand-typist.

# Maternity and Child Welfare:

\*Miss A. Drury.

\*Miss E. G. Goodrum.

\*Miss I. M. Buckingham.

\*Miss R. Barter.

# Senior Sanitary Inspector:

- 1 \*Albert E. Clutterbuck (Retired 31st May, 1936).
- 1 \*EDGAR DRAKE (From 1st June, 1936).

# Sanitary Inspectors:

- 1 \*EDGAR DRAKE (promoted 1st June, 1936).
- 1 2 \*THOMAS HENRY ROBEY.
- 1 2 \*ALEX. W. GAMMACK. (Sampling Officer).
- 1 2 \*FREDERICK E. WALSH.
- 12 \*ARTHUR S. JONES.
- 1 2 \*HENRY HUTCHINSON.
- 1 2 \*Frederick C. Payne.
- 1 2 3 \*WILFRED C. TURNER.

- 2 9 \*CHARLES J. PRICE.
- 12 \*Joseph H. R. Crabtree. (Resigned 31st May, 1936).
- 1 2 \*L. G. Brooks.
- 1 4 5 6 \*Miss Ellen H. Sexton.
  - 1 2 \*ERIC H. JENKINS.
    - (Appointed 1st May, 1936).
  - 1 2 \*JAMES W CAMPBELL.

(Appointed 29th June, 1936).

#### Health Visitors:

- 4 5 6 \*Mrs. J. BRYNING.
- 4 5 6 7 8 \*Miss E. V. THOMAS.
- 4 5 6 8 \*Miss E. BECKETT.
- 4 5 6 8 \*Miss N. MILBURN.
- 4 5 6 7 \*Miss D. M. HAYWARD.
- 4 5 6 \*Miss P. M. BUCKNELL. | Appointed
- 4 5 6 \*Miss G. LEACH. 4 5 6 \*Miss P. KAYE.
- 4 5 6 \*Miss A. S. CLARK. 4 5 6 \*Miss A. G. Fox.
  - ARK. 1st April, 1936.

(Infant Life Protection Visitor).

# 1 4 6 \*Miss A. PERRETT. Tuberculosis Dispensary Staff:

#### Nurses:

- \* \*Miss E. E. WALKER.
- 4 5 6 \*Miss E. C. CARMICHAEL.
- 4 5 6 \*Miss E. M. PRETTY.
- \*Miss M. C. Robinson, Bacteriological Assistant and Dispenser.
- \*Miss M. E. SARGENT, Clerk and Secretary of the Care Committee.
- \*Miss Grimstone, Clerk (part-time).

\*Mr. and Mrs. Roberts, Caretakers.

# Maternity Home:

Matron: 46 \*Miss M. Bustard.

Assistant Matron: 46 \*Miss M. DENMAN.

# Disinfecting Station:

Superintendent: A. V. WILLIAMS.

Disinfectors: E. J. EYLES, W. LEATON, T. G. MARTIN.

Van Driver: JOHN BARRS.

# Mortuary Keeper:

S. CHURCHILL.

#### Rat Officer:

J. GIGNER.

# Housekeepers Infant Welfare Centres:

Greyhound Road: \*Mrs. B. GREGORY.

Wandsworth Bridge Road: \*Mrs. M. B. SEXTON.

- 1 Certified Sanitary Inspector.
- 2 Food Inspector's Certificate.
- 3 Smoke Abatement Certificate.
- 4 Trained Nurse.
- 5 Health Visitor's Certificate.
- 6 Certificate of Central Midwives Board.
- 7 Fever Trained.
- 8 Queen's Nurse.
- 9 Associate Member of Institute of Sanitary Engineers.

<sup>\*</sup>The Council receives Exchequer grants towards the salaries of these Officers.

# Section I.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

# GENERAL STATISTICS.

							1 500
Area (acres)		****				•••	1,706
Population (census 1931)			***	***	***	***	150,928
Population (mid 1936)			•••	***			141,300
Number of inhabited houses	(census 19	31)					26,245
Rateable Value at 31st Dece	mber, 19	36					£1,327,199
Sum represented by a penny	rate				***		£5,138
					T	VEAD	
EXTRACTS	FROM	VITAL	STATISTI	CS FOR	THE	YEAR.	
LIVE BIRTHS:		Total.	Males.	Females.			
Legitimate		2,006	1,028	978	Birth	rate per	1,000
Illegitimate		105	52	53	of f		imated
						populatio	n 14.9
STILLBIRTHS:							
Legitimate		52	33	19	Rate	per 1,000	) total
Illegitimate		3	2	1		and still)	births
					25.4		
DEATHS:—		1,786	928	858	Death	rate per	1,000
DEMINO.		1,100					imated
					popula		
						rate	
					aujust	eu rate	
Percentage of o	deaths occ	curring in	public insti	tutions	***		60.9
						Rat	
						per 1,00	
						(live an	
				I	Deaths.	births.	
Deaths from disease			From se	*	2	0.92	
pregnancy as	nd childb	irth		ner causes	2	0.92 $1.85$	
			То	tal	4	1.00	
Death rate of Infant	ts under	One Year	of Age:				
All infants per							64
Legitimate inf							61
Illegitimate in	fants per	1,000 ille	gitimate liv	e births			124
Double form							
Deaths from:							950
Cancer (all ag							250 14
Measles (all a Whooping co					***	***	6
Diarrhœa (un		-					22
(							

#### SOCIAL CONDITIONS.

#### UNEMPLOYMENT.

The Manager of the Local Employment Exchange has kindly supplied me with the following particulars relating to the number of persons registered as unemployed:—

			October, 1936.	January, 1937.
Adult males	 	***	1,836	2,339
Adult females	 		571	602
Juvenile males	 		22	37
Juvenile females	 		26	32
	Totals		2,455	3.010

These show a considerable decrease compared with the corresponding periods for last year, especially in the number of males, both adult and juvenile. The figures for the females are approximately the same for October but substantially lower for January.

#### LOCAL INDUSTRIES.

The main local industries are the borough electrical power station, the gas works, a distillery, a sugar refinery, printing works, oil and petrol depots, transport and other distributive trades.

A table of occupations was printed in the Annual Report for 1935.

# COMMENTS ON THE VITAL STATISTICS.

#### POPULATION.

The Census taken during 1931 showed that the population of the borough was 150,928 but the Registrar-General's estimate of the population for the year 1936 was 141,300. This latter figure has been used for the compilation of the various rates mentioned in this report.

Despite a natural increase (excess of births over deaths) of 325, the Registrar-General estimates a decrease of 2,300 in the population from mid 1935 to mid 1936.

#### MARRIAGES.

The number of marriages during 1936 was 1,385 and the marriage rate (the number of marriages per 1,000 of the population) was 9.80. In the previous year the number of marriages was 1,479 and the rate was 10.29.

#### BIRTHS.

During the year the live births, corrected by the distribution of those occurring in lying-in institutions in the borough to those districts in which the mothers resided, and the inclusion of children born to Fulham mothers in institutions outside the borough numbered 2,111, of whom 1,080 were males and 1,031 were females. The birth rate (the number of live births per 1,000 of the population) was 14.9 an increase of 1.1 compared with 1935. The birth rate tor the Metropolis was 13.6 and for England and Wales 14.8.

#### STILLBIRTHS.

The number of stillbirths during 1936 was 55 compared with 65 during the previous year. The stillbirths amounted to 25.4 per 1,000 of the total births (live and stillbirths). The corresponding rate for England and Wales was 39.73. On the basis of stillbirths per 1,000 of the population, the local rate is 0.39 as against 0.61 nationally and 0.45 in the administrative county.

#### ILLEGITIMACY.

The illegitimate live births numbered 105 (52 males and 53 females) during 1936 compared with 103 for the previous year and constituted 4.9 per cent. of the total live births.

#### DEATHS.

During the year ended December 31st, 1936, 1,486 deaths were registered as having occurred in the borough. Of these, 230 were of persons not belonging to the borough, while 530 inhabitants of Fulham died outside the borough, chiefly in public institutions. There were, therefore 1,786 deaths of persons, 928 males and 858 females, having their usual residence in Fulham, representing an annual crude death rate of 12.6 per 1,000 of the population. This rate is 1.0% above that of the previous year. The death rate for England and Wales was 12.1 and for London 12.3. The "Comparability Factor" remains unchanged at 1.01 and the adjusted death rate is, therefore, 12.7.

## CERTIFICATION OF CAUSES OF DEATH.

Of the 1,786 deaths belonging to the borough, 1,643 or 91.99 per cent., were certified by registered medical practitioners; 75 or 4.20 per cent., by coroners after inquests; 67 or 3.75 per cent., by coroners without inquests, while 1 case or 0.06 per cent. was uncertified.

#### DEATHS IN PUBLIC INSTITUTIONS.

Of the deaths of Fulham persons 60.9 per cent. took place in Public Institutions. The distribution of these institutional deaths according to the type of institution was as follows:—

701 in Dublic A. i.i.	TT	·			per cent.
781 in Public Assistance		Institu	itions		71.8
29 in Infectious Disease	Hospitals				2.7
222 in Other Hospitals	***		***	***	20.4
55 in Mental Hospitals					5.1

#### FULHAM HOSPITAL.

In this institution belonging to the London County Council there were 677 deaths of which 594 were of Fulham residents and 83 of persons residing in other districts.

#### WESTERN HOSPITAL.

This hospital, the only London County Council Infectious Disease Hospital in the borough, had 150 deaths during the year and of this number 21 were of Fulham residents while the remaining 129 were of patients admitted from other districts.

# DEATHS OF FULHAM RESIDENTS OUTSIDE THE BOROUGH.

The deaths of Fulham residents outside the borough numbered 530 and occurred in the following places:—

St. George's Hospital .		 	. 41
West London Hospital .		 	24
Princess Beatrice Hospital .		 	26
Other General Hospitals .		 	63
Children's Hospitals		 	15
Women's Hospitals		 	7
Other Special Hospitals		 	31
L.C.C. Infectious Disease Hosp	oitals	 	8
L.C.C. Hospitals and Institutio	ns	 	187
Mental Hospitals		 	55
Sanatoria		 	15
Nursing Homes and elsewhere		 	58
			530
			-

#### ZYMOTIC DEATHS.

The Zymotic death rate is that from the principal zymotic or infectious diseases, viz:—smallpox, scarlet fever, diphtheria, measles, whooping cough, epidemic diarrhœa and fevers (typhus, enteric, other or doubtful fevers).

The mortality from these diseases was higher than in 1935, 53 deaths being due to them as against 36. The death rate per 1,000 of the population was 0.38 compared with 0.25 for 1935. The increase was due to the number of deaths from measles (14 against nil).

# SEASONAL MORTALITY.

The number of deaths in each of the four quarters of the year was as follows: -

			1936	1935
First quarter	 	 	560	462
Second quarter	 	 	414	413
Third quarter	 	 	328	384
Fourth quarter	 	 	484	403
			1 500	1 000
			1,786	1,662

#### CAUSES OF DEATH.

These are classified in Table 5, pages 19 and 20. The following table shows the number of deaths from the six commonest causes:—

Disease		No. of Persons	Males.	Females.	of total	Death Rate per 1,000s inhabitant
Heart Disease	 	470	208	262	26 -32	3 .33
Cancer	 	250	135	115	13 -99	1 .77
Respiratory diseases	 	213	109	104	11 .93	1.51
Tuberculosis (all forms)	 	120	81	39	6.72	0.85
Cerebral hæmorrhage	 	70	28	42	3 -92	0.49
Chronic and acute nephritis	 	55	34	21	3.08	0.39
TOTALS	 	1,178	595	583	65 -96	8 .34

It will be seen that heart disease, as in the last seven years, heads the list; 470 deaths were due to this cause compared with 479 during 1935. Sex distribution of these deaths was 208 males and 262 females. Of the total no less than 426 occurred in persons over the age of 55 years.

Cancer came next as in the last 3 years with 250 deaths, an increase of 32 on the previous year; 195 were in persons over 55.

Pneumonia, bronchitis and other respiratory diseases together caused 213 deaths. The age distribution is less marked in these deaths, deaths taking place in every age group though with a preponderance in the groups aged 45 and over.

Tuberculosis caused 120 deaths, of which 107 (73 males and 34 females) were from pulmonary tuberculosis. The death rate from pulmonary tuberculosis is 0.76 as compared with the national rate of 0.58. The prevention of this disease depends in the main upon good nutrition and good environmental conditions, the cure upon early diagnosis. The steady year by year fall in mortality from this cause is one of the most satisfactory achievements of public health and social work.

Cerebral hæmorrhage is again a disease of the elderly, only 10 of the 70 deaths occurring under the age of 55.

Influenza caused 16 deaths compared with 24 in 1935.

#### INFANTILE MORTALITY.

Of the 1,786 deaths of persons of all ages belonging to the Borough, 136 or 7.61 per cent., occurred in infants under one year of age.

The Infantile Mortality Rate (the number of deaths of infants under 1 year of age per 1,000 live births) was 64 as compared with 51 during 1935. The actual number of deaths was 136 compared with 100.

The Infantile Mortality Rate for England and Wales was 59 and for London 66.

#### INFANTILE MORTALITY RATE IN FULHAM SINCE 1891.

Averag	ge for 5 y	ears.	Actual rate	for the la	ast 9 years.
1891-1895	***	168	1928		77
1896-1900		167	1929		69
1901-1905		144	1930	***	57
1906-1910		117	1931		67
1911-1915		109	1932		58
1916-1920		92	1933		65.
1921-1925		73	1934		59
1926-1930		67	1935		51
1931-1935	***	60	1936	4	64

The following table shows the births, infantile mortality, and death rates during the last two years for the various wards in the borough.

TABLE 1.

Wards			Birth Rates		Infantile deaths		Infantile Mortality Rates		General Death Rates			
		1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	
Baron's Court			198	185	13 ·1	12 .9	14	9	71	49	13 .9	13 .9
Lillie			323	308	15.2	14 ·1	24	21	74	68	11.8	9.9
Walham			281	269	20.9	20.2	19	16	67	59	12 .7	13 .7
Margravine 1			236	198	14 .3	12.2	24	11	102	56	15.3	11.5
Munster			478	431	15.1	12.9	23	20	48	46	11.6	10.9
Hurlingham			91	105	10.8	12 .3	11	4	121	38	12.6	11 .7
Sands End			319	314	14 ·1	13 .8	14	9	44	29	11 .7	10 .2
Town			185	179	14 ·3	13 .4	7	10	38	56	14 .2	13 .9
BOROUGH			2111	1989	14 .9	13 .8	136	100	64	51	12 .6	11 .6

The principal causes of infantile mortality were as follows: —

Prematurity ... 28 deaths compared with 22 in 1935.

Pneumonia (all forms) ... 27 deaths compared with 13 in 1935.

Diarrhœa and Enteritis ... 19 deaths compared with 13 in 1935.

The increased pneumonia deaths are associated with the measles epidemic which occurred in the spring.

55 deaths (40.4 per cent., of all deaths under one year of age) occurred in infants under 4 weeks of age as compared with 42 in 1935 and 46 in 1934.

# MATERNAL MORTALITY.

The Maternal Mortality rate of 1.85 per 1,000 total births compares favourably with the similar rate for England and Wales, namely 3.81. This rate is usually low in London and the South compared with the country as a whole.

The following is a list of the maternal deaths together with the causes: -

Occupation.	Age.	Date and place of death.	Cause of Death.
Wife of Caterer's Watch- man.	37	16th February— Hospital.	Hæmorrhage following abortion at three months; fifth pregnancy.
Wife of Commercial Motor Driver.	32	9th May— Hospital.	Purulent Broncho-Pneumonia follow- ing miscarriage of first pregnancy at about three months—not due to interference.
Wife of Advertising Copy Writer.	37	16th June— Nursing Home.	1. (a) Pulmonary Embolism. (b) Placenta Prævia.
Wife of a Clerk.	31	13th July— Hospital.	(a) Peritonitis.     (b) Pelvic abscess, sloughing round ligament. Placenta accreta.

Table 2.—Vital Statistics of the Borough during 1936 and Ten preceding Years.

tion Esti- mated Year. to		Births.		m . 1	TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE BOROUGH.				NETT DEATHS UNDER	NETT DEATHS UNDER	Zymotic Death	
	od	i	Net	t.	Total Deaths Regis-	Of Non- Resi- dents		At all	Ages.	Under of A		ONE YEAR.	FIVE YEARS.	Rate (In- fluenza
	Middle of each Year.	Occurr- ing in the Borough.	Number.	Rate.	in the Borough.	regis- tered in the	regis- tered in the Borough.	Number.	Rate.	Number.	Rate per 1,000 Nett Births.	Percen Total Dea	Nett ths.	in- cluded)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		-	-											
1926	164,300	2,691	2,670	16.2	1,578	168	373	1,783	10.8	173	64	9.7	15.8	0.71
1927	161,900	2,356	2,444	15.1	1,588	121	366	1,833	11.3	162	66	8.8	12.3	0.54
1928	155,300	2,319	2,388	15.4	1,548	128	360	1,780	11.5	185	77	10.4	14-4	0.73
1929	153,700	2,328	2,502	16.2	1,882	157	394	2,119	13.7	173	69	8.2	13.5	0.78
1930	153,700	2,226	2,366	15.3	1,473	143	343	1,673	10.8	136	57	8.1	13.4	0.68
1931	151,200	2,103	2,281	15.08	1,532	107	432	1,857	13.3	154	67	8.3	10.7	0.48
1932	149,600	1,842	2,137	14.3	1,569	202	481	1,848	12.4	124	58 .	6.7	10.7	0.69
1933	148,200	1,579	1,938	13.08	1,531	143	538	1,926	13.0	126	65	6.5	8.9	0.89
1934	145,400	1,592	1,996	13.7	1,531	206	507	1,832	12.6	118	59	6.4	10.9	0.74
1935	143,600	1,653	1,989	13.8	1,353	129	438	1,662	11.6	100	51	6.02	7.6	0.42
1936	141,300	1,576	2,111	14.9	1,486	230	530	1,786	12.6	136	64	7.61	9-69	0.49

TABLE 3. STATISTICS 1901-1936.

Year.	Population.	Structurally separate Dwellings (Census).	Number of Private Families (Census).	Average size of Family (Census).	Birth Rate.	Death Rate.	Infant Morta- lity Rate.	Pul- monary Tuber culosis Rate.
1901	137,289 (Census)	19,667	32,137	4.27	33.2	15.8	152	1.35
1902	143,102	13,007	02,107	121	32.9	17.1	148	1.38
1902	147,780				32.5	13.9	127	1.34
					32.2	15.4	153	1.43
1904	152,482 156,210				30.5	15.1	145	1.23
1905					31.9	14.8	136	1.14
1906	149,520				30.6	14.6	122	1.23
1907	150,670		_			14.2	115	1.23
1908	151,659				31.1	13.9		
1909	152,501				28.2	12.5	108	1.30
1910	153,166	20 727	26 422	4.19	28.1		107	1.07
1911	153,284 (Census)	20,737	36,432	4.13	26.9	14.5	126	1.45
1912	155,402	_			27.1	13.0	94	1.36
1913	157,117				26.9	12.7	96	1.34
1914	157,303	_	-		26.4	13.6	113	1.32
1915	153,161	-	-	-	24.3	15.2	115	1.29
1916	149,428				23.1	13.3	88	1.41
1917	145,186	_	_	-	18.4	13.7	109	1.32
1918	143,211	_	-	79	16.7	17.4	107	1.45
1919	152,543	_	-	-	18.6	12.2	83	1.01
1920	158,621			-	27.2	11.5	74	0.89
1921	157,944 (Census)	26,630	40,436	3.82	22.1	11.7	83	0.96
1922	159,500	-	-	177	20.3	12.1	69	1.02
1923	161,600	_	_	-	19.3	10.5	64	0.92
1924	163,100	_	-	-	18.2	11.1	72	0.80
1925	163,700	_	-	-	16.9	10.7	76	0.92
1926	164,300	-	-	-	16.2	10.8	64	0.98
1927	161,900	-	-	_	15.1	11.3	66	0.77
1928	155,300	-	_	_	15.4	11.5	77	0.73
1929	153,700	-	_	-	16.2	13.7	69	0.96
1930	153,700	-	_	_	15.3	10.8	57	0.76
1931	150,928 (Census)	26,738	43,153	3.38	15.08	13.3	67	0.97
1932	149,600	-	_	-	14.3	12.4	58	0.91
1933	148,200	-	-	-	13.08	13.0	65	0.85
1934	145,400	_	_	-	13.7	12.6	59	0.77
1935	143,600	-	-		13.8	11.6	51	0.78
1936	141,300	-	_	-	14.9	12.6	64	0.76

TABLE 4.—VITAL STATISTICS OF LONDON BOROUGHS, 1936.

Borough.	Estimated Resident Population	Live Births Rate per 1,000	per	Rate 1,000 lation.	Infantile Mortality Rate per
	(mid-1936).	Population.  -	Crude.	Adjusted.	Live Births
WEST DISTRICTS.					
Paddington	139,200	13.8	12.98	12.81	72.0
Kensington	150 100	12.7	12.5	11.7	73.0
II a management it b	107 700	15.1	12.5	12.9	60.0
TALL TLAM	141 900	14.9	12.6	12.7	64.0
CII 1	FC 500	11.3	13.7	11.6	53.0
Westminster	104 100	8.5	11.1	11.4	65.8
NORTH DISTRICTS.	1 199				
Cu M 1.1	92,400	9.8	12.6	12.5	75.0
TT 1 1	00.700	10.4	10.2	9.6	65.8
C. D	100.000	13.0	13.5	13.8	79.0
T 11 /	904 100	15.24	12.44	12.56	61.0
Ct-l- Manington	50.950	13.7	11.4	10.9	44.6
Hackney	900 100	14.4	12.0	12.6	62.9
CENTRAL DISTRICTS.	W. B. B.				
TT - 11	34,850	8.29	11.99	12.83	62.0
T2: 1	00,000	13.8	14.0	15.3	81.0
City of London	0.100	7.5	11.4	12.65	147.0
EAST DISTRICTS.					100
Cl. one dital	85,400	14.9	12.8	14.1	75.0
D-411 C	00,000	13.5	12.7	14.3	98.0
Clauman +	907 900	14.7	12.6	14.7	100.09
Poplar	140,900	15.0	12.5	13.8	72.0
SOUTH DISTRICTS.	1 3-91 1 3-5				
Southwark	152,200	14.8	13.1	_	59.0
Bermondsey	100 400	15.4	12.8	14.6	60.0
Lambeth	077 700	13.9	12.5	12.4	59.0
Battersea	145 500	14.63	13.06	12.93	59.21
Wandsworth	0.40,000	11.46	11.79	10.96	58.0
Camberwell	990 900	13.93	12.64	12.64	58.86
Deptford	00,000	15.7	12.2	12.6	50.0
Greenwich	07.000	13.82	11.36	11.58	49.0
Lewisham	994,000	13.0	10.8	10.9	55.0
Woolwich	140 500	13.8	11.2	11.8	59.0
LONDON, Administrative					
County	4,141,100	13.6	12.3	-	66.0
ENGLAND AND WALES	-	14.8	12.1	_	59.0

TABLE 5.

Causes of and Ages at Death during the Year 1936.

Nett deaths at the subjoined ages of	" Resi	dents,"	whelher	occurri	ing with	iin or w	ithout ti	he Distr	ict.				TOTAL DEATHS,	Ne	tt deaths	at all a	ages of 'lorough,	* Reside wherev	nts" in	the Wo	irds
CAUSES OF DEATH.	N All ages.	₩ Under 1 year.	4 1 and under 2 years.	cs 2 and under 5 years.	o 5 and under 15 years.	A 15 and under 25 years.	00 25 and under 35 years.	6 35 and under 45 years.	0 45 and under 55 years.	11 65 and under 65 years.	12 65 and under 75 years	12 76 years and upwards.	WHETHER OF  "RESIDENTS" OR "NON- RESIDENTS" IN INSTITUTIONS IN THE DISTRICT.	G. Baron's Court Ward.	16 Lille Ward.	Valbam Ward.	S Margravine Ward.	Munster Ward.	Hurlingham Ward.	Sands End Ward,	Town Ward.
Il Causes {Certified	1785	136	21	15	33	51	65	92	153	309	415	495 1	957	199	248	170	242	372	105	265 —	184
1. Typhoid and paratyphoid fevers 2. Measles 3. Scarlet Fever 4. Whooping Cough 5. Diphtheria 6. Influenza 7. Encephalitis Lethargica 8. Cerebro-spinal fever 9. Tuberculosis of respiratory system 0. Other Tuberculous diseases 1. Syphilis 2. General paralysis of the insane 3. Cancer, malignant disease 4. Diabetes 5. Cerebral Haemorrhage, etc. 6. Heart Disease 8. Other circulatory diseases 9. Bronchitis 10. Pneumonia (all forms) 1. Other respiratory diseases 2. Peptic ulcer 3. Diarrhoea, etc. 4. Appendictis 5. Cirrhosis of Liver 6. Other diseases of liver, etc 7. Other diseases of liver, etc 8. Acute and chronic nephritis 9. Puerperal Sepsis 1. Congenital debility, premature malformations, etc 2. Senility 3. Suicide 4. Other violence 5. Other defined causes 6. Causes ill-defined or unknown	3 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 0 7 7 8 2 2 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0	3 - 1 1 1 2 - 1 1 1	6 1 1 1 1 1 7 7 1 2 2 1 1 1 1 1 1 1 1 1 1	2 3 2 - - - - - - - - - - - - - - - - -	3 1 6 	1				2		1 1 5 - 2 1 1 - 47 6 6 33 2 21 2 1 1 49 32 25 2 2 2 1 1 - 5 9 9 - 7 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5 - 7 35 5	3 46 7 33 32 1 1 44 45 8 1 1 40 186 37 21 78 8 11 41 8 2 2 11 1 29 17 20 65		1 3 1 1 1 2 2 — — — — — — — — — — — — — — —	4 	2 2 2 2 14 1 1 2 2 7 7 6 4 4 1 1 1 2 2 7 7 7 1 7 4 4 9 18			1 3 2 4 4 1 1 20 1 2 1 1 3 8 2 7 7 7 5 5 4 4 6 6 2 5 5 8 1 1 6 5 2 8 8 1 1 1	1 1 1 2 2 1 1 1 1 0 5 6 6 9 9 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1
Total I	-	136	21	15	33	51	65	92	153	309	415	496	957	199	248	170	242	372	106	265	184

TABLE 6.
Infant Mortality during Year 1936.

