# [Report of the Medical Officer of Health for Paddington, Metropolitan Borough of].

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Metropolitan Borough of Paddington.

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# REPORT

ON

# THE VITAL STATISTICS

AND THE

# WORK OF THE PUBLIC HEALTH DEPARTMENT

For the Year

1913.

BY

REGINALD DUDFIELD, M.A., M.B., D.P.H., F.S.S.

Medical Officer of Health.

SALUS CIVIUM CIVITATIS OPES.

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MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit my Report on the Vital Statistics of the Borough and the work of your Public Health Department during the year 1913, this being the twenty-

first report prepared by me.

The foundation of vital statistics being the annual estimate of the population of the Borough, the correctness of such estimate is a matter of first importance. population for the middle of last year which has been used in this report has been obtained by the use of well-recognised formulæ which involve the assumption of a persistence of the rate of change in the population observed at the last census. Such method has given an estimate of 142,261 persons, showing a decrease of 290 persons since April, 1911. There are, however, grounds for thinking that the population in the Borough has increased and not decreased since that date. The principal argument in favour of that view is the reduction in the number of empty properties which has been recorded by the Borough Treasurer. On page 15 there will be found described a method of estimating the inhabitants of the Borough which allows for the reduction in "empties" referred to. Briefly the use of such method gives an estimate for last year which is 4,430 persons in excess of that obtained by the accepted method, and shows an increase of 4,140 persons since the census. Having regard to the total population, the difference between the two estimates is not very great at the present time (equal to 3:1 per cent. for 1913), but the run of the figures given on page 16 suggests that the error arising from the old method will be very considerable before the next regular census is taken unless the present tide of immigration undergoes a notable check. Reasons are given in the report for abstaining from the use of the estimate obtained by the new method in the calculation of the various rates, but it will be of interest to note here the differences between the birth and death rates (fully corrected) obtained from the use of the two estimates, "A" rates being those given by the estimates calculated in the usual way, and "B" rates those given by estimates based on numbers of occupied ratings.

Birth-rate A ... 20·88 ... 21·01 ... 20·87 B ... 20·70 ... 20·60 ... 20·24 Death-rate A ... 13·51 ... 12·44 ... 13·68 B ... 13·39 ... 12·70 ... 13·27

As regards the birth-rate, it can only be said that there are no indications of any check in its reduction. In the next report I hope to be able to show the extent to which the recorded reduction in the fertility is independent of changes in age at marriage, and proportion of fecund women in the population of the Borough.

Last year the following diseases were unduly prevalent, viz., diphtheria, scarlet fever, measles and whooping cough, but in the case of the first disease evidence is adduced (page 32) which minimises the significance of the recorded number. "Return cases" of scarlet fever continue to occur, and the proportion of secondary cases due to this cause is dealt with on page 38. Measles has during the past four years been exceptionally prevalent, and the usual periods of exemption have been almost entirely absent. Two tables will be found in the Appendix (Tables XI. and XII.) which show as clearly as can be exhibited without the use of diagrams the fluctuations in the numbers of known cases occurring week by week since 1903. Last year the fatality of the disease was considerably above the average.

It has been necessary to devote a considerable amount of space to tuberculosis, and there will be still further expansions in future reports when the "tuberculosis scheme" has come into operation. In the account of the working of the "Sanatorium Benefit" provisions of the National Insurance Act given on page 71, I have indicated the need of closer co-operation between the Insurance Committee and your Public Health Department. I would direct your attention to the paragraphs dealing with "Institutional Treatment of Pulmonary Tuberculosis," where the question of the part played by the segregation of the tuberculous (page 74) in producing the reduction in the mortality from pulmonary tuberculosis (phthisis or consumption) is discussed. There can be little doubt that such segregation has been, so far, a factor of insignificant influence. The success of the proposed schemes of treatment of tuberculosis will depend almost entirely on the patients coming under treatment in the earlier stages of their disease. The figures (page 73) showing the average intervals between notification and death indicate that to secure the much to be desired success the disease must be recognised and declared much earlier than has been done (on the average) since notification became operative. This is a matter for which the general public rather than the medical profession are responsible.

The increase in mortality from the malignant diseases included under the generic title "Cancer" has been prominently before the public for some years. Paddington has long had a death-rate from "cancer" higher than the rates of most of the metropolitan districts. Part of

such excess has been due to age-sex-distribution of the population, but there are other factors which require elucidation. The subject is worth close study, and I hope to be able at an early date to examine the data collected.

The infantile mortality rate was slightly higher last year than in 1912, but was, nevertheless, fairly low and in striking contrast with the rates recorded ten to fifteen years ago. Diarrhea was more prevalent last year, but at an unusual time, namely, in the autumn, not in the summer. In the section dealing with "Health Visiting" there is a table—necessarily much condensed—showing the distribution of still-births and miscarriages in relation to frequency of pregnancy. (See Table 48.) The agreement between the proportions of still-births deduced from that table and from the notification of births records is very remarkable and quite contrary to expectation.