Nett Deaths from st	ated can	ises at v	arious o	ages und	ler One	Year o	Age.				N	ett Dea	ths und	ler One	Year	in War	ds.	
Causes of Death.	Under 1 Week,	1-2 Weeks.	2—3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	TOTAL DEATHS UNDER ONE YEAR.	Baron's Court Ward.	Lillie Ward.	Walbam Ward.	Margravine Ward.	Munster Ward.	Hurlingham Ward.	Sands End Ward.	Town Ward.
Il Causes Certified	40	4	5	6	55 —	26 —	27	16 —	12 —	136	14	24	19	24	23	11	14	-
1. Small-pox 2. Chicken-pox 3. Measles 4. Scarlet Fever 5. Whooping Cough 6. Diphtheria and Croup 7. Erysipelas 8. Tuberculous Meningitis 9. Abdominal Tuberculous 0. Other Tuberculous Diseases 1. Meningitis (not Tuberculous) 2. Convulsions 3. Laryngitis 4. Bronchitis and Pneumonia 5. Influenza 6. Gastro-Enteritis and Diarrhoea 7. Syphilis 8. Rickets 19. Suffocation, overlaying 10. Injury by Birth 11. Atelectasis 12. Congenital Malformations 12. Premature Birth, Debility and Marasmus, etc. 14. Other Causes		1	2 3			5 7		- 1 - 1 - - - - 8 - 4 - - - - - - - - - - - - -									3 3 1	
Тотац	40	4	5	6	55	26	27	16	12	136	14	24	19	24	23	11	14	

# Section II.

GENERAL PROVISION OF HEALTH
SERVICES FOR THE AREA.

## STAFF.

A full list of the staff of the Health Department appears at the beginning of this report.

#### LABORATORY FACILITIES.

The Council's Laboratory is situated at the Dispensary, 114, New King's Road. It is equipped for all routine bacteriological work and during the year 3,330 specimens were examined.

Arrangements have also been made with the Clinical Research Association for the examination of specimens during week-ends, holidays and emergencies, 454 specimens being reported on during the year.

Diphtheria isolated				86	
Negative Result				1,684	
					1,
Blood from cases of Enteric	Fever:	_			
Agglutination reaction	for T	yphoid or	Para-		
Typhoid obtaine	ed			1	
Negative Result				4	
Pathologica: Specimens for	Ente	ric Organ	nisms:—		
				-	
Negative result				12	
				-	
Sputa from cases of suspected	d Tub	erculosis:	_		
Tubercle bacilli found				340	
Tubercle bacilli not fou	nd			1,342	
				-	1,
Swabs from suspected Gonor	rhœa:				
				2	
Gonococcus not found				76	
Examinations of Urine					
Blood Counts					
Throat Swabs, Hæmolytic St		tc.			
Examinations of Ice Cream					
Examinations of Water		***			
Other Examinations					
Special Examinations of:					
Sputa				9	
Úrine		***		25	
				_	

# AMBULANCE FACILITIES.

This service is under the control of the London County Council, a depot being situated in the Borough at the Western Hospital, Seagrave Road.

#### NURSING IN THE HOME.

Certain types of cases requiring home nursing treatment are visited on behalf of the Council by the Fulham District Nursing Association at a cost of one shilling per visit. A table showing the number and type of visits is given below.

The District Nursing Association employs twelve full-time nurses and besides nursing cases in their own homes provides attendance and home visits in connection with the School Treatment Centres at Bagley's Lane and Bishop Creighton House. A treatment room is also available at the headquarters of the local Association.

HOME NURSING BY THE FULHAM NURSING ASSOCIATION ON BEHALF OF THE FULHAM BOROUGH COUNCIL, 1936.

Illness.		ar.		ril to me		y to pt.		t. to ec.	тот	TALS
ILLNESS.	Cases	Visits	Cases	Visits	Cases	Visits	Cases	Visits	Cases	Visits
Ophthalmia Neonatorum	_	_	_	_	3	78	1	3	4	81
Mammary Abscess and										
Inflamed Breasts	3	37	1	4	4	53	_	-	8	94
Ante-Natal	7	47	2	15	5	65	3	20	17	147
Post Parturition		-	7	122	2	12	3	75	12	209
Discharging Eyes	17	187	15	209	8	93	7	74	47	563
Mastitis	5	44	3	16	7	59	6	115	21	234
Wet Cord	15	119	6	55	2	35	1	16	24	225
Prematurity	1	7	_	_	_	_	2	36	3	43
Otorrhœa			1	5	3	47	5	37	9	89
Menorrhagia	_				_	-	1	7	1	7
Diarrhœa	_	_	2	23			1		2	23
Constinution	1	7	5	8			4	23	7	38
Dobilita	11	73	3	12			1	4	15	89
W	1	5	3	19	1	8		*	5	32
Conjunctivitie	_		1	46	_		_	1000	1	46
Thomas	6	- 29	1	13		_	_		7	42
Com Duttooks	1	13	1		1	_	_			17
	1		-	29	1	4			2	
Pemphigus	19	991	2		11	100	1	7	3	36
Pneumonia		231	9	141	11	168	22	309	61	849
Broncho-pneumonia	26	365	3	52	-	-	26	565	55	982
Influenza	7	99	3	24	The same	-	11	103	21	226
Pleurisy	1	8	-		-	_	-	-	1	8
Chicken Pox	1	17	1	5	-	-	-	-	2	22
Scarlet Fever	-	-	1	5	-	-	1	4	2	9
Diphtheria		-	1	2	-	-	-	-	1	2
Whooping Cough	-	-	-	-	2	28		-	2	28
Tuberculosis	_	_	-	-	-	-	10	298	10	298
Measles	35	435	36	375	1	9	-	_	72	819
Erysipelas	-	-	-	-	2	4	-	-	2	4
Enteritis	-	-	1	14	-	-	1	10	2	24
Septic Spots	-	-	4	42	2	20		-	6	62
Burns	2	15	-	-	-	-	2	14	4	29
Abscess of Arm	1	4	-	-	-	-	-	_	1	4
Rash	-	-	1	9	-	-	-	-	1	9
Rhinitis	-	-	1	8	-	-	-	-	1	8
Thrombosis	-	-		-	1	3		_	1	3
Bleeding after teeth extraction			The second		1				1	9
Foroma		-		-	1	3	-		1	3
		-		-	1	11	-	-	1	
Roile				-	1	6	-	90	1	6
Boils					100	_	2	20	2	20
TOTALS	160	1,742	110	1,253	58	706	110	1,740	438	5,441

# CLINIC AND TREATMENT CENTRES.

The following is the list of clinics in the borough. There are, in addition, school treatment centres controlled by Voluntary Committees at Bagley's Lane and Bishop Creighton House, Lillie Road.

Clinics.	Address.	Hours.	Provided by
ANTE-NATAL	90/2, Greyhound Road.	Mondays—2 p.m. Fridays—10.30 a.m.	Borough Council.
	170, Wandsworth Bridge Road.	Fridays—2 p.m.	ditto.
INFANT WELFARE	90/2, Greyhound Road.	Wednesdays and Thursdays— 10.30 a.m. and 2 p.m. Tuesday—10.30 a.m.	ditto.
	170, Wandsworth Bridge Road.	Mondays, Tuesdays and Wednesdays—2 p.m.	ditto.
	Melmoth Hall, Eustace Road.	Tuesdays and Thursdays—2 p.m.	ditto.
TODDLERS	170, Wandsworth Bridge Road.	Tuesdays—11 a.m.	ditto.
BREAST FEEDING	90/2, Greyhound Road	Thursdays—2 p.m.	ditto.
DENTAL (expectant and nursing mothers and children under 5 years)	90/2, Greyhound Road.	Fridays—2 p.m.	ditto.
GYNÆCO- LOGICAL	90/2, Greyhound Road.	Tuesdays—2 p.m.	ditto.
MASSAGE	Bishop Creighton House, Lillie Road.	Fridays—9.20 a.m.	Voluntary.
TUBERCULOSIS DISPENSARY	114, New King's Road.	Mondays—10 to 11.30 a.m. (Women and young children). Mondays—1.45 to 3 p.m. (School children). Tuesdays—10 to 11.30 a.m. (Men—old and new cases). Tuesdays—6 to 7.30 p.m. (Men and Women workers).	Borough Council.
		Wednesdays—10 to 11.30 a.m. (Women—old and new cases). Thursdays—1.45 to 3 p.m. (Children—old and new cases).	
DIPHTHERIA IMMUNISATION	170, Wandsworth Bridge Road.	Thursdays—2 p.m.	ditto.

#### HOSPITALS.

- (a) GENERAL: There are no voluntary general hospitals in the borough, the needs of the district in this respect being fully met by Fulham Hospital, which is under the control of the London County Council Public Health Committee and has 555 beds (410 for medical, 64 for surgical, 12 for maternity, 10 for V.D., 19 for isolation, 14 for psychiatric, 22 for tuberculosis cases and 4 for sick members of the staff). Of these beds, 73 are reserved for children.
- (b) CHILDREN AND INFANTS: The Fulham Babies' Hospital is controlled by a voluntary committee, an annual grant being made by the Borough Council, who also provide the medical staff. It contains 21 beds and during the year admitted 121 patients, the average daily number of beds occupied being 12.9. This hospital works in the closest co-operation with the child welfare service and renders particularly valuable services in dealing with cases of difficult nutrition.
- (c) INFECTIOUS DISEASES: There is one hospital for infectious diseases in the borough, the Western Hospital, Seagrave Road, which is under the control of the London County Council and contains 479 beds.

#### HEALTH PROPAGANDA.

During the early part of the year a series of five lectures, all illustrated with films was given at the Central Library:—

Date.	Title of Lecture.	Lecturer.
February 17th	Prevention of Diphtheria.	Dr. Scott.
March 2nd	A Housing Evil—the Bed Bug.	Dr. Scott.
March 16th	Social Hygiene (for Men).	Dr. Scott.
April 6th	Tuberculosis and its Prevention.	Dr. Bennett.
April 20th	Social Hygiene (for Women).	Dr. N. Dancy.

In addition three lectures on Diphtheria, all illustrated with the film "The Empty Bed," were given at various halls in the Borough:—

March 23rd at St. James' Church Hall.

November 12th at Princess Beatrice Social Centre.

December 17th at Bishop Creighton House.

The British Social Hygiene Council have continued their propaganda work in the Borough and, besides assisting at the two lectures at the Central Library, held the following meetings during the year:—

#### SINGLE LECTURES.

Date.	Place.	Speaker.	Film,	Attendance.
OPEN-AIR ME	ETINGS,			
June 10th July 8th September 16th.	Walham Grove Walham Grove Walham Grove	Captain Buckler, Captain Buckler, Captain Buckler,	=	20 30 60 110
MEN. February 17th	Shell-Mex	Mr. Lucas Phillips.	Trial for Marriage	330
March 11th	British Vacuum Cleaner Co	Mr. Lucas Phillips.	Any Evening after work.	150
September 7th	A.M.B Club	Captain Buckler	–	50
September 8th	Munster Road Social Club	Captain Buckler		50
WOMEN.				-
March 4th	British Vacuum Cleaner Co	Miss Bennett	Growing Up	90

#### COURSES OF LECTURES.

November 26th, December 3rd, December 10th.—Course of 3 lectures at Princess Beatrice Welfare Centre.

Speaker Mrs M. C. Hume.

Average Attendance 50

#### ANALYSIS.

Total No. of Meetings :- 11

Total Attendance :- 830.

#### MATERNITY AND CHILD WELFARE.

Report by the Medical Officer in Charge of the Maternity and Child Welfare Department (Miss Ruby Thomson, M.B., Ch.B., D.P.H.) on the work of the Department.

The work of the Maternity and Child Welfare Department has been considerably extended during the year 1936. Dr. Barrett acted for me until 13th January, when I resumed duty. Dr. Louise Matheson, however, continued to attend some of the Infant Welfare sessions until Easter, when I undertook full duty. To meet the necessity for extra medical work at the clinics, Dr. Edith Wilson, who had previously acted as a locum tenens in the Department, was appointed in November to act as Medical Officer at one Infant Welfare session weekly at Eustace Road clinic.

In May, the Council decided to inaugurate a gynæcological clinic at Greyhound Road on one afternoon weekly. To this clinic any married woman in the district may go when in need of any advice on the diseases peculiar to women; and the Medical Officer advises medically, or on birth control, according to the necessities of the case and with due regard to conditions laid down by the Ministry of Health in a memorandum on the subject. Dr. Lynette Hemmant was appointed to be Medical Officer for this clinic.

An investigation was commenced in Fulham in August on the nutrition of expectant and nursing mothers attending Greyhound Road clinic. We were fortunate in obtaining the voluntary services of Dr. Lilli Meyer-Wedell, late of Hamburg, for the scientific side of the work, while I do the clinical work. Dr. Meyer-Wedell has spent an aggregate of approximately eighteen hours in the Borough every week doing this work, attending at Greyhound Road, or at the Maternity Home when her patients were there. Work of this kind is being undertaken in different parts of the country; and the information obtained will be of great value to future Maternity and Child Welfare arrangements throughout the country.

Mr. Dodd who had been dental surgeon in the department for several years retired in January and his place was taken by Mr. D. K. Gaskill, L.D.S.

#### HEALTH VISITORS.

In April three additions were made to the Health Visiting staff, so that there are now ten Health Visitors, each of whom is responsible for visiting one-tenth of the Borough.

The more highly trained the Health Visitor, and the more vivid her personality, the more effective is the work of Maternity and Child Welfare in any area. The first contact of the majority of mothers with Public Health activities is usually made through the Health Visitors. As the Health Visitor has no "right of entry" into any house, it, in a large measure, depends upon her persuasive powers as to whether or not the mothers in her district keep their children under regular medical supervision. It should be mentioned that little difficulty is encountered locally in getting into any house. The Health Visitors come and go as friends of the family, and they are appealed to for advice on very many subjects.

The qualifications, training and special experience of the Health Visitors were fully described in last year's Report.

The whole department is controlled by the provisions of the Maternity and Child Welfare Act, 1918, and the Public Health (London) Act, 1936; and a large proportion of the work of the Health Visitors is directly dependent on the Notification of Births Acts, 1907 and 1915, which make compulsory the notification of every birth to the Medical Officer of Health within thirty-six hours. The Health Visitor calls as soon as the period of attendance by the doctor or midwife has ended.

Advice is given on the general management of all children under five years of age, and where there is an infant the importance of breast-feeding is stressed. Anything which may affect the well-being of the home is a concern of the Health Visitor; and mothers are encouraged to place their children under regular medical supervision, through the Welfare Centres or otherwise.

The question of the importance of breast-feeding is continually urged in the home and at the clinic; and yet there is a large proportion of mothers who, for no physical reason, persist in putting their babies on artificial foods. There may be many contributory causes for this; but it is a matter which gives rise to grave concern on the part of the Maternity and Child Welfare staff.

The Health Visitors visit all cases of ophthalmia neonatorum, puerperal fever and puerperal pyrexia; all cases of measles (which is notifiable in this Borough) in children under the age of five years; all antenatal cases brought to our notice; cases of pneumonia in children under five years; and epidemic diarrhœa;—and give such advice in these cases as may be desirable.

The Health Visitors also visit pregnant women in the Borough who are booked to enter maternity wards of hospitals. The hospital Almoners send lists of such cases; and by this means the department gets into touch with many pregnant women who would otherwise remain unknown.

The following table illustrates the wide scope of their work:-Visits to cases of stillbirths 1.851 First visits to infants under one month 562 Re-visits to infants under one month 108 First visits to infants aged one to twelve months ... 7.540Re-visits to infants aged one to twelve months First visits to infants aged one to two years 4,455 Re-visits to infants aged one to two years ... 88 First visits to infants aged two to five years 9,595 Re-visits to infants aged two to five years Visits to children over five years of age: — 257 Removal from Infant Welfare Register 144 Measles 50 Convalescent Homes 29 Throat swabs, etc. Diphtheria Immunisation Clinic 32 1,432 First visits to Antenatal cases 1,078 Re-visits to Antenatal cases 10 Visits to Puerperal Fever cases 19 Visits to Puerperal Pyrexia cases Enquiries concerning maternal deaths and other visits 27,346 TOTAL EFFECTIVE VISITS 4,152 "No replies" ... 31,498 TOTAL VISITS ...

## ANALYSIS OF SPECIAL VISITS TO INFANTS UNDER FIVE YEARS OF AGE.

Measles				 7	 737
Ophthalmia Neonatorun	n			 	 20
Pneumonia				 	 20
Epidemic Diarrhœa		***	***	 	 3
Chicken Pox			***	 	 2
Whooping Cough			***	 	 1

In addition to their work in the homes, the Health Visitors systematically attend at the various Centres during the medical sessions for the control and management of the clinics.

#### INFANT LIFE PROTECTION VISITOR.

In April, 1933, under an Order of the Minister of Health, the supervision of all foster-mothers in Fulham was transferred from the London County Council to the Borough Council. Every foster-mother in the Borough is now required to be approved as such by the Council as the local authority.

At the end of the year there were 87 foster-mothers with 116 children in their care. The Infant Life Protection Visitor paid 1605 visits to foster-mothers and inspected 1991 children at such visits. In addition 231 special visits were made and 567 visits were made to cases of measles.

There was a scarcity of foster-mothers during the year. The Department would be glad to hear of suitable candidates for approval as foster-mothers, as there are more applications for their services than can be met.

The duties of the Infant Protection Visitor are closely associated with those of the Health Visitors, and foster-mothers are urged to bring their charges to the Infant Welfare Centres, that they may be under regular medical supervision.

Close co-operation is also maintained between the Infant Life Protection Visitor and the School Authorities, as her duties relate to children between birth and the age of nine years. The Visitor possesses the "right of entry," and may visit at night as well as by day, when necessary.

The Maternity and Child Welfare Department also maintains touch with the National Society for the Prevention of Cruelty to Children.

#### NOTIFICATIONS OF BIRTH.

The Birth Rate was again slightly higher last year (14.9 compared with 13.8 in 1935). Under the Notification of Births Acts, 2078 births were notified to the Department during the year, of which 52 were stillborn. The number of births notified by midwives was 1902, and by doctors and parents 176. The stillbirths equalled 2.6 per cent. of the notified births.

#### MATERNITY AND CHILD WELFARE CENTRES.

There are three Maternity and Child Welfare Centres in the Borough, viz:—90/92, Greyhound Road; 170, Wandsworth Bridge Road; and at Melmoth Hall, Eustace Road; all of which are attended by the Medical Officers in this Department. The times of the sessions are detailed on page 26.

The total attendances at the clinics increased by 3,325, and the first attendances of children under one year of age represented 56 per cent. of the notified live births.

The following table shows the attendances at the Infant Clinics during the year 1936: -

Clinic.	Number of Clinics held.	atten	rst dance abies		otal dances.
Age in years		0-1	1-5	0-1	1-5
92, Greyhound Road 170, Wandsworth	257	557	92	7722	*4389
Bridge Road Melmoth Hall,	148	331	52	4810	2507
Eustace Road	95	256	60	4075	2387
TOTALS	500	1144	204	16607	9283

<sup>\*</sup>Includes attendances made by Toddlers at special clinic (402)-47 sessions.

In 1935 the experiment was tried of issuing dried milk during the clinic sessions at the Greyhound Road Centre for mothers in that district, instead of at the Town Hall. The experiment proved successful, and was instituted at all the clinics, so that no milk is now issued at the Town Hall. This system is not entirely without disadvantages, but it is working well.

As all mothers buying milk at cost price now attend the Centres, children are brought for medical supervision who might otherwise remain without it. The percentage of children under the age of one year attending the clinics is still far below what it ought to be; and we know that a great proportion of those children who do not attend the clinics have no medical supervision except in illness.

The area of the Borough is such that, with the Infant Welfare Centres situated as they are, no mother has a very great distance to walk with her child in order to attend at a Centre; and it would be well for the Borough if mothers realised the importance of medical supervision for the apparently healthy child. Fewer defects would remain to be detected when the children are compulsorily examined by the Education Authorities, and less curative treatment would be required during school life. Here as elsewhere, prevention is better than cure. The General Practitioner has neither time nor opportunity for this work; whereas, on the other hand, the clinics are not concerned with the treatment of sick children.

Again I would stress that supervision of the pregnant and nursing mother is the foundation of the whole edifice of Maternity and Child Welfare work. In Fulham since 1919 special cards have been used at the clinics for recording the history of nursing mothers, while pregnant women attend at separate sessions.

Upon the mother depends greatly the contentment and well-being of the family, and at the Centres great emphasis is laid on this point. The presence in the Borough of open spaces such as Eelbrook Common, Parson's Green, the Recreation Ground, South Park and Bishop's Park, definitely contributes towards the same end. The organised games which have been continued in the Parks during the year are a means of reassuring the mothers of their children's safety and happiness while away from school and out of their sight.

Legislation continues to extend the boundaries of Maternity and Child Welfare work, and the Maternity and Child Welfare Staff never seems big enough to meet all the demands. I should like to place on record my deep appreciation of the loyal services of both the Health Visiting and the Clerical staffs.

I am glad that the clinics still retain the generous services of our Voluntary Workers, some of whom have attended regularly for many years, and to them we would express our sincere gratitude; they help to ensure the smooth running of the clinic sessions.

The members of the Fulham Free Church Women's Guild continue to provide tea and biscuits at a nominal cost for mothers attending the Centres, and their services are much appreciated.

#### ANTENATAL CLINICS.

Three antenatal sessions are held each week, a morning and an afternoon session at Greyhound Road conducted by myself, and an afternoon session at Wandsworth Bridge Road conducted by Dr. Barrett.

The public mind is becoming yearly more conscious of the importance of regular medical supervision of pregnancy, and the demand for this, and for the hospitalisation of labour, increases; but there is much to be done yet to spread the conviction that every pregnant woman should have medical supervision from early pregnancy, whether she intends to have the services of a doctor at the actual confinement or not.

The accidents and risks of child birth are every year greater than they should be, and pregnant women can do so much to reduce this risk if they will only obtain for themselves proper antenatal supervision.

The antenatal clinics are intended primarily for supervision with a view to the occurrence of a safe confinement. It is the duty of Medical Officers of antenatal clinics to satisfy themselves that any abnormalities are known and provided against, and that every woman attending has made suitable arrangements for the proper conduct of her confinement. A close co-operation is maintained between the clinics and the doctors or midwives concerned with all cases; and written reports are sent when necessary.

All patients who are booked for their confinements in the Council's Maternity Home are required to attend at the antenatal clinics. It will be seen from the following table that the actual number of new patients attending has considerably increased from 1935. Quite a number, however, make only a single attendance, on account of their being referred to hospitals and attending the antenatal clinics there; others are sent by hospitals to obtain grants of milk or dinners, and since such patients continue under the observation of the hospital doctors, only one attendance may be registered.

It does not seem to be understood as widely as it should be, that any expectant mother in the Borough who is attending an antenatal department of a hospital may attend as well the Borough antenatal clinics to avail herself of the various activities of the Fulham antenatal clinics.

The following is a record of the work done at the antenatal clinics during 1936: \_\_\_

Clinic	No. of Sessions.	No. of New	Patients. Total	No. of Attendances.
92, Greyhound Road. 170, Wandsworth Bridge Road	97	290	401	1736
TOTALS	50 147	437	177 578	890 2626

It may be mentioned here that a stock of maternity outfits is maintained at the Town Hall and Centres. Each parcel contains all sterilised dressings, etc., likely to be required for use at a confinement in a private house, and may be obtained by any expectant mother or midwife at a cost of four shillings.

#### OPHTHALMIA NEONATORUM.

Ophthalmia Neonatorum—inflamation in the eyes of the new-born—is a disease which does a great deal of harm to the eyes of new-born infants, who may contract it at the time of birth unless careful precautions are taken.

When a midwife is in charge of a case, any eye discharge occurring in the infant is required to be notified by her to her local supervising authority, which in London is the London County Council; she must also call in a doctor who, if necessary, notifies the Medical Officer of Health. When a case of this kind is notified, the Health Visitor calls immediately, and any necessary treatment is arranged for.

#### EYE AND SKIN DEFECTS.

Cases of eye defects in mothers and children are dealt with by the London County Council oculist, and this is a convenience to the mothers. Children who attend the clinics regularly are referred to the London County Council local School Treatment Centres, when they are found to be suffering from any skin condition requiring attention. No contagious or infectious disease is allowed in the clinics.

#### MASSAGE CLINIC.

Cordial appreciation and thanks are again due to Miss Christian Wickham, for her continued help in carrying out massage treatment which is undertaken, as previously, two mornings each week at Bishop Creighton House.

#### DENTAL CLINIC.

One dental session is held weekly at Greyhound Road, and work is increasing slowly but surely. During the year the Council gave dental assistance in 26 cases, in some instances giving completely free dentures to clinic mothers. During the year 290 new cases attended, making 967 total attendances; 207 extractions and 25 fillings were carried out, 32 dentures also being supplied.

#### HOME NURSING.

Home nursing is provided by the Borough Council for persons requiring such attention and unable to pay for it privately. There are three groups of cases included in the Council's scheme—certain illnesses in children under five years of age; certain illnesses in expectant and nursing mothers; and certain infectious diseases.

A fee of one shilling per visit is paid for each attendance on a case, in the first two groups by the Maternity and Child Welfare Committee, and in the third group by the Public Health Committee.

Miss Watson has been succeeded as Superintendent of the District Nurses by Miss Browning, her Chief Assistant, and to both I would express thanks for their loyal co-operation and assistance in the work of the Department.

#### MATERNITY HOME.

The Fulham Borough Council Maternity Home is situated at 706, Fulham Road, S.W.6. It has ten beds for patients, with an isolation ward containing one bed. No antenatal beds are provided.

The primary purpose of the Home is to ensure that mothers whose own homes are not suitable or convenient for their confinements should have such privacy and proper attention as is desirable.

It may be mentioned here that a new Maternity Home and Health Centre is in course of erection at Parson's Green, and this will greatly extend the possibilities of the work of this Department. The Council's arrangements for this are already well in hand, and will be described in next year's Report. The new Maternity Home will be provided with antenatal beds—a welcome addition to our present facilities.

The Staff from the Maternity Home attenc at the antenatal clinics to receive their practical training in antenatal work. The Maternity Home is recognised as a training school by the Central Midwives Board, and trained nurses are prepared for the certificate of that Board.

The following is a record of the work done at the Maternity Home during 1936: -

Cases admitted		 225
Average duration of stay (days)		 14
Number of cases notified as Puerperal Pyrexia		 1
Number of cases notified as Ophthalmia Neonatorum		 3
Number of cases of Infectious disease		 _
Number of infants not entirely breast-fed while in the institution Number of maternal deaths		 -
Number of foetal deaths (stillborn or within ten days of birth)	.,.	 _
of local deaths (stinboll of within ten days of birth)		 7

The highest fee charged during 1936/37 was £9: 10: 0d., for the two weeks, and the average fee charged was £3: 9: 3d. The cost per patient per week to the Council before deduction of patients' fees was £3: 14: 5d., for the financial year 1936/37.

#### DAY NURSERY.

The Fulham Day Nursery is situated at Eridge House, Fulham Park Road, S.W.6, and is under the control of a Voluntary Committee. The Council makes a grant of £626 per annum to the Day Nursery, in addition to providing the services of myself and the Assistant Medical Officer for Maternity and Child Welfare as Medical Officers. The institution is visited by one or other of us five times weekly

Children are admitted to the Nursery between the ages of six weeks and five years; the mothers pay a small fee. The Nursery is intended to receive the children of mothers who must go out to work daily, and it is a great advantage to such children to be under trained care instead of being left to the mercy of kindly but often ignorant neighbours.

In every case the Matron receives a home report of the circumstances of the child; and these reports made by the Health Visitors are most useful.

Breast-feeding is not only encouraged, but insisted upon where possible, if only partially. All the feeding of infants is done on the principle of the use of breast standard milk, and the older children get a well balanced diet. An open-air life is rigidly followed; and an old army hut in the garden makes it possible for the children to be out of doors in winter and summer, although they are never allowed out when there is fog.

The Day Nursery is affiliated to the National Society of Day Nurseries, 117, Piccadilly, W.1. Girls of over sixteen are received for a year's training. After examination certificates of proficiency are granted by the National Society. Some of the girls become children's nursery nurses, and others proceed to hospital training.

 	113 16 5050 1594	6644
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 	1300	
 	139	
		1439
		8083
		30.7

### SUPPLY OF MILK.

Under the provisions of the Maternity and Child Welfare Act, 1918, milk may be supplied free to necessitous nursing and expectant mothers and to children under three years of age. In certain circumstances also milk is granted to children between the ages of three and five years.

The Local Authority is required by the regulations of the Ministry of Health to ascertain that need actually exists; and a special Visitor visits the homes of applicants and reports on the home circumstances, while the ordinary reports of the Health Visitors are also available for reference. A special Milk Sub-Committee of the Maternity and Child Welfare Committee meets every week to consider applications and make grants.

		approximate	cost	of	the	milk	granted	free	or	at	less	than	cost	price	during	19	36
was:-	-	Dried milk				-									£459		
		Wet milk													£246	1	3
															£705	19	9

Milk is also sold at cost price in cases recommeded by the Medical Officers, Health Visitors or any local practitioner or hospital Medical Officer. During 1936 under this part of the scheme 5,958 lbs. of dried milk were supplied at a cost to the families of £570: 18: 6d., as compared with 5071 lbs. at a cost of £401 10s. 10d. during the previous year.

Under the arrangements made with the Public Assistance Committee of the London County Council, dried milk is given in exchange for relief tickets in certain cases; and during the year 290 lbs. of dried milk were so issued at a cost to the Committee of £24: 9: 4d.

The Borough Council supplies a full-cream or humanised dried milk prepared by the spray method and similar preparations dried by the roller process. It is found that where one type of milk does not suit a child, almost invariably the other form will prove digestible. The digestibility of either form of dried milk is greater than that of wet milk.

The heating of milk in the process of drying somwhat alters the vitamin-content of it; but this is easily and completely made good by the addition of a small quantity of fresh fruit juice daily to the infant's food. Every mother whose infant is receiving dried milk at the clinics is carefully and repeatedly instructed by the doctors and health visitors in reference to this matter.

Experience confirms me in views I have expressed strongly in previous Reports, that dried milk and not wet milk should be supplied practically exclusively in the Infant Welfare clinics; and this is my personal practice in the sessions that I myself conduct. My reason for this attitude is that it is difficult in any circumstances to maintain fresh milk in a pure condition. In the absence of proper precautions there is a continuous liability to the contamination of wet milk by dust and flies carrying germs of disease, such, for instance, as cause the diarrhœa of young infants, so frequently fatal. The probability of such dangerous contamination is greatly less when dried milk is used. Another consideration that weighs with me is, that the composition of cow's milk differs from that of human milk; and the modification necessary to render it a suitable food for human infants cannot be looked for in the circumstances of many of those attending the clinics.

I am of the opinion that the reduction of infant mortality in this Borough and throughout the country, especially in the large cities, has been to some extent contributed to by the wider use of dried milk and the consequent elimination of some of the causes of illness in very young children.

Still another consideration may be referred to; the curd formed in the stomach from milk made from the dried powder is lighter and more easily digested than that resulting from the ingestion of wet milk. Experience has proved conclusively that children fed on dried milk with the addition of a little fresh fruit juice, as above described, can be reared successfully.

Medical research has proved the importance of a due regard to the question of anæmia in the mothers and babies of this country. For many years we have met this necessity by distributing dried milk powder with which a mild preparation of iron has been incorporated or by using Iron and Ammonia Citrate tablets.

# CHARITABLE ORGANISATIONS.

The Charity Organisation Society, the Invalid Children's Aid Association and the Invalid Kitchens of London have continued their helpful co-operation. The last-named conducts its local activities at Bishop Creighton House.

Dinners are provided also by the Council at the Centre at 170, Wandsworth Bridge Road, the food being prepared on the premises by the housekeeper. In this way, both the north and the south parts of the Borough have equal facilities for the supply of dinners, as the arrangement with the Invalid Kitchens of London to supply dinners at the cost of the Council still continues at Bishop Creighton House.

Each year the Women's Holiday Fund sends away for a fortnight many mothers who would otherwise be unable to get away from home responsibilities. The women who are thus sent to the country or to the seaside are expected to contribute to the cost as they may be able. They begin to save from the early spring for these holidays, and the joy of anticipation adds to the value of the holiday itself.

### MATERNAL MORTALITY.

The Maternity and Child Welfare Department investigates all cases in which women have died during pregnancy, at childbirth or during the puerperium. Details of maternal deaths are given on page 15.

### BABIES' HOSPITAL.

The Fulham Babies' Hosptial is under the control of a Voluntary Committee on which the Borough Council is represented. The type of case in which the hospital is mainly interested is that in which there are nutritional difficulties, but rickets, pneumonia, bronchitis, anæmia and certain post-operative conditions are also treated. The hospital is an invaluable adjunct to the child welfare services at whose request the majority of the children are admitted, and has been an important factor in reducing infant mortality. The medical staff is provided from the medical officers of the Borough Council.

The medical statistics for 1936 were as follows: -

The medical statistics for							
Cases admitted: 121.							
Clinic cases		99					
General Practition	ners	22 —this	numb	er includes 5 fro	om othe	r distri	cts.
Average daily number in Average duration of sta In Hospital January 1st In Hospital December 3	y			12.9 38.9 days. nil—closed fo	r fumiş	gation.	
Reasons for admission:							
Anæmia .		3		Injury to knee			1
D 1.141.		9		Indigestion			1
Broncho Pneumon		7		Loss of weight			13
		13		Marasmus			10
Bronchial Catarrh				Otitis Media			2
		2		Prematurity			5
27.111.211.11		3		Pleurisy	***		1
Debility .		5		Pneumonia	***	***	1
200111111111111111111111111111111111111		1		Rickets			5
		1			***	17.5	1
		7		Spina Bifida		***	1
	**	11		Septic Umbilicu		***	8
		1		Test feeding	***	***	6
		1		Vomiting		***	1.
Gastritis		1		After Tonsilecto	omy	***	1.
Discharges:			Death	is:			
		65		Broncho Pneum	onia		2
				Prematurity			3
		24		Gastro Enteritis			1
No improvement .		9		Spina Bifida			1
							1
Total .		98		Septicamia	***		1
				Marasmus	hoso one	og wor	V 70
				(Three of t			han
				Hospita	11 101	less t	112111

24 hours).

Discharged	on	account	of	infectious	diseases:		
				Measle		 	2
				Diphth	neria	 	1

Section III.

SANITARY CIRCUMSTANCES OF THE AREA.

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### RIVERS AND STREAMS.

No action to check pollution was necessary during the year.

### CLOSET ACCOMMODATION.

All closets are of the water carriage type. There are no closets of the conservancy or wastewater type in the area. There is, however, a sad deficiency of the "sufficient" water closet accommodation of the Housing Acts. In an urban community this can only be reasonably interpreted as meaning one W.C. per family, a standard which is far from being realised locally.

### PUBLIC CLEANSING.

### REFUSE COLLECTION.

Refuse collection is carried out by means of mechanical transport at an economic cost and with a general freedom from complaints. The Council endeavour to keep the type of vehicle engaged on the collection as up-to-date as circumstances will permit, and latterly have purchased four vehicles with enclosed bodies of the barrier type, which are giving every satisfaction not only to the Department, but to the residents generally; further vehicles of this type will, no doubt, be purchased in the near future when renewals become necessary.

Generally the House Refuse is collected once weekly, but extra collections are made in the case of public buildings, large blocks of flats and other premises where special circumstances arise.

The Council has recently inaugurated the "Container" system of storage and collection in connection with its Housing Estates, whereby a daily collection is given. The system works very satisfactorily and is being adopted by the London County Council in respect of Hospitals and Schools under their control. Owners of certain large blocks of residential flats in the Borough are also considering the scheme.

There are still a few ash pits in the Borough, but these are gradually being abolished as opportunities occur. Special attention is given to the maintenance of the dustbins to see that these are kept in serviceable condition.

#### DISPOSAL.

Practically the whole of the House and Trade Refuse collected in the Borough continues to be disposed of at the Refuse Destructor in a satisfactory and economical manner.

The volume of Refuse dealt with has increased out of proportion to the tonnage, and it is assumed this is due to the increasing substitution of gas and electric fires in place of solid fuel fires, and so curtailing facilities for burning Refuse on the premises.

# SCAVENGING AND WATERING.

Practically all the streets in the Borough receive daily attention and the more important thoroughfares are swept several times daily; mechanical watering vehicles are employed in the summer and gullies are mechanically cleansed by a modern machine.

# SANITARY INSPECTION OF THE AREA.

During the year the staff numbered one senior inspector responsible for all new drainage work, ten district inspectors, one woman inspector and one food and drugs inspector. In November, three temporary inspectors were appointed to release three of the permanent staff for house-to-house inspection of a proposed re-development area and afterwards to release the staff in turn for work in connection with the Overcrowding Survey under the Housing Act, 1936.

## DWELLING HOUSES.

The following table shows the number and nature of inspections carried out by the sanitary inspectors during the year.

### TABLE 8.

### DWELLING HOUSES.

COMPLAINTS.	Houses inspected for first time Re-inspections				3,416
	Intimations served	***	***	***	14,147
		***			2,630
	do. complied with	***			1,984
INFECTIOUS DISEASES.	Houses inspected for first time Re-inspections	***			1,397
	Re-inspections				839
	Intimations served				217
	do, complied with				119
HOUSE TO HOUSE INSPECTIONS.	Houses inspected for first time				703
THOI ECTIONS.	Re-inspections				5,252
	Intimations served				581
	do. complied with	***			575
STATUTORY NOTICES.	Number served under:— Public Health Act Housing Acts Metropolis Management Acts L.C.C. (G.P.) Acts Number complied with:— Public Health Act Housing Acts Metropolis Management Acts L.C.C. (G.P.) Acts	 s			649 79 146 24 396 67 79 6
RENT RESTRICTION ACT CERTIFICATES.	Number of applications  Number of inspections made Number of reports to M.O.H.				12 15 7
HOUSES LET IN LODGINGS	Annual Cleansing Inspections				12
BYELAWS.			***		10
	do. complied with				10

		40					
DRIVICE.	Drains tested						4,569
DRAINAGE.	Inspections of v	vork carried	out unde	er Notice	е		6,724
	Number of No	tices received	d of vo	luntary	work		344
	Inspections of v	vork carried	out volu	ntarily			3,290
	Inspections of S	ewer Re-Con	struction	work			76
	Inspections of 5	circi ito con	Del ciotios		***		
DIEDNI IND	First inspections						151
INFIRM AND							119
DIRTY TENANTS.	Re-inspections Notices served						1
	Notices served						
	FACT	ORIES.					
PACTORIES	Inspections						557
FACTORIES,	Intimation Noti						22
INCLUDING		complied v				***	4
FACTORY	Statutory Notice	oe cerved	witti .		***		2
LAUNDRIES.	do Notice	complied v	with		***	***	3
	do.	complied	with .			***	
Webviewore	Toonastions						202
WORKSHOPS,	Inspections Intimation Not	icoc corvod					9
INCLUDING WORKSHOP							3
LAUNDRIES.	do.	complied v	WILLI .				
WODEDI ACEC	Inapastiona						260
WORKPLACES.	Inspections Intimation Not	icos corred					19
	do.						6
		complied v		••	***		1
	Statutory Notice	complied				***	5
	do.	complied	with .				0
OUTWODIEDC!	Inapastions						125
OUTWORKERS'	Inspections Intimation notice						1
PREMISES.	Indination noti	ces served					1
CHOILE ADATEMENT	Compleints reco	divid					5
SMOKE ABATEMENT	Complaints reco	erved					5 53
ACT.	Intimation Not						2
	do.	complied	with	**			ĩ
	do.	complied	WILLI			•••	-
	FOOD I	PREMISES.					
No. 1 China dia dia							
Number of inspections to	.—					11	
Food Factories			•••	***		11	
Milkshops and Da	iries			***		453	
Restaurants			***			55	
Dining Rooms and	Eating Houses					126	
Eel and Pie Shops						9	
Slaughter Houses						47	
						400	

...

...

...

...

183

45

33

26

93

65

Fried Fish Shops

Fish Shops ...

Butchers' Shops

Fish Curing Premises ...

Ice Cream Premises ...

Greengrocers' or Fruiterers' Premises

	Stall	holders' Sto	rage Pr	emises		 	 30
	Cook	ked Meat Sho	ops			 	 12
	Licer	nsed Premis	es			 	 92
	Othe	r Food Prei	nises			 	 192
	Number of	Intimation 1	Notices	served		 	 32
	do.	do.	do.	complied	with	 	 11
EVE	NINGS ON I	MARKET D	UTY	***		 	 79

# OTHER INSPECTIONS

PHARMACY AND POISONS					
	f inspections				526
	f inspections				388
	Intimation Notice				- 32
	Intimation Notice		with		11
	f Statutory Notice				2
Number o	f Statutory Notice	es complied	with		3
Inspections of Common Lodging Houses					13
Inspections of Public Conveniences				***	112
Inspections in connection with Housing a					284
Inspections in connection with Undergroun	nd Room Survey				41
Houses in Clearance Areas					805
Supervision of disinfestation prior to entry					62
Inspections in connection with "Bath Roo					32
Inspections in connection with noise, coal du		isances			44
Enquiries regarding suspected cases of food Miscellaneous visits	*			***	42
miscendificous visits		***	***		20

In addition the inspectors made 2,003 ineffectual visits (i.e. cases in which no reply was obtained).

# SUMMARY.

Cause of Inspecti	First inspections.	Re- inspections.	Total inspections.		
In consequence of Complaint	 		3,416	14,147	17,563
In consequence of Infectious Disease			1 397	839	2,236
House to House Inspections			703	2,552	3,255
Houses in Clearance Areas	 		257	548	805
Annual Cleansing Inspections	 		_	12	12
Verminous or Aged Persons	 		151	119	270
Rent Restriction Act Applications	 		15	_	15
TOTALS	 		5,939	18,217	24,156

The following notices were served in respect of dwelling houses during the year:-

Intimatio	on Notices.	Statutory Notices.			
Number served.	Number complied with up to 31st December, 1936.	Number served.	Number complied with up to 31st December, 1936.		
3,438	2,688	898	548		

# REPAIRS EFFECTED.

The following works were carried out and repairs effected as a result of the action of the sanitary inspectors:—

# TABLE 9.

	TABLE 9.			
DRAINAGE.	Drains cleared			202
	Drains repaired	gh .		276
	Drains relaid			366
	Soil and ventilation pipes repaired			78
	Soil and ventilation pipes renewed			18
	New Soil and ventilation pipes provided			- 98
	Rain water gutters and pipes repaired and	renewed		467
	Drains sealed off			13
	Disused drains excavated			1
	Fresh Air inlet			62
WATER	Those alarmed manifest at-			100
CLOSETS.	Traps cleansed, repaired, etc	***		420
CLUSEIS.	Pans renewed			602
	Seats repaired or renewed	***	***	406
	Flushing cisterns repaired			351
	Flushing cisterns renewed	***		14
	Additional W.C. accommodation provided	***		15
	Lobbies provided to W.C. apartments			3
	Fastenings provided to doors, and doors i	repaired		123
	W.C. apartments ventilated			55
SINKS,	Sinks provided			80
BATHS AND	Sinks renewed		***	336
LAVATORY	C:-1 1		***	40
BASINS.		***		
DASINS.	Sink waste pipes trapped	***		431
	New sink waste pipes provided			186
	Sink and Bath wastes repaired			156
	New baths fitted			66
	New lavatory basins fitted	***	***	100
	New bath and lavatory wastes fitted	***	***	36
	Baths cleansed	***	***	3
WATER SUPPLY.	Drinking water cisterns cleansed, etc.,			129
SUPPLI.	Water supplied from mains		***	16
	Occupied house provided with a sufficient	supply		25
	Water supply pipes and fittings repaired			65
	Water supply provided to separate floors	***	***	25

		,			1010
CLEANSING		sed		***	4946
AND		ooms cleansed		***	444
INTERNAL		and internal hou		lea ota l	7992
WORK.	Fireplaces re	paired (nuisanc ges repaired o	es from sino	(for cool	472
					407
	Washing con	pers repaired of	r renewed		905
	Ventilation pr	rovided under fl	oors		173
		medied			1854
	Staircases pro	ovided with ade	quate light a	and ventila	
		ded with adeq			
		od cupboards			69
		***************************************	***************************************		1000
EXTERNAL	Roots repaire	ed	***	***	1068
REPAIRS	Other externa	al repairs	wood	***	719
AND OTHER		of refuse remo vided		***	491
NUISANCES.	Vards and fo	recourts paved	and drained	***	107
		nuisance from			10
		ublic Houses cl			2
		tories cleansed			4
	Rat runs trace				33
		OF BUILDI			
The following drainage	plans were su	ibmitted to an	d approved	by the	Public Health
Committee during 1936.					
New Buildings:					
Maternity Home,	Parson's Green				1
Public Convenience		***			1
Children's lavator					1
Fulham Power Sta					2
D 111 II					1 .
Earl's Court car j					2
			***		9
Block of Flats (pr					2
Borough Council 1			***	***	1
Electricity Transfe	ormer Station				1
Chemical Works					_ 14
				_	- 14
A 1 1111					19
Additions to existing b					17
Conversion to flats of e					
Reconstruction of existin	g buildings				209
The supervision of the	work with the	exception of re	e-construction	is in the	hands of the
Council's senior inspector. Th					
Visits to new drainage					770
Visits to new dramage Visits to extensions of e.		e work		***	251
Visits to extensions of e.					236
VISITS TO TECONSTRUCTION V	VOIK			***	1,257
Draine tested					1,159
Drains tested					3
Old drains sealed off					9

# COMBINED DRAINAGE.

During the year the Council authorised the carrying out of work in connection with combined drainage in five cases.

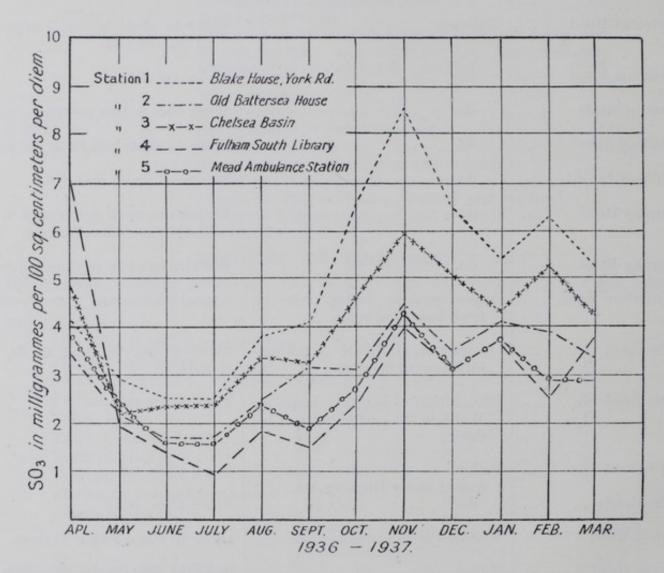
# LEGAL PROCEEDINGS.

# TABLE 10.

Proceedings were instituted in the following cases during the year: -

Address			Off	fence.			Result.
109, Estcourt Road		Nuisance					Order to abate within 7 days and £2 2s. 0d. costs.
109, Estcourt Road		do.					£7 7s. 0d. fine.
49, Lindrop Street		do.					Work done before hearing.
49a, Lindrop Street		do.					Order to abate and £3 3s. 0d. costs.
501, Fulham Road		do.					Dismissed under P.O. Act.
56, Tournay Road		do.					Withdrawn upon payment of 5s. 0d. Work done before hearing.
56, Tournay Road		do.					Withdrawn upon payment of costs.
106, Waterford Road		Appeal ag front bas			order	on 	Appeal withdrawn.
13, Lillie Road		Obstruction				per-	Fined £1 0s. 0d. and £2 2s. 0d. costs.
13, Lillie Road		Obstruction Walsh in duties.					Fined £1 0s. 0d.
12 Lillio Pond		Failure to quired undo.				re-	Fined £2 0s. 0d. Fined £5 0s. 0d.
45, Crefeld Road		Nuisance fi	om ov	vercrow	ding		Order to abate within 21 days.
34, Darlan Road		Nuisance					Order to abate nuisance within 28 days. Fined £5 0s. 0d. and £2 2s. 0d. costs.
17, Purcell Crescent .		do.					Summons withdrawn. Work done.
17, Purcell Crescent .		do.					Fined £2 0s. 0d.
39, Greyhound Road .		Failure to notice	comp	ly with	drain	age	Fined £2 0s. 0d. and £3 3s. 0d. costs.
William Hyam, 2, Rive bank, Beafont Roa Stanmore, Middlesex	d,	Carriage through			mat	tter	Fined £1 0s. 0d.
William Hyam, 2, Rive bank, Beafont Road Stanmore, Middlesex.	d,	do.				1	do.

### ATMOSPHERIC POLLUTION RECORD.



Covering an area within ½ mile radius of Fulham Power Station.

The similarity of these curves is striking. It can be assumed that the lowest recorded pollution occurring in July roughly indicates the normal industrial pollution in that area. The peaks corresponding with the cold damp weather of November are almost entirely due to domestic pollution; the ration being about 3 to 1.

(The April reading for Station 4 seems to be exceptional.)

### SMOKE ABATEMENT.

During the year five complaints regarding smoke nuisance were received and 52 observations on chimneys were made by sanitary inspectors; in two cases intimation notices were served on the owners to abate the nuisance. No legal proceedings were necessary during the year.

### ATMOSPHERIC POLLUTION AND THE NEW POWER STATION.

Since the last annual report, the new Fulham Power Station has come into operation, a potential source of enormous atmospheric pollution, with an incredible total flue gas discharge rate of 330,000 cubic feet per minute.

To ascertain the sulphur activity in the atmosphere, five test points using lead peroxide cylinders have been set up on a circle approximately  $\frac{1}{2}$  mile radius, it being indicated as the result of experiments that the worst ground conditions occur at a distance of eight to ten chimney heights away, in this case between 2,400 to 3,000 feet. A graph showing the pollution record at these five points is reproduced on page 48.

The results obtained at these points compare favourably with those from three other positions in London. It is difficult to trace any correlation between these results and the Fulham Power Station, but the seasonal fluctuation indicates considerable pollution from domestic sources. For the proper interpretation of these results it is necessary to take into consideration wind direction and the installation of a recording wind indicator on the Station roof is a practical requirement.

During the Inquiry prior to the extension of the Station a limit for Sulphur emission of 0.03 grains per cubic foot (equivalent to 50 parts per million) was suggested, but by the adoption of a new flue gas cleaning system of the lime treated non-effluent water type, an exceptionally high rate of sulphur elimination has been obtained, the average figure being as low as 0.007 grains per cubic foot (12 p.p.m.) Interesting and probably unique experimental apparatus for continuously recording the acidity due to the soluble oxides of sulphur and nitrogen in the flue gases has been installed at the base of each shaft.

Dust can be said to be non-existent in the effluent gases, the residual being an extremely small percentage of particles approaching the size of, and behaving like gaseous molecules, practically impossible to eliminate. The overall efficiency of the flue gas washing system, for sulphur grit and dust extraction, is of the order of 99.5 per cent.

Some nuisance arises from the "attempted" burning of wet debris collected from the intake screens of the condenser cooling water and another method of disposal is indicated; its removal as trade refuse would meet the case.

It is only when results such as the above are achieved and maintained that Electricity has any claim to being a clean fuel, it being remembered that the original plant allowed sulphur to be discharged into the atmosphere.

### RAG FLOCK.

The sale and use of Rag Flock are now regulated by Section 136 of the Public Health (London) Act, 1936, which repeals the Rag Flock Acts of 1911 and 1928.

The Regulations made by the Ministry of Health in 1912 continue in force and prohibit the sale or use of unclean flock manufactured from rags in making any article of upholstery, cushions, bedding, etc., and provide that when not less than 40 grams of flock are thoroughly washed with distilled water at a temperature below 25°C., the chlorine must not exceed 30 parts per 100,000 of flock. This standard ensures a certain degree of cleanliness.

During 1936, four samples of rag flock were taken with the following results: -

Sample No.	Parts of Chlorine per 100,000 of flock.
R.F. 1	15
" 2	4
" 3	2.5
,, 4	26.5

### PUBLIC BATHS AND WASH-HOUSES.

The swimming baths and wash-houses are at present being rebuilt and when complete in about September 1937 will provide a first class men's bath, a first class ladies' bath and a bath for mixed bathing, together with 16 first class and 41 second class slipper baths for men; and 10 first class and 15 second class slipper baths for women; 4 foam baths for women will also be provided. The wash-houses will contain 12 compartments.

In June samples of water were taken from a private open air swimming pool in the Borough and submitted for bacteriological and chemical analysis. The reports gave the following figures:—

(1)	Chemical.					Parts per 100,000	Grains per gallon.
	Solids in suspension		***		***	nil.	nil.
	Total solids (dried at 120°C.	.)in soluti	on			43.0	30.1
	Combined chlorine					6.60	4.62
	Equivalent to NaCl.					10.89	7.62
	Nitric nitrogen (Nitrates)	***				0.16	0.11
	Nitrous nitrogen (Nitrites)					nil.	nil.
	Ammoniacal nitrogen	***				0.0068	0.0048
	Albuminoid nitrogen			***		0.0100	0.0070
	Oxygen absorbed in 4 hours	at 27°C.				0.064	0.045

## (2) Bacteriological.

Average number on gelatin			100			
days.					1	9 per c.c.
Average number on agar p						2 per c.c.
B. Coli	***	***		***		not found in 100 c.c.
Streptococci	100	***	***	***		not found in 30 c.c

These excellent results show how pure swimming bath water can be kept under continuous filtration process.

### MORTUARY.

The Mortuary provides cold chambers for the accommodation of eight bodies, two in each compartment. One compartment is entirely isolated from the general body of the chamber, so that two bodies of infectious cases can be accommodated separately. There is also a postmortem room with modern equipment.

During the year 192 bodies were removed to the Mortuary and were admitted as follows:-

By order of the Coroner	 	 	118
For convenience till funeral	 	 	74
			192

There were 73 post-mortems made and inquests were held in 45 cases.

### PUBLIC CONVENIENCES.

The following tables show the existing accommodation in Public Conveniences in the Borough.

Under the control of the Public Health Department.

Convenience.	Dete		M	EN.	Women.			
Convenience.	Date erected.	Total W.C.s.	Free W.C.s.	Urinal Stalls.	Wash Basins.	Total W.C.s.	Free W.C.s.	Wash Basins
WALHAM GREEN								
(enlarged in 1930)	1895	7	2	14	4	8	2	2
GIBB'S GREEN	1900	4	1	9	2	4	1	2
LILLIE ROAD	1905	3	1	4	2	3	1	2
EELBROOK								
COMMON	1929	4	1	9	_	4	1	_
PUTNEY BRIDGE	1934	5	1	11	2	7	1	2
WYFOLD ROAD	1936	2	2	4	1	3	3	1
EFFIE ROAD (for								
men only)	1903	4	1	8	2	-		-
TOTAL		29	9	59	13	29	9	9

Under the control of the Borough Surveyor's Department.

TOTAL FOR THE BOROUGH		37	14	72	13	43	15	14
TOTAL		8	5	13	_	14	6	5
BISHOPS PARK: Pryor's Bank Paviln. Chalet by Bandstand (Women's enlarged 1931).	1898 1905	3 2	1	3 4	=	3 5	1 2	1 2
SOUTH PARK: Lodge, Clancarty Rd. Lodge, Hugon Rd.	1903 1903	1 2	1 2	3 3	_	3 3	1 2	2

The Conveniences under the control of the Public Health Department are open from 8 a.m. to 12 midnight on weekdays, and on Sundays from 10 a.m. to 10 p.m. The hours of those in the Parks are regulated by the hours of opening and closing of the Parks.

# INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTIONS) ACTS,

During 1936 twelve applications for certificates under the above-named Acts as to the fitness of the houses for habitation were received and in eight cases issued; in the other four cases the applications were withdrawn.

In addition one application that the work specified in a certificate had been carried out was received from the owner of the premises and a "Clearance Certificate" issued.

# REMOVAL OF AGED, INFIRM AND PHYSICALLY INCAPACITATED PERSONS.

Sec. 224 of the Public Health (London) Act, 1936 continues the power formerly contained in one of the London County Council (General Powers) Acts, for the Council to apply to a Magistrate for an order for the compulsory removal of aged, infirm or physically incapacitated persons living under insanitary conditions, to a hospital or institution.

During the year it was only necessary to apply for one order and the application was granted. In addition, however, the Council's Woman Sanitary Inspector was able to persuade twenty persons to enter hospital voluntarily and she also kept thirty-six other cases under observation but it was not necessary to have them removed to hospital.

## RAT REPRESSION AND DESTRUCTION.

The Borough Council employs a Rat Officer who is a whole time employee of the Public Health Department. He attends to complaints regarding rat and mice infestation in the Borough and takes steps necessary for their destruction. He also traces the manner in which the rats have gained entry to the premises and gives advice regarding the methods necessary to prevent a recurrence of the trouble. In all cases the Rat Officer works in close co-operation with the sanitary inspectors.

During the year 134 formal complaints regarding infestation by rats were received and 1,775 visits were made to dwelling houses and 519 visits to business premises in the Borough. In addition 680 visits to sewers in all parts of the Borough were made.

Out of the 134 formal complaints investigated, in 79 instances or 58.96 per cent. the rats gained admission to the premises owing to defective drains. The type of drainage defect was:—

Defective drains under premises			 42
Defective connections under footwa	у		 36
Direct from sewers	***	***	 1
Rats were caught as follows during the year	r:-		
In cage traps in sewers			 138
In dustbin traps in sewers			 219
By ferrets and break-back traps i	n premises		 323
Under footways			 135

The amount received by the Council from property owners for the services of the Rat Officer during the year ended 31st March, 1937, was £26 5s. and, in addition, £5 was credited to the department for the services of the Rat Officer to other departments of the Council.

### NATIONAL RAT WEEK.

During National Rat Week held from November 4th to 9th the Rat Officer paid special attention to the sewers in the Borough, and laid 16,500 baits in the stunt ends of 12" pipe sewers which are known to harbour rats in 112 streets. While, of course, it is difficult to to estimate the number of rats destroyed as a result of this action, it is satisfactory to note that the majority of the baits were taken.

A circular letter pointing out the need for the destruction of rats and giving advice concerning this, was circulated to all factories and large workshops in the Borough with a request that it should be displayed on the staff notice boards. A copy was also sent to the three newspapers circulating in the Borough.

A number of posters from the Ministry of Agriculture and Fisheries were purchased and exhibited on the Council's vehicles and outside public buildings during the week.

### NUISANCE FROM PIGEONS.

Section 121 of the Public Health (London) Act, 1936, continues the power of the Council to abate or mitigate any nuisance caused by pigeons having no owner, subject to the consent of the owner of the land or buildings upon which the birds congregate.

During the year special traps were set up on the roof of a private house, the Fulham Hospital and the Town Hall. As a result of this action 110 pigeons were caught and killed.

# SHOP ACT, 1934.

During the year, the sanitary inspectors made 388 inspections of shops under the abovenamed Act in connection with ventilation, temperature and sanitary conveniences. Thirty-two intimation and two statutory notices were served regarding these matters and five certificates under Section 10 of the Act exempting shops from the provision of sanitary conveniences were issued. All the certificates were issued on the ground of restricted accommodation making it impossible for the conveniences to be provided on the premises. In three cases, the use of water closet compartments as sculleries was discontinued, and in six cases water closet accommodation was provided as the result of action by the sanitary inspectors.

# INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

TABLE 11.

Premises.		Number of	
	Inspections.	Written Notices.	Occupiers prosecuted.
(1)	(2)	(3)	(4)
Factories (including factory laundries)	557	73	_
Workshops (including workshop laundries)	202	10	_
Workplaces (other than outworkers' premises)	260	21	-
TOTAL	1,019	104	

# DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES. TABLE 12.

	N	Tumber of defe	cts.	Number of
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	offences in respect of which Prose- cutions were instituted.
(1)	(2)	(3)	(4)	(5)
Nuisances under the Public Health Acts :-				
Want of cleanliness	35	35	_	_
Want of ventilation	11	11	_	_
Overcrowding	-	_	_	_
Want of drainage of floors	3	3		
Other nuisances	20	20		_
(insufficient	4	4	-	_
Sanitary accommodation { unsuitable or defective	15	15		_
not separate for sexes	4	4	_	_
Offences under the Factory and Workshop Acts :-				
Illegal occupation of underground bakehouses (s. 101)	92	_	_	_
Other offences (Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)	14	14	-	-
51 25 1015) Order, 1521.)				
TOTAL	106	106	_	_

# HOME WORK DONE BY OUTWORKERS.

In certain industries specified in the Home Work Orders made by the Home Secretary, if work is given out by employers or contractors to be done in private houses, the workers are known as Outworkers and the premises in which they work are subject to inspection by the Sanitary Inspectors of the Borough Council. In Fulham this duty is carried out by the Woman Sanitary Inspector. The object of the inspections is to prevent such work being done in unwholesome premises or in houses in which infectious diseases are present.

The following table gives the number of Outworkers' premises in the Borough, the nature of the work carried on and the classification of the Outworkers' premises into factories, workshops and workplaces:—

N		TOTAL.		
Nature of Work.	Factories	Workshops.	Workplaces.	TOTAL
Wearing Apparel Bootmaking Miscellaneous	5 1 1	$\frac{10}{1}$	44 40 20	59 41 22
TOTALS	7	11	104	122

### OUTWORK IN UNWHOLESOME PREMISES.

Natu	re of	Work.		Instances.	Notices served.	Prosecutions
Boot Making			 	3	3	_
Boot Making Wearing Apparel		···		5	_	_
TOTALS			 	8	3	_

#### TOTAL INSPECTIONS.

	]	Premise	s.		Male Inspectors.	Woman Inspector.	Total.
Factories				 	408	149	557
Workshops				 	65	137	202
Workplaces				 	90	170	260
Outworkers'		ises		 	-	125	125
TOTALS				 	563	581	1,144

Section IV.

HOUSING.

### GENERAL.

A general description of the growth of the Borough, of the occupations of the residents and the number of dwellings and families in the Borough, and an analysis of the 1931 Census in its bearing on housing, was given in last year's Report.

### OVERCROWDING.

The information revealed by the preliminary overcrowding survey was fully described in last year's Report. The detailed measurement of over 20,000 working class houses is now in progress and sufficient information has been accumulated to throw some rather depressing light on the standards of overcrowding laid down by the Act. These standards are as follows:—

	TABLE	I.	
Where a house consists of			Permitted number of persons
(a) one room			2
(b) two rooms			3
(c) three rooms			5
(d) four rooms			$7\frac{1}{2}$
(e) five or more rooms			10
			with an additional two in respect of each room in
			excess of five.
	TABLE	II.	
Where the floor area is			Permitted number of persons
(a) 110 sq. ft, or more			2
(b) 90 sq. ft. or more,			
	***		$1\frac{1}{2}$
(c) 70 sq. ft. or more,	but less	than	
90 sq. ft			1
(d) 50 sq. ft. or more,		than	1
70 sq. ft			Nil Nil
(e) under 50 sq. ft		***	Nil

The maximum permitted number of persons per house is that determined by applying these two tables. Thus, for example, a three roomed house in which each of the rooms were between 70 and 90 sq. ft., would accommodate three persons only; a similar house in which all the rooms exceeded 110 sq. ft., would accommodate five presons, not six, subject to the modification determined by the age of the persons.

The Act provides that in measuring a house for the purpose of estimating the "permitted number" the area of the living room shall be taken into account. In cottage property inhabited by one family and where a scullery in addition to a living room is available, this inclusion, though regrettable, may not have very serious consequences. In London, where the majority of working class houses are now occupied by two or more families, the inclusion of the living room

in ascertaining the "permitted number" becomes much more serious in its effects. Houses of this type may or may not have a common scullery on the ground floor, but the living room on the first floor has always to be used as a scullery, and all food, etc., stored in it. The rooms are usually of small size, so small that in many instances cooking stoves are erected on the landing outside the living room. Every room in a dwelling of this type is therefore used to the maximum and it has not been possible to exclude any room on the grounds that it was a scullery.

The survey results of 1,054 houses have been specially analysed with a view to throwing light on the present occupation and the maximum possible occupation allowable by the standards of the Housing Acts. These results can only be described as startling and are set out in the following table:—

### TABLE 13.

(i)	Structurally separate dwellings surveyed	24,502
(ii)	Population in "equivalent units"	115,422
(iii)	Number of structurally separate dwellings, Census	96 799
(iv)		
(iv)	Actual population, Census 1931	
(v)	Population in "equivalent units", Census 1931	
(vi)	Number of houses analysed	1,054
(vii)	Percentage of working class houses analysed	4.3%
(viii)	"Equivalent population" in houses analysed	5,5181
(ix)	"Permitted number" applicable to houses analysed	$11,177\frac{1}{2}$
(x)	"Permitted number" applicable to all dwellings surveyed, on basis of the 1,054 especially analysed	259,840
(xi)	"Permitted number" applicable to all dwellings surveyed, on basis of the 1,054 especially analysed, with	100 550
	allowance for a kitchen/living room	186,557

#### TABLE 14.

(i)	Number of occupied rooms in Fulham, Census 19	931	139,943
(ii)	"Equivalent units" per room, Census 1931		1.004
(iii)	"Equivalent units" per room applicable to all dwe ings, on basis of the 1,054 especially analysed	ell-	1.85
(iv)	Re-housing standard, persons per room		1.5

Streets containing the 1,054 houses especially analysed.

Allestree Road	Vernon Street
Biscay Road	Anselm Road
Stamford Road	Chesson Road
Ewald Road	Edenvale Street
Seddlescombe Road	Mimosa Street
Epple Road	Lindrop Street
Claybrook Road	St. Dunstan's Road
	Avonmore Road

It will be noted that the houses analysed amount to 4.3% of the total working class dwellings surveyed, that they actually contain a population reckoned as "equivalent units" of  $5.518\frac{1}{2}$ , and that the "permitted number" applicable is no less than  $11.177\frac{1}{2}$ , i.e. more than double the existing number. If the kitchen/living rooms had been excluded in calculating the "permitted number" for these dwellings, the total permitted population in terms of "equivalent units" would amount to  $8.025\frac{1}{2}$ .

A calculation has been made of the "permitted number" for all the working class houses in the Borough on the basis of the information revealed by the analysis of these 1,054 representative houses. This amounts to no less than 259,840, as compared with an actual population at the Census of 1931 of 140,639 "equivalent units." The exclusion of the kitchen/living rooms in calculating the "permitted number" would have reduced this potential maximum population of the working class houses of the Borough, to 186,557.

Most house owners have now been supplied with the "permitted number" for inclusion in the rent books of their tenants, the "appointed day," after which fresh overcrowding becomes an offence in the Borough, being 1st July, 1937. It has been an encouraging, if unusual, experience to receive from them many grumbles and protests at what they regard as an unreasonably high figure for the dwellings which they own. It has been pointed out to the Department by owners on many occasions that tenants' knowledge of the maximum "permitted number" may lead to undesireable sub-letting.

Consideration of these figures wll show that the present overcrowding standards can only be of a temporary nature. Low as they undoubtedly are they have already revealed the fact that more than 1,700 families are overcrowded, and will need the provision of larger houses. Even that provision will not be easy within the circumscribed area of the Borough.

This rather pessimistic review should perhaps conclude with a reminder that the re-housing standards which the Council have to apply are better than the overcrowding standards, and allow a maximum occupation of Council dwellings of 1.5 persons per room. The revealed maximum "permitted number," from the 1,054 houses analysed, works out as 1.85 "equivalent units" per room.

### LONDON COUNTY COUNCIL ESTATES.

During the year 1936, 29 families were allotted houses on London County Council Estates on the recommendation of the Public Health Department, in addition to other families applying direct to the County Council. The following table shows the number of families accommodated on the various Estates:—

TABLE 15.

Estate.	on recommen-	Accommodated on applying direct to the London County Council.	Total Fulham families accommodated.
EAST HILL, Wandsworth.	14	40	54
WATLING, Middlesex.	139	86	225
DOWNHAM, Kent.	54	20	74
BECONTREE, Essex.	109	450	559
ST. HELIER, Morden.	136	292	428
HANWELL.	6	15	21
BROXHOLME HOUSE, Fulham.	1	46	47
ROEHAMPTON, CASTELNAU, CENTRAL LONDON, Etc.	150	541	691
TOTALS:	609	1490	2099

During the year 110 applications were made to the Public Health Department of the Borough for accommodation on the London County Council Estates and were dealt with as follows:—

In addition 34 applicants made enquiries but did not return their application forms or notify the Department of their reasons for not doing so.

<sup>81</sup> families were recommended to the County Council for preferential consideration; five of them subsequently refused the accommodation which was offered.

<sup>29</sup> families proved upon enquiry to be unsuitable for recommendation, but 12 of those applications were forwarded to the London County Council for inclusion in the "ordinary list" of applicants.

# HOUSING WORK DURING 1936.

A summary of the housing work carried out during the year is given on pages 42-44.

### HOUSE-TO-HOUSE INSPECTION.

Details of house-to-house inspections carried out during the year will be found in the following table which gives the housing statistics in the form desired by the Minister of Health.

### TABLE 16.

	TABLE 10.	
1.	(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	5,939
	(b) Number of inspections made for the purpose	24,156
	(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regula-	
	tions, 1925	960
	(b) Number of inspections made for the purpose	4,060
	(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	257
	(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	3,438
2.	Remedy of Defects during the year without Service of Formal Notices:	
	Number of dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	2,688
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	79
	(2) Number of dwelling-houses which were rendered fit after service of formal notice:—	
	(a) by owners	67
	(b) by Local Authority in default of owners	10
(b)	Proceedings under Public Health Acts:-	
(-)	(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	649
	(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—	
	(a) by owners	396
	(b) by Local Authority in default of owners	

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

54

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

# LONDON COUNTY COUNCIL BYE-LAWS WITH RESPECT TO HOUSES DIVIDED INTO SEPARATE TENEMENTS.

During the year 10 notices were served on tenants and owners regarding failure to carry out the provisions of the Bye-laws.

### UNDERGROUND ROOMS.

During the year Closing Orders were made by the Council in respect of 54 underground rooms which did not comply with the Regulations. The Orders were made under Section 20 of the Housing Act, 1930, as amended and extended by Section 84 of the 1935 Act, which prohibits the use of the rooms for human habitation.

### CLEARANCE AREAS.

During the early part of the year a careful survey of the Borough was made to ascertain which houses were unfit for human habitation in accordance with the Clearance Area Sections of the Housing Acts. A definite programme was formulated and 7 Areas, involving 88 houses and 131 families were represented by me and the following Clearance Orders subsequently made:—Field Road Area (No. 1), Field Road Area (No. 2), Mulgrave Road Area, Lanfrey Place Area and Hawes Buildings Area, on the 24th June, 1936, and Carnwath Road Area, Sotheron Road Area and Gorleston Street Area, on the 22nd July, 1936. Formal notices were forwarded to the London County Council as required by Section 16 (5) of the Housing Act, 1930, and the County Council intimated that they themselves intended to deal with the Gorleston Street Area, which adjoins their Avonmore Road School. A Public Enquiry was held by the Minister of Health into the Council's application for confirmation of the above orders during the month of November and the Clearance Orders were confirmed on the 27th April, 1937, with the exception of three houses in the Carnwath Road Area.

Some photographs illustrating typical conditions met with in the Clearance Areas in the Borough are reproduced at the end of this section, together with a photograph showing the type of flats which have been erected by the Borough Council to re-house families displaced by the slum clearance programme.

# DEMOLITIONS UNDER PART 2, HOUSING ACT, 1930.

Two houses were demolished in consequence of Orders made by the Council during the year.

### COMMON LODGING HOUSE.

There is one Common Lodging House in the Borough, accommodating 36 men, and the Inspector made 13 inspections of the premises during the year.

### DISINFESTATION.

During the year the household effects of 22 families were disinfested by the H.C.N. process prior to transfer to new dwellings from slum clearance areas. The bedding was taken to the Fulham Disinfecting Station and treated by steam before delivery to the new flat.

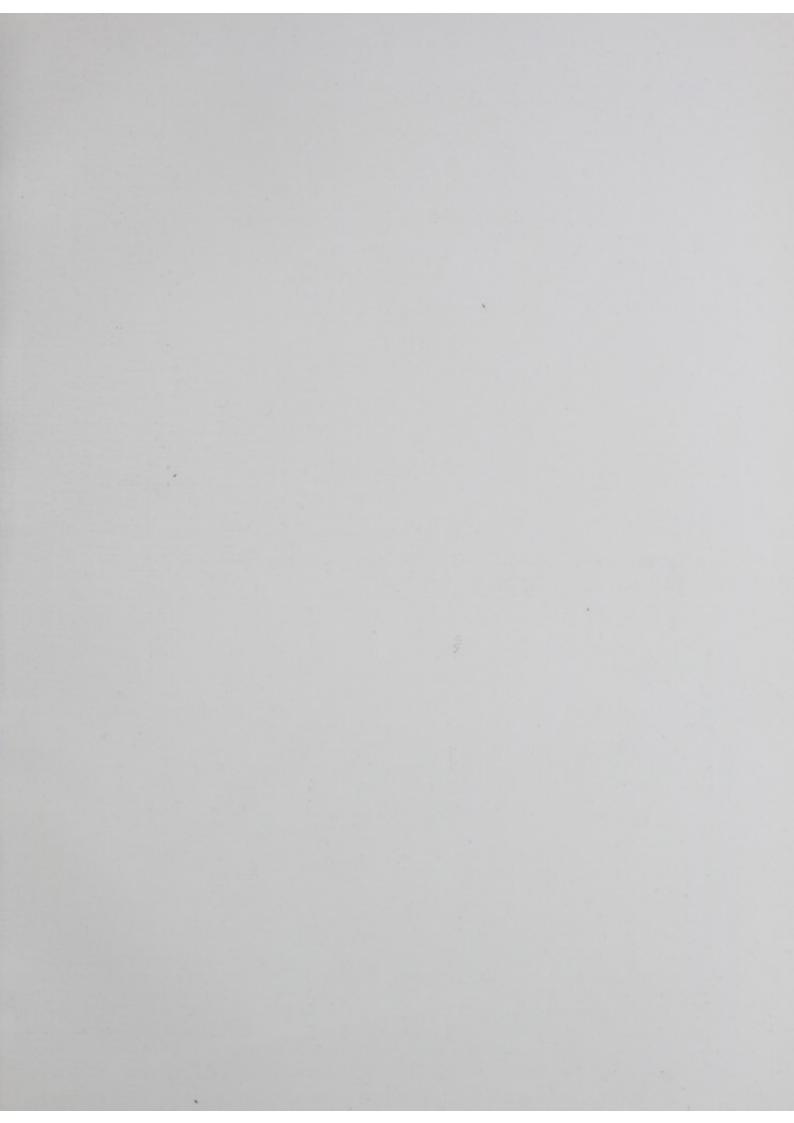
All woodwork from condemned houses in the Clearance Areas was burnt on the site and all other building materials were treated before removal.

For the treatment of infested premises, the usual procedure is to have the room stripped of all woodwork and then fumigated by means of sulphur candles. In some cases where fumigation was inconvenient the rooms were sprayed with a formalin or other solution or tenants were allowed the use of a spray filled with solution on paying a deposit of 2s. 6d., which was refunded when the spray was returned. A total of 78 issues of such sprays were made during the course of the year.

During the year 342 rooms were fumigated or sprayed on account of vermin.

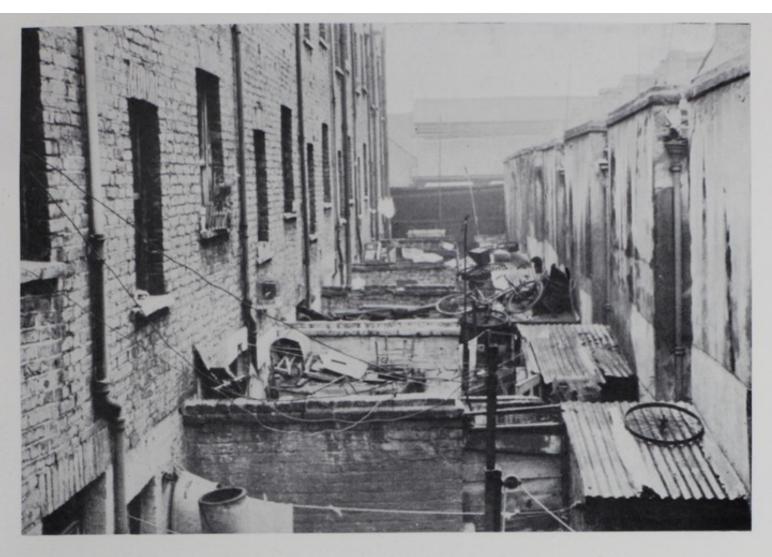
# THE VITAL STATISTICS OF WORKING CLASS FLATS.

Unfit houses produce ill-health, particularly of a respiratory character. This cannot always be shown in figures, but it is of interest to examine the vital statistics of the fairly stable populations living in modern blocks of working class flats. The influence of good nutrition on these statistics has been strikingly shown by Dr. McGonigle, of Stockton-on-Tees, in his comparison of the vital statistics of a re-housed slum population before and after re-housing with a similar population living under continued bad housing conditions.





KEIR HARDIE HOUSE, FULHAM PALACE ROAD. (RE-HOUSING).





TYPICAL VIEWS IN CLEARANCE AREAS.



Dr. McGonigle showed conclusively that where the family income per head is low, good housing alone will not prevent ill-health. Fortunately, these considerations do not apply to the statistics of the working class flats given in the following table:—

TABLE 17.

	Fulham Borough.	Fulham Court.	Lewis Trust, S.W.6.	Lewis Trust, W.14.	Peabody Buildings
Population :—					
(a) Total	141,300	2,010	1,356	762	598
(b) Under 10	16,291	577	388	202	67
(c) Per cent. under 10	11 ·5	28 .7	28 ·6	26 · 5	11 .2
Births	2,111	21	12	2	4
Birth Rate	14 -9	10 .4	8.8	2.6	6 .7
Deaths :—					
(a) Total	1,786	6	5	3	4
(b) Under 10	191	1	1	3 2*	
(c) Under 1	136	1	i	_	_
Total Death Rate (crude)	12.6	3.0	3.7	3 .9	6 .7
Death Rate under 10 on					
population under 10	11 ·1	1.8	2.6	9.9	
Infant Mortality Rate	64	48	-83	-	-
Diphtheria, No. of Cases :—					
(a) Total	179	4	3	4	_
(b) Under 10	138	4	3	4	_
Attack rate per 1,000 :—					
(a) Total	2.6	2.0	2 .2	5.3	_
(b) Under 10	8.5	6 -9	7 -7	19.8	_
Scarlet Fever, No. of Cases :-					
(a) Total	323	13	3	1	1
(b) Under 10	223	11	1	_	-
Attack rate per 1,000 :—					
(a) Total	2 · 3	6.5	2.2	1.3	1.7
(b) Under 10	13 • 7	19.1	2.6	_	_

Section V.

INSPECTION AND SUPERVISION OF FOOD.

### MILK.

During the year 1936, 566 samples of milk (including two of machine-skimmed milk) were purchased by Inspector Gammack and submitted to the Council's Public Analyst for chemical analysis.

Of these, 243 were purchased from milk vendors in the streets during the early hours of the morning, 61 were taken at the early morning delivery to hospitals, etc., in the Borough which are under the control of the London County Council and 96 were purchased on Sundays and public holidays, three of the latter (Nos. 287, 288 and 347) being adulterated.

Six, or 1.06% of the 566 samples of milk examined, were reported as adulterated and the following table gives details of the results of the analyses of the samples and the action taken:—

TABLE 18.

Sample No.	Result of Ana	alysis.			Action taken.	Result.	
287	1.4% added water 13.7% deficient in fat		***		Prosecution	Fined £10 0s. 0d., cost £3 3s. 0d.	
288	5.5% deficient in fat				Prosecution	Dismissed under P.O. Ac on payment of £2 2s. 0d costs.	
291				Further samples purchased from same dairyr			
347	56.6% deficient in fat			***	officer too unreliable to	urchased milk for sampling o justify legal proceedings ration as retail purveyor o blic Health Committee.	
552	2% deficient in fat				Vendor cautioned.		
646	Contained :—2.99 % Fat, fat.	8.57 %	Solids	not	Vendor's attention drawn	to result of analysis.	

Note:—The vendors of samples Nos. 287 and 288 were formerly registered as dairymen in Fulham but have now discontinued trading and the vendor of sample No. 347 who was registered in Hampstead was refused registration as a retail purveyor of milk in Fulham.

Particulars of the number and percentage of adulterated samples of milk for the years 1928 to 1936 inclusive are given in the following table:—

TABLE 19.
SAMPLES OF MILK ADULTERATED.

Year.	1928	1929	1930	1931	1932	1933	1934	1935	1936
No. examined	591	565	548	540	543	641	554	580	566
No. adulterated	15	28	4	3	4	18	6	2	6
Percentage of adulteration	2.5	4.7	0.7	0.55	0.74	2 .8	1.1	0.3	1 .06

As in previous years, samples of milk were taken in course of delivery to the hospitals, institution and schools in the Borough which are under the control of the London County Council. The following were taken during 1936 and no adulterations were reported.

TABLE 20.

					Samples taken for				
	nstitutio	on.			Chemical Analysis.	Bacteriological Examination			
Fulham Hospital			 		23	18			
Fulham Institution			 		6	6			
Western Hospital			 		30	18			
Elizabethan Open Air	School		 	·	2	2			
L.C.C. Schools			 		29	31			

#### AUTOMATIC MILK MACHINES.

There are in the Borough three automatic milk machines fixed to the doors of registered milkshops from which milk is obtainable after ordinary trading hours. During the year under review ten samples were purchased from these machines for chemical analysis and in all cases the milk was genuine.

#### COMPOSITION OF MILK SAMPLES.

The following table gives the monthly average composition of all samples of milk (excluding machine-skimmed milk) taken during 1936, and it is satisfactory to note that the quality of the milk supplied in Fulham is well maintained and compares very favourably with the standards of the Ministry of Agriculture and Fisheries:—

TABLE 21.

Month.	No. of Samples.	Fat.	Solids not Fat.			Remarks.		
January February	<b>4</b> 8 48	3·57% 3·42%	8 ·89% 8 ·86%					
March	51	3 .44%	8.77%	Including	3 a	dulterated	samples.	
April	- 51	3 .42%	8.71%					
May	54	3 .42%	8.77%	"	1	,,	,,	
June	52	3.51%	8.94%		1			
July	36	3.58%	8.81%	,,	1	,,	,,	
August	39	3.60%	8.73%	"	1	,,	,,	
September	44 46	3.59% 3.94%	8 ·84% 8 ·93%					
October November	49	3.90%	8.88%					
December	46	3.80%	8.77%					
	564	3 .59%	8 .82%	2				
Legal Standards		3 .00%	8 .50%					
Average composition	on of nor-	3 .7%	8.9%					

## MILK AND DAIRIES (AMENDMENT) ACT, 1922, AND MILK AND DAIRIES ORDER, 1926.

Article 6 of the Milk and Dairies Order, 1926, requires local authorities to keep registers of dairymen and dairy premises; while Section 2 (1) of the Milk and Dairies (Amendment) Act, 1922, gives the Council power to refuse to enter any person's name on the register of retailers of milk and dairies if they are satisfied that the public health is, or is likely to be, endangered by any act or default of the person in relation to the quality, storage or distribution of the milk.

During the year under review, a dairyman—Albert James Martin—who occupied registered premises in the Borough of Hampstead, applied for registration as a retail purveyor of milk in Fulham. The application was regarded with suspicion and careful enquiries revealed the fact that this man had been convicted of many offences under the Acts and Orders relative to milk. It was from this man that sample No. 347 referred to in Table 18, was purchased. The applicant

was given notice, as required by Section 2 of the Milk and Daires (Amendment) Act, 1922, to appear before the Public Health Committee to show cause why his application for registration should not be refused but he failed to attend the meeting and discontinued retailing milk in the Borough.

No contraventions of Article 31 (2) of the Milk and Dairies Order, 1926, which requires that the bottling of milk shall be carried out only on registered premises were reported during the year under review. This is due in large measure, to the fact that very few dairymen carry "loose" milk in hand-cans or churns.

There were on the register at the end of 1936, 107 dairymen occupying 107 registered dairies within the Borough. In addition, there were 29 dairymen retailing milk in Fulham from premises situated and registered in adjoining districts.

The following are details of the changes which took place during 1936:-

No of Dairymen on the Register: -

No. on Register at 31st December 1935 No. who transferred their business or discontinue	d selling	milk	112
during the year 1936			13 .
No. of Registrations granted during 1936			99 8
No. on Register at 31st December 1936			107

The sale of milk in properly closed and unopened receptacles from premises not registered as a dairy has been held to make it compulsory for such shopkeepers to be registered as dairymen. The expression "dairy" as defined in the Milk and Dairies (Consolidation) Act, 1915, includes "a milk store, milk shop, or other place from which milk is supplied on, or for, sale or in which milk is kept or used for the purpose of sale or manufacture into butter, cheese, dried milk or condensed milk for sale and in the case of a purveyor of milk who does not occupy any premises for the sale of milk, includes the place where he keeps the vessels used by him for the sale of milk, but does not include a shop from which milk is not supplied otherwise than in the properly closed and unopened receptacles in which it was delivered to the shop, or a shop or other place in which milk is sold for consumption on the premises only."

The expression "dairyman" includes any occupier of a dairy or any purveyor of milk and the expression "purveyor of milk" includes a seller of milk, whether wholesale or by retail.

During 1936, registration as purveyors of milk in properly closed and unopened receptacles was granted to seventeen persons and there are now 162 names on the Register.

## INSPECTION AND SUPERVISION OF DAIRIES AND MILKSHOPS.

During the year under review, the Sampling Officer made 451 visits to dairies and milkshops and served 10 written notices and in addition gave many verbal intimations of defects noted during his inspections.

Every dairy in the Borough in which milk bottle washing and filling is carried out is now provided with means for sterilizing vessels, bottles, etc.

Milk and Dairies (Consolidation) Act 1915-Section 4. This section empowers local authorities to stop the supply of milk from any dairy if such milk causes, or is likely to cause, tuberculosis. During 1936, it was not necessary to take any action under this Section.

Similarly, there was no evidence that milk sold in the Borough was infected by persons suffering from infectious diseases, so that no action was taken under Article 18 of the Milk and Dairies Order, 1926.

#### MILK (SPECIAL DESIGNATIONS) ORDER, 1936.

The licences granted by the Borough Council during 1936 were as follows: -Number of Licences to sell Certified Milk 8 2 Number of supplementary Licences to sell Certified Milk ... 34 Number of Licences to sell Grade A (Tuberculin Tested) Milk Number of Supplementary Licences to sell Grade A (Tuberculin Tested) Milk 3 ... ... Number of Licences to sell Grade A (Pasteurised) Milk Number of Supplementary Licences to sell Grade A (Pasteur-1 ised) Milk ... ... Number of Licences to sell Pasteurised Milk 36 Number of Supplementary Licences to sell Pasteurised Milk 5 Number of samples taken in accordance with the instructions 4 of the Ministry of Health

### BACTERIOLOGICAL EXAMINATION OF MILK.

The Milk (Special Designations) Order, 1936, which came into operation on 1st June, 1936, repealed the Milk (Special Designations) Orders, 1923 and 1934.

The new Order simplifies, to some extent, the nomenclature of designated milks, the new grades being as follows:—

- (a) Tuberculin Tested Milk. This is milk from tuberculin tested herds and takes the place of "Certified" and "Grade A (Tuberculin Tested)" which were recognised by the old order. The word "Pasteurised" may be added to the designation "Tuberculin Tested" if the appropriate conditions have been complied with, or the word "Certified" if the milk is bottled at the place of production.
- (b) Accredited Milk is raw milk from cows which have passed a veterinary examination; it is bottled on the farm or elsewhere and is identical with that previously designated "Grade A."

It cannot be treated by heat and still retain its designation. If bottled at the place of production the words "Farm Bottled" may be added to the designation.

(c) Pasteurised Milk is milk which has been pasteurised by being heated to a temperature of between 140°F and 150°F for at least 30 minutes and then immediately cooled to a temperature of not more than 55°F.

It will be noted that there are therefore now six designations applicable to milk, and these, together with details of the bacteriological standards prescribed by the new order, are as follows:—

#### Designation.

- 1. Tuberculin Tested Milk
- 2. Tuberculin Tested Milk (certified). ...
- 3. Accredited Milk
- 4. Accredited Milk (Farm bottled). ...
- 5. Tuberculin Tested Milk (Pasteurised). ...
- 6. Pasteurised Milk ...

## Bacteriological standard.

This milk must not decolourise methylene blue within  $4\frac{1}{2}$  hours if the sample is taken between 1st May and 31st October, or within  $5\frac{1}{2}$  hours if taken between 1st November and 30th April. It must not contain B. Coli in 1/100th millilitre.

Must not contain more than 30,000 bacteria per millilitre.

Must not contain more than 100,000 bacteria per millilitre.

In addition to the bacterial plate count, the Ministry of Health recommend that the Phosphate test should also be applied to milk which is sold under the designation "Pasteurised." By this test, it is possible to detect even relatively small errors in pasteurisation technique. e.g. heating the milk at 143°F instead of 145°F, or heating for 20 minutes instead of 30 minutes, or the addition of as little as 0.3% of raw milk to the pasteurised bulk.

Several important changes are laid down in the new Order, and as will be observed from the above, the plate count for raw milks is no longer recognised. Other amendments are (a) the term "bottle" includes any container of a capacity not exceeding one quart and of a type approved by the licensing authority; thus cartons may now be used for designated milks; (b) the cap used for closing the bottle need not bear the day of production of the milk, and (c) the licensing authority may dispense with the payment of licence fees.

During the year under review, 105 samples of graded milk, 27 of ungraded and 6 of raw neilk were purchased by the Sampling Officer for bacteriological examination. Forty-six of the samples were purchased from milk vendors in the streets in the early hours of the morning and 44 were taken at the early morning delivery to the hospitals, etc., in the Borough which are controlled by the London County Council.

Of the total of 138 samples examined 41 were especially tested by animal inoculation for the presence of tubercle bacilli under Section 5 of the Milk and Dairies (Amendment) Act, 1922, and in none of the samples so examined was tubercle bacilli detected.

The following table gives the number of the various types of milk examined: -

TABLE 22.

					Examination Made.				
	Туре	of Mil	k.		Bacteriological Count only.	Bacteriological count and Animal inoculaton for tubercle bacilli.			
Certified				 	6	_			
Tuberculin Teste	ed .			 	3	_			
Grade A (Tubero	ulin Tes	sted)		 	7	5			
Tuberculin Teste	d (Paste	eurise	d)	 	1	1			
Grade A (Pasteu	rised)			 	3	_			
Pasteurised	>			 	85	21			
Ordinary				 	25	9			
Carton				 	2	1			
Raw				 	6	4			
TOTALS				 	138	41			

Certified Milk and Tuberculin Tested Milk. Of the nine samples examined, four were taken at the request of the Ministry of Health, one of which was reported to contain 86,500 bacteria per c.c., the legal maximum under the 1923 Order being 30,000. The matter was dealt with by the Ministry.

Grade A (Tuberculin Tested) Milk. Seven samples were examined during 1936 and the average bacterial count was 18,671 per c.c.—well below the legal maximum of 200,000 bacteria per c.c.

Tuberculin Tested Milk (Pasteurised). One sample taken and reported to contain 1,820 bacteria per c.c.—legal maximum 30,000 per c.c.

Grade A (Pasteurised) Milk. The results of three samples examined were excellent, the bacterial counts being respectively 260, 280 and 1,560 per c.c.

Pasteurised Milk. A maximum of 100,000 bacteria per c.c. was prescribed for this milk by the Order of 1923 and none of the 85 samples examined during 1936 was reported to contain bacteria in excess of this standard, the lowest count being 690 and the highest 43,000 bacteria per c.c.

Ordinary Milk. This is milk which has been treated by heat although not sold under the designation "Pasteurised." There is of course, no bacteriological standard for such milk, and it is satisfactory to record that the lowest count was reported to be 8,860 bacteria per c.c., and the highest 111,660 per c.c., while the average for the 25 samples examined was 41,777 bacteria per c.c.

In addition to the above, six samples of raw milk and two of carton milk were examined bacteriologically and satisfactory reports received.

#### FOOD AND DRUGS-ADULTERATION, ETC.

During the year, one thousand articles of food and drugs were purchased by Inspector Gammack in his capacity as sampling officer and were submitted to the Public Analyst for analysis.

The samples were taken under the Food and Drugs (Adulteration) Act, 1928, and other Acts, Regulations and Orders relating to foodstuffs.

Of these, 26 or 2.6% were adversely reported upon and full details of the adulterated samples will be found in Table 18 (milk) and Table 24 (other articles).

The usual practice of reporting all adulterated samples to the Public Health Committee was continued during 1936 and the appropriate action taken.

In the table which follows will be found details of the number and percentage of adulterated samples of all articles of food during the years 1928 to 1936 inclusive.

TABLE 23.

# SAMPLES OF ALL FOOD (INCLUDING MILK) REPORTED AS ADULTERATED ON CHEMICAL ANALYSIS.

Year.	1928	1929	1930	1931	1932	1933	1934	1935	1936
No. examined	1,000	1,000	1,000	1,000	1,001	1,000	1,000	1,002	1,000
No. adulterated	31	44	40	22	29	35	43	40	26
Percentage of adulteration	3.1	4.4	4.0	2.2	2.89	3.5	4.3	3 -99	2.6

During 1936, one sample of tinned crab and one of tinned salmon were purchased by the Sampling Officer and submitted to the Clinical Research Association for examination for the presence of organisms of the food poisoning (Salmonella) group, but in neither sample were food poisoning or other micro-organisms of importance found.

# PUBLIC HEALTH (CONDENSED MILK) REGULATIONS, 1923 & 1927 AND PUBLIC HEALTH (DRIED MILK) REGULATIONS, 1923 & 1927.

Ten samples of condensed milk were purchased during 1936 and in all cases the milk, labelling of tins, etc, were in accordance with the Regulations.

## PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS, 1925-1927.

During the year under review samples were examined for the presence of preservative and no contraventions were reported.

For a detailed report on the result of the analysis of food and drug samples see the report of the Council's Public Analyst on pages 80—83.

#### TABLE 24.

DETAILS OF ACTION TAKEN IN CONNECTION WITH SAMPLES (EXCLUDING MILK)
REPORTED TO BE ADULTERATED OR NOT IN ACCORDANCE WITH PRESCRIBED
STANDARDS.

Sample No.	Article.	Result of Analysis.	Action taken.
235	Butter	1% excess water	Vendor cautioned.
236	Butter	1 % excess water 1 % excess water	Vendor cautioned.
238	Ground Nutmegs	Contained 4 % St. Vincent Arrowroot	Informal sample—see 246.
246	Ground Nutmegs	Contained 2% St. Vincent Arrowroot	Vendor cautioned.
281	Powdered Rhubarb	Contained 3 % excess of ash	Vendor's attention drawn to matter.
312	Malt Vinegar	Consisted of artificial vinegar	Vendor cautioned.
559	Gelatin	Contained 1/30th grain of arsenic per pound.	Informal sample—see 634. Vendors attention drawn to matter.
568	Allspice	Consisted of pickling spice	Vendor's attention drawn to matter.
582	Black Draught	Contained 32% excess magnesium sulphate.	Vendor cautioned.
634	Gelatin	Contained 1/30th grain of arsenic per pound	Vendor cautioned and remainder of stoc collected by wholesalers.
731	Tinned Sild	Contained 2.5 grains of tin per lb.	
733	Tinned Sild	Contained 2.2 grains of tin per lb.	
734	Tinned Sild	Contained 2.8 grains of tin per lb.	Remainder of stock—4,704 tins—su
735	Tinned Sild	Contained 2.2 grains of tin per lb.	rendered.
736	Tinned Sild	Contained 3.5 grains of tin per lb.	
737	Tinned Sild	Contained 2.8 grains of tin per lb.	
752	Gin	Contained 0.9% by weight excessive water.	Vendor cautioned.
753	Gin	Contained 0.5% by weight excessive water.	Vendor cautioned.
764	Vinegar	Was 12% deficient in Acetic acid	Vendor cautioned.
940	Shredded Suet	Contained 20% rice starch—15% only allowed.	Vendor cautioned.

## INSPECTION OF BAKEHOUSES AND BAKERS' SHOPS.

At the end of 1936 there were 61 registered bakehouses in the Borough of which 33 were underground.

Of the 61 bakehouses 49 are factories and 12 are workshops; in addition there are 13 retail bakers' shops in the Borough without bakehouses attached.

During 1936, 313 visits were made and 51 notices served, principally for the limewashing and cleansing of the interior of bakehouses. In addition a large amount of cleansing is carried out as the result of verbal intimation to the occupiers.

### INSPECTION OF MEAT AND OTHER FOODS AND OF FOOD PREMISES.

This is extremely important for the health of the community. The inspections are made for many reasons, but principally:—

- (1) To ensure that articles of food are sound, wholesome, free from disease and fit for the food of man.
  - (2) That the premises are in good sanitary condition and clean.
- (3) That the persons engaged in food occupations are clean in their persons and free from disease and that they carry out their duties in a hygienic and wholesome manner.

The public can assist materially by encouraging clean food shops and discouraging any that are not obviously clean and hygienic.

The following table shows the number of inspections of the various types of food premises: -

Milk shops and dair	ies			 ***	453
* "				 	65
				 	183
Fish shops				 	33
Fried fish shops				 	45
Fish curing premises				 	26
Greengrocers' and F		rs' Pre	emises	 	93
Cooked meat shops				 	12
Eel and Pie shops				 	9
Dining rooms and ea				 	126
Restaurants				 	55
Licensed Premises				 	92
Street Traders' Stora				 	30
Slaughter Houses				 	47
Factory Bakehouses					283
Workshop Bakehous		111			18
		***	***	 	12
Workplace Bakehous			***	 	53
Bakers' shops		410000	included above	 	11
Food factories other				 	139
Other food premises			•••	 	100
			*		1,785

The inspection of food shops and of food is carried out by the District Inspectors as well as by the Sampling Officer. Two inspectors are on duty two evenings a week inspecting the North End Road Market, the Fulham Market and other street markets in addition to shops. All the male Inspectors take their turn with this duty.

#### SLAUGHTER-HOUSE.

There is now one licensed slaughter-house in the Borough, and the following is a summary of the work performed in connection with these premises during the year:—

Animals Slaughtered	 ***			179 sheep.
Visits to slaughterhouse	 	***		47
Meat condemned	 		1 live	r (2 lbs.) abcess.
			4 prs	lungs abcess.
			2 prs	. lungs strongylosis

#### PREMISES USED FOR THE PREPARATION OF FOOD.

On and after October, 1936, the powers formerly exercised under the London County Council (General Powers) Act of 1932, with regard to the registration of premises used for the manufacture, storage or sale of ice cream and for the preparation of certain specified articles of food, have been exercised under Section 187 of the Public Health (London) Act, 1936.

At the end of 1936 there were 118 premises on the Register relating to the preparation of preserved foods and 227 premises on the Register relating to the manufacture or sale of ice cream under the following headings:

Premises registered for manufacture, storage and sale of ice cream	 93
Premises registered for storage and sale of ice cream	 120
Premises registered for the manufacture and storage of ice cream	 10
Premises registered only for the manufacture of ice cream	 4
	997

#### UNSOUND FOOD.

The undermentioned articles of food examined at the request of the owners were condemned and destroyed during the year:—

Tomatoes	180 lbs.	Potatoes	10 cwt.
Chilled beef	159 lbs.	Bacon	61 lbs.
Nougat	5 bars.	Smoked fillets	7 lbs.
Tinned herrings	194 tins.	Cod	1
Winkles	5 bags.	Onions	34 bags.
Corned beef	122 tins.	Shredded wheat	4 pkts.
Tinned ham	8 tins.	Crab dressing	14 tins.
Cod fillets	4 boxes.	Honey	3 pots.
Skate	105 lbs.	Evaporated milk	17 tins.
Lemon curd	1 pot.	"Cremo" oats	5 pkts.
Tinned salmon	8 tins.	Baked beans	3 tins.
Tomato purée	3 tins.	Cream	2 tins.
Sardines	2 tins.	Oranges	2
Tinned pilchards	3 tins.	Wheatschop	1
Tinned bristling	2 tins.	Peas	2 tins.
Syrup	2 tins.	Anchovy Paste	2 jars.
Gelatine roll	2 tins.	Tinned fruit	38 tins.

No food was seized as unfit for consumption.

## PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1925.

One notification was received from the Port of London Sanitary Authority under these Regulations relating to bags of damaged sugar. The sugar was inspected and seen in the process of refining by one of the sanitary inspectors.

#### THE PHARMACY AND POISONS ACT, 1933,

#### THE POISONS RULES, 1935.

This Act, together with the Rules made under it, came into full effect on 1st May, 1936, and by it all the existing legislation relating to the sale etc., of poisons was repealed.

The law relating to the sale, supply, storage and transport of poisons has been considerably revised and the Act establishes a Poisons Board with the duty of preparing a list of the substances to which the Act is to apply. This list known as the Poisons List, was confirmed by the Home Office on 21st December, 1935, and consists of two parts. In Part I are those substances, the sale of which is restricted to the premises of "authorised sellers of poisons," i.e. chemists and pharmacists, and in Part II are those poisons in common use which may be sold from premises of "authorised sellers" and also "listed sellers of poisons," i.e. shop-keepers other than chemists, provided the name of the person and the address of the premises are entered in a list kept by the local authority of the area in which the poisons are sold.

The principal changes in the law are: -

- 1. The sale of certain poisonous preparations used in agriculture and horticulture (not arsenical weed killers) is now permitted to any trader who is registered with the local authority.
- 2. Traders so registered are now permitted to sell carbolic disinfectant containing up to 60% of phenols. Formerly the sale of liquids containing more than 3% of phenols was restricted to chemists' shops.
- 3. The sale of ammonia of over 5% strength, sulphuric acid, nitric acid, potassium quadroxalate (salts of lemon), hydrochloric acid (spirits of salts) and of disinfectants containing less than 3% of phenols which has hitherto been unrestricted except for requirements in regard to labelling and form of bottle, is now restricted to authorised sellers and listed sellers of poisons only.
- 4. The sale of potasium hydroxide (caustic potash) and sodium hydroxide (caustic soda) is controlled for the first time and may only be sold by authorised and listed sellers of poisons.
- 5. The only poisons which listed sellers are permitted to retail from "bulk" (i.e. repack) are ammonia, hydrochloric acid, nitric acid, potassium quadroxalate and sulphuric acid. All other Part II Poisons may be sold by listed sellers only in closed containers as closed by the manufacturer or wholesaler from whom they have been obtained.
- 6. The sale of Part II poisons must be effected on the premises specified in the local authority's list and the previous practice of hawking carbolic disinfectants from barrows, becomes, therefore, illegal. No poison may be sold from an automatic machine.

It is the duty of the Pharmaceutical Society of Great Britain to secure compliance by authorised sellers of poisons with the provisions of the Act and Rules and local authorities control listed sellers of poisons and other persons not being authorised sellers of poisons. A fee of 7s. 6d. is payable to the local authority by every person for entry of his name in the list in respect of each set of premises on which he is entitled to sell poisons and thereafter an annual fee of 5s. is payable for the retention of his name on the list for each set of premises.

The local authority is empowered to refuse to enter, or to remove from the register, the name of any person who fails to pay the prescribed fee or who, in the opinion of the authority is, for any reason relating either to himself or to his premises, not fit to be on the list. There is right of appeal against the decision of the local authority.

At the end of 1936, there were 98 names on the Register of Listed Sellers of Part II poisons and Inspector Gammack, who is carrying out the provisions of the Act in Fulham, made 526 visits to premises during the year.

Under the Act, local authorities are empowered to take samples of poisonous substances for examination and during 1936 two articles were purchased and submitted to the Council's Public Analyst.

#### REPORT OF THE PUBLIC ANALYST.

(Mr. Thomas McLachlan, A.C.G.F.C., F.I.C.).

It is satisfactory to note that the percentage of adulteration (2.6%) during the year under review is less than it has been for many years in Fulham, and would have been still lower (2.0%) if it had not been for a complaint regarding tinned fish, to which reference will be made later.

Of a total of 566 samples of milk and skimmed milk, six only (1.06%) were reported as adulterated. An informal sample submitted to the Medical Officer of Health as being "bad" was found to be 36% deficient in fat, but as this had been taken from the bottom of a jug, the probability was that the person making the complaint had poured off most of the fat with the creamy layer. A formal sample taken in the course of delivery from the vendor was found to be satisfactory. Another sample was found to contain 1.4% of added water and to be 13.7% deficient in fat. A third sample was over 50% deficient in fat, and in this case the application for a licence to sell milk in Fulham was refused. The other three samples were slightly deficient in fat.

Of a total of 364 samples of foods, other than milk, beers, or spirits, 16 (or 4.4%) were reported as adulterated.

Two samples of butter were found to contain 1% of excessive water. It is found in general that good butter usually only contains about 12—14% of water, so that the Regulation requiring butter not to contain more that 16% of water is not too stringent.

One sample of shredded suet was found to contain 20% of rice starch. At Christmas time the charge made for suet is 1s. per lb., and with the ground rice at approximately one-sixth this price it will be seen that the addition of more than 15% of starch is definitely fraudulent.

Two samples of ground nutmeg, one informal and the other a formal sample from the same vendor, were found to contain a small quantity of St. Vincent arrowroot. Inspection of the vendor's premises showed that various spices, starches, etc., were kept in a chest of drawers, and that products leaked from one drawer into another.

In one case, where the inspector asked for allspice, he was supplied with pickling spice. Allspice is the popular name for pimento, a small berry which looks rather like black pepper, and although it is used in pickling spice and for flavouring pickles, it should not be confounded with pickling spice, which is composed of a mixture of various spices.

As a result of the Spanish Civil War there was a shortage of almonds at the beginning of the season, and consequently a tendency to supply substitutes. Mixtures sold definitely as substitutes are a simple matter with which to deal; but powders made from ground apricot kernels require considerable care in their examination. In no case was any sample submitted by the inspector found to be other than genuine ground almonds.

In other parts of the country there have also been several complaints about the presence of magnesium carbonate in ground white pepper, but none was detected in any sample examined in Fulham. At one time it was considered necessary to add some substance to pepper in order to facilitate grinding, but millers have now overcome this difficulty, so that it is a matter of argument as to whether such additions should be permissible or not. In the opinion of your analyst it would be an advantage to have a standing Committee at the Ministry of

Health which could arbitrate in such matters and guide analysts and manufacturers, rather than make it necessary for these cases to be decided in Court.

Of the five samples of gelatine submitted, two were found to contain excessive quantities of arsenic. Arsenic is sometimes used in the treatment of hides, either as a preservative or for dehairing them, and scraps from the leather industry are used for the preparation of gelatine. It is claimed by many experts that the use of arsenic for these purposes is unnecessary; but it is certain that any hide which has been treated with arsenic should be discarded and not passed on for the purposes of making food products.

Owing to a complaint from a neighbouring borough that tins of sild, emanating from a wholesale store in the Borough contained an excessive amount of tin, 14 tins were examined, and of these 6 were found to contain from 2.2—3.5 grains of tin per lb. All the tins were found to be corroded on the inside, and the whole batch was condemned.

One sample of malt vinegar was found to consist of artificial vinegar.

Of the 20 samples of beers and spirits, 2 samples of gin were found to contain an excessive amount of water. The Food and Drugs (Adulteration) Act, 1928, requires that no spirits shall be sold which are less than 35% under proof. Owing to the desire of publicans and their wholesalers to obtain the maximum profit on spirits, there is a growing tendency to dilute them to as nearly 35% under proof as possible, with the result that the amount of water is sometimes just above the limit.

The quality of drugs examined this year is superior to that of the last few years, and it is to be hoped that this improvement will be maintained. Only two out of fifty samples of drugs were reported against. These were a sample of Black Draught, which contained an excess of Epsom salts to the extent of 35%, and of powdered rhubarb where the ash was 18% as compared with the maximum of 15% permitted by the British Pharmacopæia. A sample of sulphur ointment containing 10.9% of sulphur was reported genuine, although the Pharmacopæia formula demands 10.0% only. In cases such as these it must be borne in mind that the active ingredient may be less expensive than the ointment base, and that there may be a tendency to err on the side of allowing too much of a drug in consequence.

With the advent of the New Year the Addendum, 1936, to the British Pharmacopæia, 1932, will come into operation, and will make some of the tests more reliable and simpler in manipulation than formerly. At the same time, tests such as those requiring cod-liver oil to be examined for vitamin activity by means of the spectrum absorption test for Vitamin A and by biological assay in the case of Vitamin D will tend to result in increased, rather than decreased, possibilties of controlling important drug-foods.

The beginning of the New Year also marks the introduction of the methylene-blue test for Tuberculin-Tested milk and for Accredited milk instead of the former method of making bacteriological plate counts.

## TABLE 25—SAMPLES ANALYSED, 1936.

		Nu	mber o	f Samp	les.			
ARTICLE.		Taken Formally.	Adulterated.	Taken Informally.	Adulterated.	Total Samples Analysed.	Total Samples Adulterated.	Percentage of Adulteration.
Milk Skimmed Milk Condensed Machine- skimmed Milk	1	562 2	5	2 — 10	1 - -	564 2	6 -	1.1 —
Cream            Butter            Margarine            Cheese            Lard		5 69 13 6 19		6 6 -		11 75 13 6 19		
Shortening Dripping Suet Tea		1 3 5 6		_ _ 1 2		1 3 6 8		
Ground Nutmeg Mixed Spice		5 4 6 2	_ _ _ _			5 4 6 4 3	_ _ _ 2	
Pimento (Allspice) Mint Sauce Ground Almonds Demerara Sugar Dried Fruits		6 11 22		4 4 — 5	1	4 4 6 11 27	1 -	25·0 — — —
Mincemeat Butter Beans Dried Peas Flour Self-raising Flour		5 - 4		2 5 5 —		7 5 5 4 3	=======================================	
Cake Arrowroot Oatmeal Rice		3 - 4		1 4 4 3	===	4 4 4 7		=
Sago Tapioca Gelatine Sausages Preserved Sausages		2 3 1 17 7		1 1 4 2	_ _ _	3 4 5 19 7		
Corned Beef Meat Pies and Rolls Tinned Fish Non-Alcoholic Wine a Cordials	and	3 5 2 9			_ 6 _	3 5 16	6	
Fruit Cordial Powders Malt Vinegar Vinegar Ale	8	4 11 7 5	1 1 -			4 11 7 5 5	1 1	9.1 14·3
Gin Rum Whisky Bicarbonate of Soda		4 4 2 -				4 4 2 4	2 _ _	50.0 _ _
Black Draught Boric Ointment Camphorated Oil Epsom Salts		- - 4		- 4 - 7 		4 2 7 4	=	25.0

	Nu	ımber	of Samp	les.			
ARTICLE.	Taken Formally.	Adulterated.	Taken Informally.	Adulterated.	Total Samples Analysed.	Total Samples Adulterated.	Percentage of Adulteration.
Flowers of Sulphur	4		_	_	4		
Liquorice Powder	-		2		2	-	
Parrish's Food	-	-	4		4	-	-
Rhubarb (Powdered)	_	-	3	1	3	1	33 · 3
Sulphur Ointment	7				7	-	-
Sal Volatile	3		-	-	3	-	_
Senna (Powdered)	! -		3		3	-	-
Zinc Ointment	3	-	-	-	3	-	-
TOTALS	877	14	123	12	1000	26	2.6

Section VI.

PREVALENCE OF AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

TABLE 26.

TABLE SHOWING THE AGE AND WARD DISTRIBUTION OF THE CASES OF INFECTIOUS DISEASES NOTIFIED DURING 1936.

				Nu	MBEE	of (	CASES	Nor	IFIED					1		WAR								
					A:	r Ag	ES—Y	EAR	s.					Court	d. ,		0		m		d.	ses to		C
Notifiable Diseases.	At all Ages.	0—1.	1—2.	2—3.	3-4.	4-5.	5—10.	10—15.	15—20.	20—35.	35—45.	45—65.	65 and upwards.	Baron's Co Ward.	Lillie Ward.	Walham Ward.	Margravine Ward.	Munster Ward.	Hurlingham Ward.	Sands End Ward.	Town Ward.	Total cases removed to Hospital.	Deaths.	NC
Smallpox Cholera, Plague Diphtheria Scrysipelas Scarlet Fever Cyphus Fever Creteric Fever Relansing Fever, Con-	 179 63 323  16	_ 3 1 4 —	- 11 2 11 - 1	$\frac{-}{\frac{7}{27}}$	_ 14 - 22 -	$\frac{-}{17}$ $\frac{17}{38}$ $\frac{-}{1}$	- 86 3 121 - 1			 12 6 33  6	_ 3 8 7 - 2			- 6 3 23 - 2	- 31 6 45 - 5	32 16 58	- 30 8 39 - 1	- 40 9 62 - 2		- 24 10 46 - 2	$-\frac{11}{6}$ $\frac{6}{28}$ $-\frac{3}{3}$	179 40 307 16	$\frac{-}{10}$ $\frac{-}{1}$ $\frac{1}{3}$	2
tinued Fever Puerperal Fever Puerperal Pyrexia Perebro-Spinal Meningitis Polio-myelitis Ophthalmia Neonatorum Fuberculosis of	-6 25 4 4 13	_ _ _ _ _ 13		111111			_ _ _ 1 _ 2		111111	5 21 1	1 4 - -	====		$-\frac{2}{6}$ $-\frac{1}{2}$	5 - 3	2 2 - 2	1 2 - 1 3	7 1 - 2	_ _ _ _	- 1 2 1 1	1 2 - 1	6 24 4 2 8	$\begin{bmatrix} -\frac{2}{2} \\ -\frac{2}{2} \\ -\frac{1}{2} \end{bmatrix}$	
Respiratory System Non-Pulmonary Tuberculosis Measles Encephalitis Lethargica Pneumonia Diarrhœa Malaria Dysentery Trench Fever	208 35 2875 — 226 6 — 7	1 2 132 — 11 2 — —	2 297 - 5 3 - 5	- 306 - 8 - - -	2 350 7 1 —	1 514 - 10 - 1	5 1164 — 31 — —		15 3 23 — 11 — —	80 8 33 - 43 - 1	29 3  22  	61 2 1 	15 2 - 25 - - -	20 6 138 — 12 — 1 —	33 630 	_	26 200 29 1 2 2	8 629 57 2	18 118 20 —	35 4 496 	20 4 210 — 19 — —	- 419 - 4 - 7	13 14 2 133 22 —	
TOTALS	3990	172	337	349	396	582	1420	119	85	248	79	144	59	222	806	620	347	851	190	649	305	1016	309	-

TABLE 27.

MONTHLY DISTRIBUTION OF INFECTIOUS DISEASE.

Notifiable Disease.	January	February	March	April	May	June	July	August	September	October	November	December	Totals.
Pneumonia	 39	19	34	17	23	8	9	7	8	23	12	27	226
Scarlet Fever	 19	20	29	26	41	45	26	12	24	23	30	28	323
Diphtheria	 21	27	14	16	10	11	8	10	17	20	15	10	179
Puerperal Fever	 -	-	_	1	-	1	1	_	_	_	_	3	1
Puerperal Pyrexia	 1	1	1	2	-	-	2	2	5	4	4	3	25
Erysipelas	 14	5	.5	5	5	4	6	3	1	3	7	5	63
Ophthalmia Neonatorum	 1 2	1	1	5	-	-	1	_	2	1	1	_	13
Cerebro-Spinal Meningitis	 2	-	-	_	-	-	_	_	1	-	1	_	4
Enteric Fever	 -	-	1	1	4	2	3	1	3	1	_	_	16
Polio-myelitis	 _	-	-	-	-	-	_	1	3		-	_	4
Encephalitis Lethargica	 -		-	_	-	-	-	-	_		-	_	_
Measles	 54	440	1222	782	245	86	23	5	10	_	3	5	2875
Dysentery	 1	-	4	-	-	-	-	-	-	-	_	2	7
Epidemic Diarrhœa	 _	-	-	1	-	4	-	-	-	-	-	. 1	6
TOTALS	 152	513	1311	856	328	161	79	41	74	75	73	84	3747

TABLE 28.

COMPARATIVE STATEMENT OF NOTIFIABLE INFECTIOUS DISEASES, 1930-1936.

			1930	1931	1932	1933	1934	1935	1936
Scarlet Fever			 595	331	543	720	691	317	323
Pneumonia			 207	275	241	203	180	139	226
Diphtheria			 402	225	177	185	473	375	179
Erysipelas			 74	86	106	104	117	56	63
Puerperal Fever			 17	11	11	11	4	6	6
Puerperal Pyrexi	a		 33	47	37	27	37	28	25
E3 4 T3			 13	3	11	5	4	10	16
Ophthalmia Neor			 19	17	28	15	15	11	13
Cerebro-Spinal M	lening	gitis	 2	9	8	5	6	1	4
Encephalitis Let	hargi	ca	 2	1	3	_	i	2	*
Polio-myelitis			 3	4	1	2	2	3	1
Measles	***		 2526	110	2682	163	2967	41	2875
Epidemic Diarrh	œa	***	 31	33	22	13	14	4	6
Dysentery			 _	-	2	_	1	4	7
Smallpox			 7	-	-	-	-	_	_'
TOTALS			 3931	1152	3872	1453	4512	997	3747

8		

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TABLE 29. NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED FROM 1900-1906 INCLUSIVE.

	_	-	_	_							000						-										1111										
	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	193
	-																																				
mall-Pox		16	94	11												. 7							2						. 1		7	-	2				
carlet Fever	552		552		294	113	674	668	596	911	3014	334	484	766	1,042		286	234	228	371	930	961	626	466	360	398	311	360	416	489	595	331	543	720	691	317	323
hiphtheria	641	644		293	302	286	403	004	400	322	207	311	231	270		271	312	237	206	336	623	579	438		259	276	345	390	359	370	402	225	177	185	473	375	179
yphoid Fever	92	133		80	39	56	4.5	58	39			38	26	34		14	- 5	11	15	-6	25	7	16	3	7	10	- 8	11	41	12	13	3	11	- 5	4	10	16
rysipelas	154	132	121	115	131	143	141	128	127	115	1115	115	115	121	152	89	73	50	:45	75	102	92	94	76	92	74	77	58	81	78	74	86	106	104	117	56	63
holers		1																																			
erebro-Spinal Meningitia								3	4	3	7	3	2	5	- 1	20	12	20	-8	9	5	4	1	20	2	3	4	7	4	5	2	9	8	- 5	6	1	1
olio-myelitis												1	. 5	2			3	5	2	2	9	5	9	- 5	7	3	7	3	- 3	- 5	3	4	1	- 0	- 0	3	4
phthalmia Neonatorum												1.5	13	23	55	47	49	57	44	47	40	30	33	22	97	32	- 29	33	38	30	19	17	99	15	. 15	11	12
loaslos		Notifi	able fr	oen lat	Januar	y. 1916											751	2,021	1.592	615	942	396	2.438	1.951	1.692	589	3.700	463	2.699	948	0.506	110	0.654	163	0.047	41	287/
ncephalitis Lethargica		Notifi	able fr	om 1st	Januar	v. 1919											-			6	9	7	3	9	21	10	19	75	- 0	5	-0	1	3		1		
neumonia		Notifi	ablo fr	om lst	March.	1919											-			199	198	915	200	918	376	220	1988	310	097	245	207	975	911	900	180	139	9.94
pidemie Diarrhosa		Notifi	able fr	one 2n	d July.	1919														83	51	140	17	79	40	20	50	18	60	36	31	33	00	13	14	4	- 6
uerperal Fever	- 9	7	7	19	8	24	17	15	17	34	20	23	30		33			0.5	19.	35	32				26	21	15	16	16	93	12	11	11	11	12	- 6	0
uerperal Pyroxia		Notifi	able fr	orn lat.	Octobe	r. 1926										23	200		45	-	-	1000	-	-	-	3.	.19	9.0	53	41	22	47	37	95	37	98	95
reach Fover					March.															1							1.0	+0		10.5	- 0.0	7.	91		-0.1	-0	717
ysentery					March.															o o		- 10	1					0	-	- 10			- 0		-		-
alaria					March.															104	20		1 1	1 4	-			0	-	-	100		- 2	7.			
				OHIS AND																100	20	-	1		100			1			-		- 2				
TOTALS	1,457	1,533	1,277	922	774	1,288	1,280	1,476	1,183	1,026	771	890	906	1,240	1,595	1,093	1,513	2,650	2,152	1,898	2,972	2,474	4,003	3,134	2,862	1,806	4,838	1,700	3,473	2.391	3,933	1.152	3,876	1.454	4.512	997	3.74
																																			-		1

TABLE 30. NUMBER OF DEATHS FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES DURING 1900-	00-1986 INCLUSIVE.
-----------------------------------------------------------------------------------	--------------------

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Small-Pox. Meanles Scarlet Fover Diphtheeia Whooping Cough. Typhoid Fever Duarrhora (and Enteritis	23 65 54	3 37 20 48 76 22	19 51 65	8 24 48	64 4 24 58 6		53 18 33 31 13	69 14 38 75 8	71 17 32 34 10	74 10 39 48 4	14	64 6 27 28 8	6 15		21 23	121 17 27	18 5 20		46 4 12	14 5 32	24 9 44 17	15 43		23 5 20 14	29 5 11 14	3 11 35	47 4 14 6	- 1 11 8 2	15 2 13 12 1	10 3 10 25	2 19 5	1 2 9 7 2	26 2 10 12 1		31 1 30 7 1	- - - 12 5 -	14 1 10 6 3
	181	199	140	165	235	202	275	115	130	103	74	211	34	100	127	81	64	71	60	44	36	71	27	25	22	36	30	19	58	35	34	15	22	20	18	19	22
TOTALS	422	405	465	323	391	426	423	319	294	280	222	344	173	203	254	304	140	190	185	101	134	162	144	87	82	87	101	41	96	83	88	36	73	50	88	36	56
Zymotic Death Rate	3.17	2.93	3.25	2.19	2.57	2.73	2.66	2.00	1.94	1.83	1.45	2.25	1.12	1.28	1.62	2.00	0.90	1.31	1.29	0.66	0.88	1.30	0.93	0.53	0.50	0.53	0.60	0.20	0.60	0.50	0.57	0.25	0.49	0.33	0.61	0.25	0-38

#### DIPHTHERIA.

During the year 179 cases were notified compared with 375 the previous year, the attack rate being 1.3 per 1,000 of the population compared with 2.6. My anticipation that the incidence of this disease was waning has been fully borne out. All cases were removed to hospital for treatment; 10 deaths occurred, the fatality rate being 5.6 per cent., as compared with 3.2 per cent., last year. The age distribution of the cases is shown in Table 26 (page 85).

#### DIPHTHERIA ANTITOXIN.

This is available to practitioners upon request at the Public Health Department. During the year 44 issues, each of 8,000 units, were made. Since October, besides the usual packing that has been in use for several years, a special packing with the serum already in a "syringe" has been stocked and 9 issues were made.

#### DIPHTHERIA IMMUNISATION.

No. of Clinic Session	ns held					47
New cases treated						582
Total attendances of	old and	new c	ases			3,129
Average attendance				***		66.5
Average attendance	***	***				
Primary Schick Test	t.					
Positive					503	
Negative					78	
Not tested					1	
						582,
Posterior Schick Te.	st					
Positive					79	
Negative					491	
Not read				***	8	
1101 10110						578
Post Schick Test.				,		
Positive	***				2	
Negative					13	
						15
Inoculations.						
With T.A.F.					576	
With A.P.T.	(1)				221	
With A.P.T.					194	
With A.P.T.	3				124	
***************************************	(0)					1,115
Discontinued treatn	nent		111			16
Transferred to other						5
Certificates of immu						491
Certificates of fiffing	ility issue					

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 $\begin{array}{c} \text{TABLE 31.} \\ \text{SUMMARY OF INOCULATIONS WITH T.A.F.} \end{array}$ 

	Pri	mary Schi	iek.		Inc	oculatio	ns.		Pos	terior Sch	iek.	Transferred to other	Discontinued treatment.
Age Group	Positive	Negative	Not read	lst	2nd	3rd	4th	5th	Positive	Negative	Not read		treatment
6/12 - 1 $1 - 2$ $2 - 3$ $3 - 4$	15 21 19 14	_ _ 1 1	$\frac{-1}{1}$	15 21 19 13 19	15 21 19 13 19	15 21 19 13 19	_ _ 1 1		2 2 2 1	13 18 18 18 12 18		= 1	- 1 - 3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19 16 11 14 9	3 - - 3 3		16 11 14 9	16 11 14 9	16 11 14 9	1 1 -	1 1 1	1 2 1 2 - 1	17 10 12 11 12	_ _ _ _ _	=	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 2 6 2	5 4 2 2		3 2 6 2	3 2 6 2	3 2 6 2	=	=	=	8 6 8 4	=	=	=
14 — 15 15 and upwards	3	2	=	3	3	3	=	=	-	5	=	=	=
TOTALS	165	26	3	164	164	164	6	6	14	171	4	1	4

TABLE 32. SUMMARY OF INOCULATIONS WITH ONE INJECTION OF A.P.T.

		Pri	mary Sch	iek.	I	noculation	S.	Po	sterior Schi	ek.	Transferred to other	Discontinue
Age G	roup	Positive	Negative	Not read	lst	2nd	3rd	Positive	Negative	Not read	areas.	treatment.
6/12 —	1	5	1	_	5	_		1	5	_	_	
1 -	2	28	1	-	28	_		3	25		-	1
2 —	3	27	1	_	27		-	3	23		1	1
3 —	4	34	1	_	34			2	31		_	2
4 —	5	33	5		33			8	29	1	_	
5 —	6	22			22				18	1	1	2
6 —	7	25	3	_	25	_		4	24	_		
7 —	8	11	4	_	12			2	11		-	2
8 —	9	13	4		13			4	13	-	_	
9 —	10	4	3	_	4			1	6			-
10 —	11	5	3		5	-			8		-	-
11 —	12	-6	3	_	6			1	7			1
12 —	13	4	2	-	4	2227/4	name.	-	6		-	
13 —	14	2	2		2			_	4		_	_
14 —	15	2	2		1			-	4		_	-
15 and upv		-	8	-	-	-			6	-	_	2
TOTALS	;	221	43	_	221	_	-	29	220	2	2	11

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 $\begin{array}{c} \text{TABLE 33.} \\ \text{SUMMARY OF INOCULATIONS WITH TWO INJECTIONS OF A.P.T.} \end{array}$ 

· · · · · ·	Pı	rimary Schi	ek.	Inocul	lations.	Po	sterior Schi	ek.	Transferred	Discontinue
Age Group	Positive	Negative	Not read	1st	2nd	Positive	Negative	Not read	to other areas.	treatment.
6/12 - 1 $1 - 2$ $2 - 3$ $3 - 4$ $4 - 5$ $5 - 6$ $6 - 7$ $7 - 8$ $8 - 9$ $9 - 10$ $10 - 11$ $11 - 12$ $12 - 13$ $13 - 14$ $14 - 15$ $5$ and upwards	1 17 12 10 9 13 14 11 3 3 2 2 2 2 1			1 15 11 10 9 13 15 11 2 2 2 2 1	1 15 11 10 9 13 15 11 2 3 2 2 2 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 12 11 8 7 13 15 12 2 7 3 4 2 2			1
TOTALS	100	13	-	97	97	3	99	1	_	10

TABLE 34.
SUMMARY OF INJECTIONS WITH MIXED PROPHYLACTICS (T.A.F. & A.P.T.).

	Pr	imary Schi	ek.	Pos	sterior Sch	ick.		T.A.F.		A.P.T.		
Age Group	Positive	Negative	Not read	Positive	Negative	Not read	lst	2nd	3rd	lst	2nd	3rd
6/12 — 1	2	1	-	3	-	-	2	2	2	3	2	
1 - 2	4	_	-	4	-	1	2	1	1	5	5	3
2 - 3	4	-	-	4		_	2	2	2	4	2	2
3 - 4	3	1	-	4	_	-	_		_	4	3	3
4 - 5	6	1	- 1	7		_	2	2	2	7	7	6
5 — 6	3	-	-	3		-	2	2	2	3	3	1
6 - 7	4	1	_	5	_		1	1	1	5	5	3
7 — 8	4	-	-	3	-	_	2	2	1	4	3	2
8 - 9	7			7	-	_	3	3	3	7	7	4
9 — 10	3	-	-	3	_		2	2	2	2	2	1
10 — 11	3	-		3	_	-	3	3	3	3	3	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	_	_	3	2127		2	2	2	2	3	1
2 — 13	-	-		_	-	-	_	_		_		
3 - 14	1	-	-	1	_		1	1	1	1	1	-
4 15	-	-			-	-		_				
15 and upwards	. 1	-	-	1		-	1	1	1	1	1	-
TOTALS	48	4		51		1	25	22	25	51	47	24

#### SCARLET FEVER.

There were 323 cases during the year compared with 316 in 1935. The attack rate was 2.3 per cent., compared with 2.2 in the previous year. The age distribution and seasonal incidence are shown in Tables 26 and 27 at the beginning of this section. 307 cases were hospitalised and one death occurred.

#### MEASLES EPIDEMIC.

Circumstances for the investigation of outbreaks of measles are particularly favourable in Fulham as the disease has been notifiable in the Borough since 1916. The disease was, at that time, made compulsorily notifiable throughout the country, but, owing to the apparent inffectiveness of notification in checking epidemics, the procedure was generally abandoned a few years later, and notification is now at the discretion of the local authority. The difficulty of control arises from the fact that the rash does not appear until the fourth day of the disease, whereas infectivity is most marked before the rash appears and the diagnosis is made.

Epidemics occur in London with remarkable regularity every two years; thus in Fulham the present epidemic gave rise to 2,864 cases up to July 10th this year. Compared with that, only 41 cases occurred in the whole of 1935, but during the 1934 epidemic there were again 2,967 cases.

The London County Council have recently modified their system of control of measles epidemics in order that cases should be diagnosed more promptly and any requisite treatment provided; thus contacts are no longer excluded from school but, on the occurrence of cases in a class, the class and then the school, is specially visited and the children regularly examined.

Measles in school children runs, on the whole a beneficent course, but in young children under five is apt to be a dangerous disease, the most common complication being inflammation of the lungs in one form or another. The disease is also apt to leave damaged structures behind it, the eyes and ears, in particular, being liable to suffer. A prolonged condition of debility predisposing, in undernourished children, to tuberculosis, is also not uncommon.

There are some 1,508 children under five attending London County Council and non-provided schools in the Borough of Fulham. It was, therefore, of some public health moment to determine whether the London County Council's system of control, involving continued attendance of these children at school during an epidemic, was likely to give rise to more chance of infection than existed amongst children of three and four, who did not attend school, but whose brothers and sisters did attend.

The opportunity furnished by the present epidemic was taken to determine whether school attendance of children under five did in fact, lead to increased risks of infection. The outbreak began towards the end of January and the notifications, by February 8th, had reached 12 or 13 daily. The peak of the epidemic was reached about March 28th—that is, about the 13th week of the outbreak. Notifications, for two weeks in advance of this date and for a week after, numbered about 50 daily. The outbreak ended towards the end of June after a duration of, approximately, 28 weeks. Spasmodic cases continued to occur during July.

In all, 2,864 cases were notified during the epidemic, of which, 1,713 were in children under the age of five, 1,100 in children between 5 and 15, and 51 in people over 15. A summary of the figures of the outbreak is appended.

It will be noticed from this summary that the attack rate in children under five is more than three times as high as that of children over five Eleven deaths occurred in children under five, as compared with three in children over five, none of these affecting children of 3 and 4 attending school. Considering the extent of the epidemic, these numbers are remarkably low, as will be evident from the 31 deaths which occurred in the 1934 outbreak. In the 1,508 children under five attending school, 460 cases occurred, giving an attack rate of 305 per thousand. In the 2,344 children aged 3 and 4, not attending school, 489 cases occurred, giving an attack rate of 208 per thousand.

It is a little difficult to assess the significance of this difference in the attack rates in two groups of children of similar environment, one group of which attend school, the other remaining at home. There is no doubt that some of the children remaining at home will be the eldest in the family and, therefore, will not come into contact with school children either at home or in the school. No estimate of the number of children to whom this applies has been formulated, but, on the whole, it seems reasonable to assume that a difference of one hundred per thousand in the attack rate is partly accounted for by the increased risk of school contact with the disease.

Although no deaths from measles occurred amongst children aged 3 to 4 attending school, the seriousness of the disease in children under five warrants further investigations of the effect of school attendance on the incidence of the disease in this group. I have no doubt of the wisdom, from the personal and from the public health point of view, of postponing measles wherever possible, until after the age of five years.

Confirmatory evidence on the lines of the Fulham figures would to my mind, justify a revision of the London County Council scheme of control in so far as children under five are affected. Definite proof of increased risk of infection would warrant the exclusion of all children under five during epidemic periods.

All population figures quoted in the various age groups, with the exception of the figures of children under five attending school, which were supplied direct by the London County Council's Education Officer, are taken on the 1931 Census. They are not, therefore, literally accurate for 1936, but completely accurate figures are not available, and the effect on the rates quoted, which adjustment would produce, would not, in any case, be significant.

## TABLE 35. MEASLES EPIDEMIC, 1936.

#### Population.

Total population (mid 1935)	 	143,600
Children under 5 (Census 1931)	 	9,894
Children aged 5 to 15 (Census 1931)	 	21,454
Children aged 3 to 4 (Census 1931)	 	3,852
Children aged 3 to 4 attending school	 	1,508
Children aged 3 to 4 not attending school	 	2,344

## Number of cases.

Total number of cases of measles		2,864
Number of cases aged 0 to 4		1,713
Number of cases aged 5 to 15		1,100
Number of cases aged 3 to 4 attending school .		460
Number of cases aged 3 to 4 not attending scho	ool	489

## Attack Rate.

Attack rate for	whole population				19.95	per	1,000
Attack rate in o	children aged 0 to	4		***	173.1	,,	,,
Attack rate in o	children aged 5 to	14			51.2	,,	,,
Attack rate in o	children aged 3 to	4	attending	school	305.	,,	,,
Attack rate in o	children aged 3 to	4 !	not attending	school	208.6	,,	,,

## Fatality Rate.

Fatality rate all cases (%)	1		0.45
Deaths in children 0 to 4			11
Fatality rate in children 0 to 4 (%)			0.64
Deaths in children 5 to 15			3
Fatality rate in children 5 to 15 (%)			0.27

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0-1	1-2	2–3	3–4	4-5	5-6	6-7	7–8	8-9	9-10	10-15	15-20	20-35	35-45	45-65	65+	Total
123	292	349	339	610	468	393	138	52	23	26	23	27	-	1	-	2,864

TABLE 36

ALL CASES—AGE GROUP.

#### FATAL CASES.

Age at death.	Under 1	1-2	2-3	3-4	4-5	5-6	6-7	Total
No. of deaths	3	5	1	2	_	1	2	14

#### ENTERIC FEVER.

Sixteen cases were notified compared with 10 during the previous year; three deaths occurred. Two of these cases and one of the deaths arose from the Bournemouth and Poole outbreak.

#### CEREBRO-SPINAL MENINGITIS.

Four cases occurred during the year—three being of infants under 1 year of age and one of a child aged 5 years. Two of the cases died.

#### PUERPERAL FEVER.

Six cases were notified and there were two deaths from puerperal sepsis. The incidence was equal to 2.8 per 1,000 of the registered births (live and still). All the cases occurred in Fulham Hospital.

#### PUERPERAL PYREXIA.

Twenty-five cases were notified during 1936 compared with 26 during the previous year. The incidence per 1,000 registered births (live and still) was 11.5 compared with 12.7.

#### CONSULTANT.

The services of Mr. Alexander Galletly are available for the purpose of consultation with private practitioners in cases of Puerperal Fever and Puerperal Pyrexia cases and also for difficult obstetric cases. During the year no request was made for his services.

#### OPHTHALMIA NEONATORUM.

During the year thirteen cases of ophthalmia neonatorum were notified compared with 11 during the previous year giving an attack rate of 6.2 per 1,000 of the registered live births. Through an arrangement between the Borough Council and the Fulham District Nursing Association the services of the District Nurses are available for cases which are under medical treatment in their own homes. During 1936, there were 81 visits to 4 such cases. The following table shows the place of treatment and the result of the 13 cases:—

Cases notified			 	***	13
Treated at Home			 ***	***	5
Treated in Hospital			 		8
Vision Impaired			 		_
Vision Unimpaired			 		9
Total Blindness			 		-
Deaths			 		1
Left the Borough (c	condition	not known)	 ***		3

#### NON-NOTIFIABLE INFECTIOUS DISEASES.

During 1936 the Woman Sanitary Inspector paid visits to cases of non-notifiable infectious diseases as follows:—

Chicken pox					 	60
Whooping Cou	gh				 	145
Mumps					 	35
Suspicious case	es (sore	throats,	spots,	etc.)	 	65
						305

These visits are paid to ascertain that the children are not suffering from any notifiable infectious disease and that they are receiving adequate medical and nursing attention. Information as to the cases is received daily from the Head Teachers of the schools in the Borough on Form 84.

The table on page 25 shows inter alia the number of non-notifiable infectious disease cases which were visited by the Fulham District Nursing Association on behalf of the Borough Council.

#### CANCER.

The 250 deaths classified as Cancer occurred as follows: -

TABLE 37.

	Totals  Classification.  Cinoma			Total.	Males.	Females	
Digestive Org	ans a	nd Per	itoneu	m	 124	77	47
Respiratory (	rgan	S			 36	26	10
			nx		 12	- 8	4
T .					 16	_	16
Uterus					 30	_	30
Genito-Urina	ry Or	gans (n	nales)		 17	17	_
Other Organs					 15	7	8
TOTAL	S				 250	135	115
	Cla	ssificat	ion.		Total.	Males.	Females.
Carcinoma					 244	131	113
Sarcoma					 4	4	-
Epithelioma					 2	-	2
Not defined					 -	-	-
Тота	S				 250	131	115

The ages of death of persons dying from Cancer were: -

TABLE 38.

	Ag	ge perio	ods.			Total.	Males.	Females.	
0-25 years						3	1	2	
25-35 years			***			_	_	_	
35-45 years				***		21	11	10	
45-55 years				***		31	17	14	
55-65 years				***	***	65	40	25	
65-75 years						83	44	39	
75 years upw			•••			47	22	25	
TOTAL	S					250	135	115	

From the table showing the principal causes of death it will be seen that one out of every seven deaths in the Borough during 1936 was due to Cancer.

The death rate from the disease was 1.77 per 1,000 compared with 1.62 for England and Wales.

The yearly death-rates from Cancer since 1920 are as follows:-

1920		 	1.19	1928		 	1.38
1921		 	1.32	1929		 	1.53
1922		 	1.27	1930		 	1.57
1923	***	 	1.31	1931		 	1.51
1924		 	1.35	1932		 	1.57
1925		 	1.20	1933		 	1.62
1926		 	1.59	1934		 	1.86
1927		 	1.36	1935	***	 	1.52
			1	1936		 	1.77

#### PREVENTION OF BLINDNESS.

No action was taken under Section 66 of the Public Health Act, 1925.

#### TUBERCULOSIS.

No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925 (relating to persons suffering from pulmonary tuberculosis employed in the milk trade) or under Section 62 of the Public Health Act, 1925, (relating to the compulsory removal to a hospital of persons suffering from tuberculosis).

#### TUBERCULOSIS REGISTER.

During the year under review the Tuberculosis Register has been corrected by the removal of all cases under the headings: recovered, arrested, diagnosis not confirmed, lost sight of, left the district or died, and the addition of all new cases notified, in accordance with the Public Health (Tuberculosis) Regulations.

The details of these removals and additions are as follows:-

	Puln	ionary:	Non-Pu	lmonary:	
	Males.	Females.	Males.	Females.	TOTALS:
Number of cases on Register at com- mencement of 1936 Number of cases removed during the	581	585	306	306	1,778
year	121	88	25	19	253
	460	497	281	287	1,525
Number of cases notified for the first time during the year	131	88	18	22	259
Number of cases remaining on Register at end of year	591	585	299	309	1,784

The number of cases notified for the first time during the year includes 243 cases analysed in Table 41, page 106 and 16 cases in Table 42, page 107; these 16 cases are, of course, also included in the 253 cases removed from the Register during the year.

In Table 26, page 85, the notifications received during the year are classified according to the ages of the persons affected, and the number of cases notified in each ward of the Borough is also given.

#### MORTALITY FROM TUBERCULOSIS.

Rechivatory existem.

Respiratory system.		
107 Deaths		73 males, 34 females.
Death rate		0.76 per 1,000, being 0.02 lower than in the previous year.
93 notified (86.92 per	cent.).	
14 not notified (13.08		Of these 14 cases 7 died in institu- tions and 3 were notified after death.
Other Tuberculous Diseases	::	
13 Deaths		7 males, 6 females.
Death rate		0.09 per 1,000, being 0.03 lower than in the previous year.
7 notified (53.85 per c	ent.).	
6 not notified (46.15 p		Of these 6 cases 1 died in an institution,

## PERIOD BETWEEN PRIMARY NOTIFICATION AND DEATH.

## Respiratory system:

Under 1 month	 			16	(17.20 per cent.)
1—3 months	 			8	( 8.60 per cent.)
3—6 months	 			11	(11.83 per cent.)
6–12 months	 			12	(12.90 per cent.)
1—2 years	 			14	(15.06 per cent.)
Over two years	 ***	***	***	32	(34.41 per cent.)

## Other Tuberculous Diseases:

Under 1 month			 	3	(42.85 per cent.)
1—3 months	 		 	1	(14.29 per cent.)
3—6 months	 		 	-	
6-12 months	 	***	 	1	(14.29 per cent.)
1—2 years	 		 	2	(28.57 per cent.)
Over two years			 	_	

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DISPENSARY STATISTICS, 1913—1936.
TABLE 39

1850			302		11.	II.	0.19	3115
	New Patients.					NCES AT		1113
YEAR.	Suffering from Pulmonary Tubercu- losis.	Suffering from other forms of Tubercu- losis.	Doubtful Cases.	Non- Tuberculous Cases.	Insured.	Uninsured.	Doctors' Home Visits.	Nurses Home Visits.
1913	324	86	323	429	2361	11967	2175	1517
1914	203	45	261	361	2276	8084	2385	2547
1915	174	28 -	260	323	1171	5568	1910	2918
1916	225	13	311	200	852	5954	1079	2828
1917	286	13	349	329	1052	6528	1141	2789
1918	235	14	201	478	1223	8465	1435	2317
1919	221	50	251	281	1444	8116	1724	4043
1920	142	87	239	342	1850	6713	2004	4989
1921	116	23	163	344	2074	5387	2217	5640
1922	155	35	13	388	2507	3703	1264	5447
1923	132	70	24	401	2288	3261	552	4603
1924	142	65	32	443	2188	3619	549	4775
1925	162	44	46	414	1956	3405	605	5421
1926	183	53	87	318	1741	2876	481	5355
1927	143	56	14	431	1612	2666	592	5422
1928	160	42	26	490	1548	2448	571	4989
1929	158	48	23	436	1411	1834	521	5272
1930	154	25	7	407	1558	1545	427	4532
1931	159	20	7	422	1444	1625	292	4156
1932	143	35	7	380	1329	1521	291	4125
1933	161	14	_	331	1312	1916	409	3936
1934	172	25	6	338	1265	2262	435	3895
1935	144	21	12	328	1232	1871	448	3857
1936	158	11	18	386	1164	2321	426	3655

TABLE 40.

	Til	1.	32	Notific	ATIONS.	DEA	THS.	DEATH	-RATE.
	YEAR.			Pul- monary.	Other forms of Tuber- culosis.	Pul- monary.	Other forms of Tuber- culosis.	Pul- monary.	Other forms o Tuber- culosis
1913	 			765	289	215	49	1.34	0.31
1914	 			531	164	207	45	1.32	0.29
1915	 			461	97	198	51	1.29	0.34
1916	 			496	92	210	56	1.41	0.38
1917	 			582	118	191	49	1.32	0.34
1918	 			561	80	207	47	1.45	0.88
1919	 			488	145	168	42	1.01	0.27
1920	 			282	93	142	30	0.89	0.19
1921	 		10	287	76	158	31	0.96	0.19
1922	 			272	113	163	33	1.02	0.20
1923	 			319	155	149	32	0.92	0.19
1924	 			270	126	129	33	0.80	0.20
1925	 			279	114	151	22	0.92	0.13
1926	 			312	122	161	17	0.98	0.10
1927	 			251	95	126	21	0.77	0.13
1928	 			258	75	114	33	0.73	0.21
1929	 			279	85	149	24	0.96	0.15
1930	 			244	52	118	16	0.76	0.10
1931	 			275	78	146	23	0.97	0.15
1932	 			236	90	137	28	0.91	0.15
1933	 			219	38	126	14	0.85	0.09
1934	 			258	33	112	20	0.77	0.14
1935	 			185	55	112	17	0.78	0.12
1936	 			219	40	107	13	0.76	0.09

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TABLE 41.—PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930.

Summary of notifications during the period from 1st January, 1936 to 31st December, 1936.

						Formal	Notific	cations.					
		N	lumber	of Prim	ary No	tificatio	ons of n	ew cases	of Tub	perculos	is.		l .
Age Periods	0-1.	1—5.	5—10.	10—15.	15—20.	20—25.	25—35.	35—45.	45—55.	55—65.	65 & upwards	Total (all ages).	Total Notifications.
Pulmonary: Males	 _	_	2	_	10	15	21	19	27	20	10	124	210
Females	 1	_	3	2	5	20	24	10	11	3	5	84	144
Non-Pulmonary : Males	 1	2	2	3	_	1	2	2	1	_	2	16	22
Females	 1.	3	3	2	3	2	3	1	1	-	_	19	29
TOTALS	3	5	10	7	18	38	50	32	40	23	17	243	405

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TABLE 42.

New Cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the period, otherwise than by formal notification.

Age Pe	eriod	ls.		0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 up- wards	Total Cases
Pulmonary:—			-			-		100			2-				
Males				-	-	_	_	-	-	2	-	3	1	1	7
Females				-	_	_	1	_	-	1	_	1	-9	1	4
Non-Pulmonary	:				interest										
Males .				-		_	_	_	_	1		_	1	-	2
Females .				_	_	_	_			1	_	_	-	2	3
		TOTALS	3	_		_	1	_		5		4	2	4	16

### TUBERCULOSIS.

### REPORT FOR THE YEAR 1936.

By Dr. P. L. T. BENNETT,

Clinical Tuberculosis Officer and Medical Officer, Borough Bacteriological Laboratory.

There has been no change either of Staff or of the routine at the Tuberculosis Dispensary during the year.

A summary of tuberculosis statistics is given at the end of this report. The figures, though slightly increased from the previous year as a whole do not call for any particular comment; and it should be pointed out that the slight increase in the number of suspected cases sent for examination and the few more notifications do not imply that the disease is on the increase. The investigation of statistical returns in other areas show similar yearly variations, and most of such returns, studied over a period of years, show a very decided decline both in mortality and incidence.

Therefore, in endeavouring to make any deductions, a period of years should be taken, rather than any particular year—always bearing in mind that the campaign against tuberculosis cannot be a spectacular one showing immediate results.

There still exists a great deal of misconception in the lay mind as to what tuberculosis is, and how the national campaign against its ravages is conducted.

A brief description of the disease and its history, and the present measures adopted for the furtherance of its control by the State, may therefore be helpful.

## A definition of tuberculosis.

Tuberculosis is a disease due to a specific micro-organism, it may be acute or chronic in type; and is infectious within certain limits and under certain conditions, the incubation period being extremely variable, varying (according to individual factors) from weeks to years.

## The causative organism.

A minute, rod-shaped bacillus, believed to be of the fungoid or mould group: it is readily demonstrated in pathological material (sputum, discharges, excreta, etc.) by a process of staining known as the "Ziehl Neelsen" method—an investigation which is carried out very extensively in the Borough Laboratory. Tubercle bacilli capable of causing disease in man, are derived from the sputum, discharges or excreta of consumptive individuals; and from the milk (or flesh) of diseased cattle.

Tuberculous milk is responsible for a large proportion of the bone and joint tuberculosis in children, and may give rise to fatal disease.

Bacilli are killed by exposure to direct sunlight, by the usual disinfectants, and by boiling: but survive outside the body for long periods in conditions of damp, dirt, and bad ventilation.

Promiscuous spitting, especially inside buildings or vehicles, may be a particularly potent source of infection: for the sputum of a consumptive is often heavily laden with virulent micro-organisms, which are liberated into the surrounding air as the former dries up.

## Predisposing factors.

Modern investigation has disproved the hereditary theory of tuberculosis—in other words, it is not handed down as an unwelcome legacy from parents to children: though there may exist in some families a disposition or weakness towards the disease.

The subject is thus bound up with the fact of infection—almost universal in civilised communities—and a bodily resistance in the individual, which is sufficient to overcome the invasion by tubercle bacilli in the great majority of persons.

This resistance, however, is largely influenced by other factors, and one can broadly state that any circumstance which tends to lower bodily health at the same time lowers resistance to disease.

Illness, excessive fatigue, anxiety states, toxaemic conditions or prolonged fevers all tend to lower vitality, and therefore lower resistance to tuberculosis, giving rise to a particular state in the individual that favours the multiplication of micro-organisms which may gain entry.

In 1933 there was conducted (under the auspices of the National Association for the Prevention of Tuberculosis) an extensive investigation into the causal factors of tuberculosis in two large industrial areas in the north of England—these two areas showing a particularly high tuberculosis incidence and mortality rate.

The result of this enquiry was of the greatest importance as it showed that poverty, leading to under-nourishment and over-crowding, was a marked feature in both areas.

Under-nourishment (especially in essentials such as fresh milk and fats) lowers bodily vitality and hence resistance: whilst over-crowding with all its accompanying faults of defective hygiene, lack of fresh air, and other insanitary conditions, favours the chances for continuous and perhaps heavy infection.

Certain trades which involve the inhalation of special forms of mineral dust are characterized by a peculiar condition of the lung tissue (known as fibrosis) due to continuous irritation: and this is often complicated by infective processes such as tuberculosis.

In the female subject, pregnancy and prolonged lactation may sufficiently lower resistance in certain cases, so that tubercular infection already implanted may become activated.

There are certain other factors, racial, sociological and climatic, which have been considered to have a bearing on this subject, but are largely a matter of controversy and space forbids any discussion on them.

#### Historical.

Proof of the existence of tuberculosis can be traced back to remote antiquity, for evidences of its ravages have been seen in mummies from Egyptian tombs.

Hippocrates, a celebrated Greek physician about B.C. 400, gave a very good clinical picture of consumption and its treatment; whilst Galen, A.D. 130, recognised that it was an infectious complaint—an opinion which was also held by the Arabian, Avicenna, A.D. 1037.

The early treatment of consumption, judged by the writings of these old-time doctors, appeared to have been conducted on sound lines, and in some fundamental principals viz., fresh air, rest, sunshine, adequate and good dietary (milk and fats), was much the same as is carried out nowadays in Sanatoria: whilst the drug Creosote was used in those days, as it is now.

Although the cause of tuberculosis during the middle ages was in a large degree considered to be due either to "curses or visitations", evil eye, witchcraft, or to "miasma from the East", one finds that a definite view as to its infectivity was constant in foreign countries: whilst in England it was regarded rather as "hereditary" than infectious—a belief which held sway until within comparatively recent times. It was not until numerous experiments, carried out by Klencke, Villemin, Burdon-Sanderson, Chaveau and Klebs, Cohnheim and others had shown its infectious nature that this erroneous theory fell into disrepute: and the crowning discovery of the causative micro-organism by Robert Koch in 1882 set the seal on all the extensive experimental work which had been done during the previous fifty years.

Just as Laennec's teachings in Paris at the beginning of the 19th century laid the foundations of modern methods of clinical examination (particularly the use of the stethoscope), so did Koch's discovery of the tubercle bacillus revolutionize our treatment of the disease and methods of prevention.

The outlook in the early part of the 19th century was extremely pessimistic, and the writings of such well-known novelists as Charles Dickens, Samuel Warren and Charlotte Bronte give us a clear indication how dread the disease was in popular estimation, and how slight was the chance of recovery considered to be in those times.

Control and prevention of tuberculosis.

Hospitals for consumption existed as far back as 1814, but rather focussed attention on clinical aspects of the disease and symptomatic treatment, than on preventive measures such as segregation.

In 1840, George Bodington stressed the benefits of open-air treatment accompanied by proper feeding and graduated exercises; but his teaching and theories were disregarded in this country. Abroad, however, they were accepted and promptly acted upon with the result that Sanatoria and treatment on similar lines were established in Germany, Switzerland and America. The excellent results of sanatorium treatment thus conducted no doubt influenced public attention in this country; and after Koch's epoch-making discovery, more energetic measures were instituted. To Sir Robert Philip is due the honour for the foundation in Edinburgh of the first tuberculosis dispensary system in the British Isles in 1887.

In England, charitable enterprise was responsible for the inauguration of the Paddington Dispensary for the Prevention of Consumption in 1909; followed in 1910 by the St. Marylebone Dispensary and in 1911 by the Fulham Dispensary. By 1911 fourteen Sanitary Authorities had provided Dispensaries in their areas; and in fifty other districts voluntary establishments had been founded.

It will be seen that the theory of hereditary tuberculosis has now given place to one of direct infectivity: and Public Health Regulations. 1912, set the official seal on the evidence of

the latter, by enacting that all cases of tuberculosis should be at once notified to the district Medical Officer of Health.

In 1911 "sanatorium benefit" was included as one of the provisions of the National Health Insurance, but it was realized that any scheme dealing with tuberculosis should be made available for the whole community, and not merely for insured persons; so in the Public Health (Prevention and Treatment of Disease) Act, 1913, effect was given to recommendations urged by the Local Government Board on County Councils and County Borough Councils to provide necessary facilities for diagnosis and treatment for all, with a promise of 50% net grant on approved expenditure.

In 1921, "Sanatorium Benefit" ceased to be a benefit under National Health Insurance; and the Public Health (Tuberculosis) Act, 1921, required all County and County Borough Councils to make adequate arrangements for tuberculous persons—and also permitted them to assist in after-care schemes.

So far, no hint of any compulsory measure in dealing with the disease is seen (with the exception of the onus of notification by the doctor): but in the Public Health Act, 1925, power was given to the authorities to apply to court for Orders to remove to institutions, under certain specified circumstances, tuberculous persons likely to be a danger to the community from the point of view of infection.

By the Public Health (Prevention of Tuberculosis) Regulations, 1925, employment of persons suffering from phthisis—or tuberculosis of the respiratory organs—was prohibited in various branches of the milk trade.

All the earlier regulations (notification, etc.) were consolidated in the Public Health (Tuberculosis) Regulations, 1930: and the Local Government Act, 1929, simplified institutional treatment by handing over care of those tuberculous persons (formerly in hospitals controlled by the Guardians) to the local authorities for tuberculous schemes, hence removing the disadvantage of dual control.

In 1919, the Local Government Board was replaced by the Ministry of Health and the latter institution has had an important influence upon the prevention and treatment of the disease. Health Services were co-ordinated and a special medical department in the Ministry was organised to deal solely with tuberculosis. Certain memoranda 37T and 37T (revised) were issued in 1925 and 1930 by the Ministry of Health formulating a comprehensive and uniform system of records for use throughout all Dispensaries.

The system of record and procedure is now adopted universally in England and Wales and has proved to be most efficacious in dealing with the tuberculous population, many of whom are not permanently resident in one district but move away for various reasons.

Returns of all dispensary work are furnished yearly to the Minister of Health and to the Chief Medical Officer of the Local Authority for tuberculosis, by the Medical Officer of Health of the Borough.

(Within the administrative County of London, this Local Authority is, of course, the London County Council).

In addition to the above, an optional return can also be submitted dealing with the after histories of patients. This is designed to arrive at some conclusion as to the value of the tuberculosis service in relation to prolongation of life or cure of the disease.

Further regulations and circulars have been issued by the London County Council covering all phases of tuberculosis procedure and administration including after-care; and this authority is now responsible for a block grant towards the cost of the service in each metropolitan area.

### The Tuberculosis Dispensary.

All notified cases occurring in an area are nominally under the supervision of the Dispensary, although many cases may have been notified by a hospital physician and attend his out-patient department, only coming to the Dispensary if specially instructed to do so.

The sources of new patients coming to the Dispensary are various, as a glance at the heading in the summary will show, but the majority are directly referred by private doctors. It has always been a matter of satisfaction that the local doctors have to such a large extent availed themselves of the dispensary service—especially in view of the fact that patients could be equally well referred to any one of the five hospitals (one of which is world famous for consumption and other chest diseases) within easy reach of the Borough.

A spirit of most friendly co-operation has been maintained between the dispensary service and the general practitioners, and I feel that this is an important factor in the fight against the disease, from both present and future standpoints.

A specialist Service has without doubt its place in the state scheme, but team work is essential if there is to be any real success: and perhaps the most important point is the acquisition of the patient at a stage before the disease has had time to ravage beyond repair. The private doctor is much more likely to see the patient before anyone else and can advise further investigation (sputum tests, X-ray, etc.) if there is any suspicion: and this investigation is willingly carried out by the Tuberculosis Officer until the diagnosis is definitely cleared up one way or another.

It should, however, be emphasized that no compulsion can be brought to bear on any patient to be examined, tested, X-rayed or treated: thus all attendances are entirely voluntary.

There is no provision for coercive measures in any act or regulation yet in force—with the exception of removal to Hospital (already quoted) in the Public Health Act, 1925.

Considering that tuberculosis is a notifiable disease just as scarlet fever, diphtheria and small-pox are (amongst many others) and that stringent powers are available for the control of the latter, there would appear to be a case for the operation of similar powers in the case of a disease which is so much more fatal, and whose economic and sociological effects are so much more pronounced and permanent. Under the present system too much is left to voluntary acquiescence on the part of patients and contacts; and although statistics show a marked decline during the past sixty years, the possibility of having nearly reached a "low-water" mark in this respect must be visualized.

## Dispensary procedure.

Patients attending the Dispensary are grouped and classified according to the type and stage of their disease, whether actively infectious or not, and if quiescence or arrest is reached.

A patient is said to be quiescent if there are no signs or symptoms of active disease, but only those which might be shown by a healed lesion, and whose sputum, if any, is free from tubercle bacilli.

If this stage of quiescence is maintained without relapse for two consecutive years, the patient is "arrested", and if remaining so for three years the name can be removed from the registers as recovered.

In addition to notified cases, there are, of course, many persons, adult and child, who are under observation as suspects or as contacts.

During this period frequent examinations and tests are made, and X-rays are carried out under arrangements made between the Borough Council and Brompton Hospital.

The great importance of X-rays as an adjunct to dispensary work is nowadays universally recognised. All doubtful cases require radiography, and as many others as possible, because it is sometimes very difficult to assess the amount of damage done to a lung by purely external means, or to be certain that no fresh deposits of disease are being formed.

In previous annual reports mention has been made of Mantoux tuberculin tests carried out on children and it will be remembered that a positive reaction does not necessarily imply that disease was present, but that infection with the micro-organism has at some time previously eccurred, giving rise to tuberculin sensitiveness.

Conversely, however, the absence of such a reaction would demonstrate (in the great majority of cases) that no infection had taken place and, therefore, there could not be disease present—a very important fact from the diagnostic standpoint in an otherwise suspicious case. Mention has already been made of the co-operation with medical practitioners, with whom constant touch is kept concerning their patients: but the Dispensary is equally in touch with other Health Services, the School Medical Service and with the Public Assistance Committee and hospitals.

#### Treatment.

Sanatorium is still the best basic form of treatment for tuberculosis—the complete rest, fresh air, feeding and hygiene having a natural tendency for the promotion of healing. When the toxaemia has thus been overcome, graduated exercises stabilize the condition and help to render patients as fit as can be expected to return home and carry on.

It should be pointed out that patients have to be selected for sanatorium treatment—which would not be suitable for all, either from the point of view that the disease might be too advanced and a stay in sanatorium only filling an otherwise useful bed to no advantage; or the age of the patient might militate against such open-air treatment especially in winter time, or if complicated by much bronchitis.

There are other forms of treatment which are often used in combination with sanatorium.

(a) Surgical measures, all designed to give rest to the damaged lung, such as artificial pneumothorax and refills, phrenic evulsions and more rarely thoracoplasty.

(b) Injections of gold salts and tuberculins.

(c) Heliotherapy, in the form especially of ultra-violet rays and Finsen Light.

All these forms of treatment are arranged through the Dispensary, the cost of special treatment being borne by the Borough Council whilst provision of sanatorium treatment under the L.C.C. is free.

The Elizabethan Open Air School (L.C.C.) caters for 60 children, who are notified for gland, abdominal and other forms of non-infective tuberculosis, and who are in a state of quiescence or arrest.

Contact children, especially those of debilitated type, whose condition is likely to be strengthened against disease, can also be referred to the School.

Under open air conditions of schooling, adequate rest hours, special supervision and feeding up, these children appear to do very well, and there have been but few relapses to active disease. Breakfasts, consisting of porridge, fried bread, scrambled eggs, or fish cake, together with bread and butter and jam, are provided; also mid-day meals with a varied and ample dietary consisting of fresh and stewed meat, two vegetables and pudding, with fresh fruit and lemonade.

In addition to those meals the usual ration of fresh milk is given daily to each child; and in certain cases cod liver oil and malt, Irradex, Haliverol, or Virol are prescribed as well.

Contact children can also be referred to the L.C.C. for boarding out under their Contact Scheme, if they are in danger of being infected with tuberculosis, or if a parent or parents are receiving residential treatment and adequate arrangements for their care cannot otherwise be made.

## After Care.

After patients have been discharged from sanatorium or hospital, they return home to conditions which in many cases are unchanged, and have to face the prospect of competing in the Labour Market for work with all and sundry. It can readily be conceived then, that this period is a critical one, and unfortunately many patients, if not the great majority, sooner or later relapse.

The prognosis in this disease depends on many things, but on nothing more vitally than the economic and sociological factor.

It is with a view to endeavouring to ameliorate these hard times following treatment in sanatorium, etc., that After Care Committees have been organised as part of the machinery of the Tuberculosis Dispensary Service.

The functions of Care Committees are comprehensive. The economic position of the family of every patient is considered, and advice and assistance rendered, as far as possible, with a view to enabling the family to adjust their circumstances to the new conditions in order to maintain their economic independence, and to allow the fullest possible advantage to be derived from the medical treatment given.

Care Committees also carry out, after investigation, recommendations for dental work, including the provision of dentures, and also in connection with the supply of essential clothing and boots in order that patients may be able to benefit from residential treatment.

All recommendations for extra nourishment pass through the Care Committee to the Medical Officer of Health, and in this connection grants of extra nourishment to 74 patients were made during the year.

I would like to place on record my appreciation of the services of the Chairman, Vice-Chairman and other members of the Care Committee and of the Secretary for their valuable work during the year, and in this connection would specially wish to thank the Invalid Children's Aid Association and the Charity Organisation Society for very special help given freely at all times.

To illustrate the scope of the work of the Committee, the Secretary, Miss Sargent, has kindly selected specimen cases which are here appended:—

## Specimen Cases: -

- A. Was first seen at Brompton Hospital and recommended for sanatorium treatment. He was a waiter and actually working at the time but his earnings were very low and he looked ill and under-nourished. He had a wife and two small children (one a baby in arms); the rent was high and payments on furniture still further reduced the amount available for food. As A. came from Scotland, he was referred to the Royal Scottish Corporation for assistance which was given during the whole period of his treatment in sanatorium: extra nourishment was given from the Town Hall until he went away: an outfit of clothing was granted by the London County Council, and a fortunate encounter provided the money to pay off the whole of the amount owing on the furniture. On his return from sanatorium, A. was able to sign on the Labour Exchange, and the National Association granted an allowance for four weeks whilst he was looking for suitable work. He was not very fortunate at first and only had odd days, but just as he felt at the end of his resources and had agreed to apply for Public Assistance, he obtained work in the country and is holding his job.
- B. Was in Fulham Hospital when we first heard of him early in the year. He was notified and was given a period in sanatorium, and at first it seemed as if no help was required as he had no dependants and his insurance benefit more than covered the rent of his flat. Before he was discharged, however, his insurance had dropped to half and this was not sufficient to meet his expenses. The Public Assistance Committee were not able to help while the patient was in sanatorium as he had not been in receipt of Relief before his admission to Hospital.

We referred the case to the Charity Organisation Society, one of whose visitors went to see B. in sanatorium and they agreed to co-operate with the Care Committee in keeping on the flat until he should be discharged, when it would be possible for him to apply for Public Assistance should he not be able to work. Actually, when B. came home he arranged to move out to Ealing and the flat was given up, the move being paid for by the Charity Organisation Society and the Care Committee.

C. Came to the Dispensary in the spring and was at once recommended for sanatorium treatment. He had been off work for some months and was only eligible for 9/-National Health Insurance owing to arrears of stamps. His father had been ill for many months and was only on disablement benefit, but had gone to Manchester to a brother's, where he hoped eventually to find light work. The only other source of income was the rent of a cottage in the country which brought in 9/-a week. Extra nourishment was given from the Town Hall and help was obtained from the Soldiers' Sailors' and Airmen's Families' Association, which continued help until the father was actually in work and able to send a little home. When the patient was discharged in the autumn, extra nourishment was again given and as there seemed a prospect of a light job materialising for him near Manchester and the family wanted to be re-united, they were helped to move north by the Charity Organisation Society, the Care Committee paying up the arrears of insurance stamps so as to keep C. in benefit.

## The Gloving Class.

Thirty-seven lessons were given during the year and total attendances numbered two hundred and twenty-six. The numbers in the class varied a good deal: there is now only one of the original class attending but several of the more recently joined members have attained a high degree of proficiency and there is usually a beginner.

The outstanding event for the class was a Sale which was held in the Dispensary on October 13th, when the Mayor and Mayoress were present and showed much interest in the display of gloves and in the class itself. £14: 14: 9 was taken at the sale together with a large number of orders. During the year and including the Sale, gloves to the value of £42: 3: 3 were disposed of through the agency of the Committee, besides those which were sold direct by the Central Fund which continues to be financially responsible for the class.

### Conclusion.

In the foregoing an attempt has been made to give a brief account of the history and present day control of tuberculosis. Reference has been made to the decline in mortality rates during the past sixty years, and a glance at the dispensary statistics during the past few years is sufficient to indicate that Fulham is no exception to the general rule.

At the same time it must be confessed that our past statistics are somewhat misleading—and there may be still some who are unduly impressed with large figures, judging departmental value quantitatively rather than qualitatively.

I should like to point out that large numbers—as representing work done in a department dealing specially with tuberculosis, do not necessarily indicate efficiency—rather otherwise; for excessive numbers defeat their own ends and individual care, so specially needed in this disease, suffers in the struggle to attain imposing annual returns.

Tuberculosis work, whether examination, supervision or after-care, cannot be rushed: nor can large numbers be properly dealt with at clinics, as there is a limit to one's critical faculties.

There are so many factors which must be thought of if any good is to be expected—and the mental attitude of the patient has also to be carefully considered.

Sanatorium, institutional or other treatment is not likely to do much good if a patient is worried all the time with private and home anxieties.

It is well, however, to guard against undue optimism because there has been this continued decline. The epidemiology of tuberculosis is but imperfectly understood at the present time; and although excellent work is being carried out in the country and the Borough with regard to better housing and nutrition, I do not for one minute think this is going to "wipe out" tuberculosis when there are so many hidden sources of infection, and where public ignorance, sentiment or deficiencies in the present scheme, prevent more satisfactory measures being taken in those already known.

Two important factors make themselves continuously felt in opposition to our control of the disease—viz.: (A) the unjust "stigma" which is so often more potent in that it is usually indirectly expressed. (B) Fear of the inevitable re-adjustment of all private life (often accompanied by more or less financial crash or loss of employment) which may ensue on a diagnosis of consumption being made.

These two conditions are in themselves quite sufficient to inhibit some (who might otherwise be quite willing) from presenting themselves for early examination on the appearance of (possibly) suspicious symptoms, or as contacts of others. In fact the patient already notified may feel that the only way to "get a chance" in life is to move away to a new locality leaving no trace, and hope for the best: and this is undoubtedly what does happen at times. Though it is very unsatisfactory, both for the community and from the administrative standpoint, one cannot but feel sympathy for these people: to have the complaint is bad enough without being as it were penalised by loss of work and break-up of home life.

Whilst criticism can usually be directed against any particular system, it is, however, very difficult to indicate how a more efficient and comprehensive scheme could be evolved without further legislation and a re-organisation of the present one, together with greater public education on the subject.

The disease is a fatal one and the cost of it heavy from whatever aspect it is considered; and any changes which would give the State a more efficient control should be welcomed.

To all who have worked during the past year in the Tuberculosis Dispensary; Miss Sargent and her assistant, Miss Grimstone, in the Clerical Department; Miss Robinson, Bacteriological Assistant, of whom special mention must be made for her care and skill in carrying cut Mantoux tests and keeping records of same in addition to her other work in the laboratory: to the Tuberculosis Health Visitors for their success in getting contacts—sometimes an almost superhuman task; and to Dr. Crowe, who acted as locum tenens tuberculosis officer during holiday periods, I wish to express my appreciation and thanks.

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TABLE
                            MANTOUX
                                         TESTS.
(1) Total number of injections given:
      1—10,000 dilution
      1-1,000 dilution
                                                     Total 628
      1-100
               dilution
   Total number of Positive Reactions:_
      1—10,000 dilution
                                            66 or 24.44%
                                    ...
      1-1,000 dilution
                                            7 or 3.68%
      1-100
               dilution
                                            17 or 10.11%
                                    ...
                                   Total
                                           90 or 14.33%
(3) Number of those who received test:_
      For the first ...
                                            199 (82+ : 117-)
     For the second ...
                                            29
                                                (2+:27-)
     For the third ...
                                            31
                                                (3+:
                                                         28_{-})
     For the fourth . .
                                                 (3+:8-)
                                     Total 270
Examinations for tubercle bacilli in laboratory:
      No. of sputa examinations
                                           1679
                                                (339 + : 1340 -)
                                            11
     No. of urine examinations
                                            11
      No. of fæces examinations
Special Treatments:
                                           610 at a cost of £320
     Artificial pneumo-thorax refills
                                               .. .. .. £21: 5: 0.
     Finsen Light ...
                                               ,, ,, ,, 5:0.
     Ultra violet light
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### Dental Treatment:

Fourteen persons were referred for treatment but of these one withdrew. Of the remaining thirteen, ten were recommended for extractions and dentures, two for repairs to dentures and one for extraction.

#### Extra Nourishment:

Seventy-four patients were recommended for grants of extra nourishment for varying periods of from two weeks to three months.

## SUMMARY OF STATISTICS, 1936.

No. of New Patients:						
						004
Insured						234
Uninsured	***	***		***		339
		Total				578
No. of Attendances:						
Insured	***		***		***	1164
Uninsured	***					2321
Attendances of Conta	cts		V.4.			796
Other Attendances						828
		Total				5109
		1				
Attendances in Glovin	ng Class				***	226
No. of patients who have	attended, 1	both old a	nd new			1224
No. of Notifications: -						
Pulmonary						101
			***			161
Non-pulmonary						13
		Total				174
No. of Sputa examined						1679
No. of Physical Examination					***	2638
No. of Contacts examined			***			267
No. of Home Visits paid by			***			426
Bedside Consultation						230
Consultations otherw					***	
No. of Home Visits paid by			***	***	***	725
No. of Reports sent to Pub		***		***		3655
No. of reports sent to Doct			***			573
No. of Letters written		***	***			758
No. of Patients referred to		Hoenital	***			5388
Eon V	Diompton	Hospital				3
For A-ray	***		***		111	420

No.	of	Notified	cases	on I	ispen	sary Books	on	31.1	12.36			703
No.	of	Patients	s sent	away	into	institutions	or	to	the	country	in	
	1	1936										164

#### TABLE 44.

164 Patients were sent to residential institutions on the recommendation of the Dispensary Medical Officers.

(a) 108 by the London County Council Public Health Department: -

	Sar	34 to natoria.	2 to Colonies.	6 to Convalescent Homes,	66 to Hospitals.
Men	 	18	2	1	31
Women	 	16	_	_	25
Children	 	_	_	5	10

(b) 15 by the Public Assistance Committee: -

				6 to	9 to Sanatoria or
				Hospitals.	Convalescent Homes.
Men			 	3	1
Women		***	 	1	_
Children	***		 	2	8

- 16 Children were sent to Convalescent Homes by the Invalid Children's Aid Association.
- 11 Children were boarded out under the Contact Scheme.
  - 5 Children went away through the Children's Country Holiday Fund.
  - 6 Women and
  - 3 Children were sent away by the Charity Organisation Society.

#### TABLE 45.

## Showing sources of New Cases.

229	were	recommended	by	private doctors.
32	,,	,,	22	the Medical Officer of Health.
8	,,	,,	,,	the School Medical Authorities
1	was	,,	"	the School Authorities.
112	were	,,	,,	Hospitals and Sanatoria.
23	,,	,,	27	other Dispensaries.
3	,,	,,	,,	the London County Council.
123	11	,,	"	the Dispensary Staff.
3	,,	,,	,,	friends.
27	,,	,,	,,	the doorplate.
6	,,	.,	,,	the Invalid Children's Aid Association.
4	,,	,,	,,	Bishop Creighton House,
1	was	. ,,		the Army Authorities.
1		,,	,,	Soldiers & Sailors Help Society.
579				

TABLE 46.

New Cases.	Pul- monary Tuber- culosis.	Other Forms.	Sus- pects.	Non- Tuber- cular.	Per- centage Tuber- cular.
268 Males	93	4	9	162	36-19
305 Females	65	7	9	224	23.60
573 both sexes	158	11	18	386	29.49

TABLE 47.

Sex and Age of the New Patients for 1936.

	Un- der 5 yrs.	to 10 yrs.	10 to 15 yrs.	15 to 25 yrs.	25 to 35 yrs.	35 to 45 yrs.	45yrs. and over.	All ages.
Males Females	15 24	48 39	30 30	51 72	41 74	27 32	56 34	268 305
Both Sexes	39	87	60	123	115	59	90	578

TABLE 48.

Diagnosis at various Age Periods. New Patients.

51	Pul- monary Tuber- culosis.	Other Forms.	Sus- pects.	Non- Tuber- cular.	Per centage Tuber-cular.
Under 5 years	_	_	3	36	00.00
Under 10 years	2	1	3	81	3.44
Under 15 years	1	4	-	55	8.33
Under 25 years	43	1	3	- 76	35.77
Under 35 years	44	4	4	63	41.73
Under 45 years	22	1	3	83	38.98
45 and over	46	-	2	42	51.11
All ages	158	11	18	386	29.49

### TABLE 49.

### Housing Conditions.

Of 159 of the 174 tuberculous patients found in 1936: --

5 lived in the basement.

41 lived on the ground floor.

42 lived on the first floor.

19 lived on the second floor.

2 lived on the third floor.

14 lived on the top floor.

10 lived on more than one floor.

26 lived in the whole house.

TABLE 50.

Housing Accommodation.

		N	umber	of Fam	ilies oc	cupying	g
		One room.	Two rooms.	Three rooms.	Four rooms.	Five rooms.	Six rooms or more.
Patient living a Patient living w	lone vith	12	2	3	-	-	-
1 other		4	7	8	4	-	2
2 others		2	3 2	20	10	1	1
3 ,,		1 .	2	18	13	9	1 4 2 2 3
4 ,,		-	-	5	8 2	3	2
5 ,,		-	-	5	2	1	2
6 ,,		-	-	1	-	-	3
3 ,, 4 ,, 5 ,, 6 ,, 7 ,, 8 .,		-	-	-	-	-	-
8 ,,		_	_	-	_	-	1
		19	14	60	37	14	15

### TABLE 51.

Sleeping Accommodation of 159 Tuberculous Patients.

## The patient slept: -

In a separate room in		 61 cases.
Alone in bed with one other in room in		 14 cases.
Alone in bed with two others in room in		 5 cases.
Alone in bed with three others in room in		 1 case.
In bed with one person and no others in room	in	 59 cases.
In bed with one person and one other in room		 14 cases.
In bed with one person and two others in roor		 4 cases.
In bed with two persons and no others in room	n in	 1 case.

## TABLE 52.

Occupations of.	94	Men	(New	Cases)	in	1936.
-----------------	----	-----	------	--------	----	-------

	L. Company of the Com	The second secon	
1	Advertiser.	1	Milk Roundsman.
1	Barman.	8	Motor Drivers.
2	Boot repairers.	1	Motor Tyre Builder
1	Builder.	1	Musician.
1	Canvasser.	2	Painters.
1	Carman.	1	Pastry Cutter.
1	Carpenter.	1	Pedlar.
6	Clerks.	1	Pipe Maker.
1	Commercial Artist.	2	Plumbers.
1	Coal Porter.	2	Postmen.
1	Convenience Attendant.	1	Relieving Officer.
1	Domestic.	2	Salesmen.
1	Electrician.	1	Sheet Metal Worker
4	Engineers.	1	Ship Steward.
2	Factory Hands.	6	Shop Assistants,
1	French Polisher.	6	Shopkeepers.
1	Furniture Remover.	1	Soldier.
2	Gardeners.	1	Stoker.
3	Hall Porters.	3	Students.
1	Haulage Contractor.	1	Upholsterer.
1	Hotel Valet.	1	Waiter.
1	Insurance Agent.	1	Warehouseman.
8	Labourers.	1	Well sinker.
1	Mason.	. 1	Window Dresser.
1.	Messenger.	2	No occupation.
	Occupations of 67 W	Vomen (New )	
1	Actress.	2	Hospital Nurses.
1	Bedding Cutter.	28	Housewives.
1	Braille Copier.	4	Laundry Hands.
8	Clerks.	1	Manageress.
1	Dancer.	3	Shop Assistants.
9	Domestics.	1	Traveller.
4	Factory Hands.	2	Waitresses.
1	Handbag Maker.		
		5 years of ag	e.
3	Boys.	5	
-	Doyo:	U	CHARLES.

## VACCINATION.

Mr. H. Davies, the Vaccination Officer, has supplied me with the following figures relating to his work:—

Number of births registered of	luring	1935			1656
Successfully vaccinated					910
Insusceptible of vaccination					_
Unvaccinated on account of	consc	entious	objections	made	
by the parents					421
Died unvaccinated					66

Postponed by medical certificate and unvaccinated on	31st	
January, 1937		42
Removed to other districts and unvaccinated on	31st	
January, 1937		69
Removed to places unknown		134
Outstanding on 31st January, 1937		14
Number of successful primary vaccination certification	icates	
received during 1936		1160
Number of Conscientious Objection Certificates rec	eived	
during 1936		427

The figures show that 55 per cent. of the infants born in 1935 had been successfully vaccinated by the end of January, 1937.

## DISINFECTION.

The following rooms were disinfected and cleansed after Infectious Diseases, etc.:-

### TABLE 53.

Scarlet Fever							291
Diphtheria							168
Measles							44
Encephalitis Le	ethargica						. 1
Erysipelas				***			47
Ophthalmia Ne	onatorum						1
Tuberculosis							171
Puerperal Pyre	xia						1
Vermin							342
Cancer							12
Cerebro-Spinal	Meningit		***				7
Poliomyelitis							2
School Class ro							5
Ditto.	after S						16
Chicken Pox	uiter D		10,01				5
Whooping Cou	gh	1500					2
Enteric Fever	P.,	***					10
Infantile Paral			***				3
By request	y 515			***			21
Maternity Hon				***			28
Day Nursery		***	***			***	42
Babies' Hospit			***				1
Infant Welfare		***	***		***		25
Library		***		***	***		4
Library	***	***	•••	***	***		

1,249

The following articles were disinfected at the Council's Disinfecting Station: -

TABLE 54.

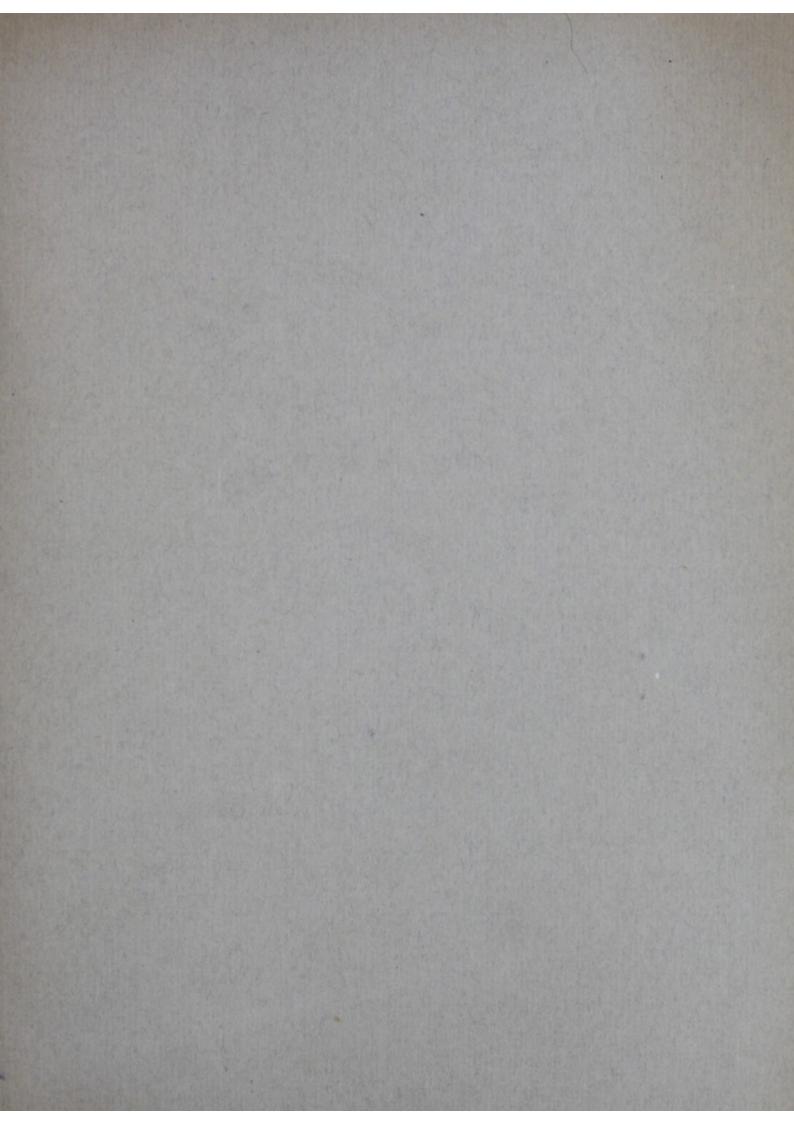
A	rticle	es.	From private houses.	From institutions.	Total.
Beds			 434	_	434
Mattresses			 929	67	996
Palliasses			 9	_	9
Spring beds			 1	_	1
Pillows			 2151	103	2254
Cushions			 326	_	326
Bolsters			 616	_	616
Blankets			 2168	305	2473
Sheets			 1321	78	1399
Covers			 325	-	325
Counterpanes	;		 663	-	663
Curtains			 3	_	3
Carpets			 26	-	26
Hearth rugs			 254	-	254
Clothing			 2892	584	3476
Eiderdowns			 322	_	322
Sundries			 660	4	664
			13101	1137	14238

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