The increased and increasing proportion of deaths recorded in institutions has been, and is, a very prominent feature in the statistics of recent years. Whether such feature is altogether satisfactory is open to question. It implies that the sick are more ready to take advantage of the opportunity afforded to them of obtaining the most skilled treatment, but, on the other hand, it is also an indication of a growing disinclination to care for the sick in their homes, the origins of which disinclination cannot be dealt with here. It has, however, to be recognised that there is a tendency to urge on behalf of the community at large hospital isolation and/or treatment for many diseases for which isolation was not thought necessary in the past.

The "Administration" section of the report give a very inadequate account of the work of your Public Health Department. The real test of the value of such work and of the success attending the activity of the Department should be sought in the vital statistics of successive years.

At the present moment the housing question bulks large in the mind of the public. While there is much that needs improvement in the Borough, my view is that there is no need for a housing "campaign." Writing quite generally, the houses are structurally good, and where unsatisfactory conditions prevail they are most commonly the result of the occupancy in tenements of premises designed for single families. Careful watch is maintained for individual houses requiring to be dealt with under the Housing Acts, and when found they are dealt with promptly. I cannot attempt to allocate the blame for insanitation between landlords and tenants, but my experience has led me to attach almost more importance to the domestic habits of tenants than to the sins of omission and commission of landlords, or rather of landlords' agents. Dirty conditions have long been recognised as factors inimical to health and have ranked as "nuisances." The time has come for verminous conditions to be placed in the same category.

I cannot regard with equanimity the conversion of the larger private houses into maisonettes or flats which is going on. It is very desirable that such conversion should be subject to the supervision and control of the Health Authority as well as of the District Surveyor. Questions of storage and collection of house refuse are intimately associated with the conversion here referred to. The accommodation for the storage of such refuse is only too frequently inadequate not only in converted houses, but in all classes of flats. Moreover, owing in part to the predilection for flats, and in part to the difficulty of obtaining domestic servants, gas cooking stoves are replacing coal ranges. Such change makes it impossible to destroy putrescible refuse in the house. Hitherto one collection a week has been the rule in the Borough, but I think it would be a great boon to the inhabitants if a regular half-weekly collection were established, more especially during the warmer months, when the accumulation of vegetable refuse is always large.

The only conclusion which is possible from the results of the work under the Sale of Food and Drugs Acts (see Analytical Work) is that those Acts are inadequate to secure a pure food supply. The warranty defence (in the milk trade at least) makes it impossible to bring home to the responsible party the blame for watering or abstracting fat from milk, and the appeal to the cow has sterilised the "presumptive" standard of milk composition. The addition of preservatives to many descriptions of food-stuffs cannot be controlled—and still less stopped—under the present law. The time is ripe for the public to demand that they shall be supplied with foods which are not only what they are reputed to be, but are also free from drugs. It is questionable, however, whether the public generally either know or care about the composition or purity of their food supply.

I have the honour to be,

Mr. Mayor, Ladies and Gentlemen, Your most obedient servant,

Equians Dus Ziell.

M.A., M.B., D.P.H., F.S.S.,

Medical Officer of Health.

Public Health Department, Town Hall, Paddington, W., 21st July, 1914.

## REPORT.

THE Borough of Paddington comprises an area of 1,356 statute acres, including 20 of inland water-ways (the Grand Junction and Regent's Canals), parts of Hyde Park and Kensington Gardens (68 acres), the Recreation Ground (27 acres), the disused Church Yard of St. Mary's Paddington Green (5 acres), and Paddington Green (1½ acres). The Borough is co-terminous with the Registration District "No. 1, Paddington," comprising three Sub-Districts, viz., "North," "Central," and "South." For municipal purposes the Borough is divided into eight Wards. The grouping of the Wards in the Registration Sub-Districts is set out below:

REGISTRATION SUB-DISTRIC	TS.		WARDS.
North Paddington			 Queen's Park. Harrow Road. Maida Vale.
Central Paddington			Westbourne. Church.
South Paddington		***	 Lancaster Gate, West. Lancaster Gate, East. Hyde Park.

The Borough is situated on the southern side of the range of low hills which culminate in the Hampstead Heights, the slope being (generally) towards the south and west. The subsoil is principally clay, but in places, more particularly in the neighbourhood of the Bayswater Road, pockets of gravel exist, or did exist. In the central parts of the Borough many depressions were filled up years ago with slop and refuse of all descriptions. In the western parts of the Borough the subsoil water lies at a very few feet below the surface of the ground. There are at least two, and possibly more, subterranean watercourses, one of which, running parallel with the Edgware Road, close to the western side thereof, has been found on several occasions, in the course of works of excavation to trace the causes of dampness in cellars. The second, the better known, now forms the Ranelagh Sewer, one of the main sewers of the Metropolis.

#### POPULATION.

Since the last report was presented ten volumes of the Census Report (1911) have been issued, but the Report is still incomplete. In 1901 the population of the Borough was found to comprise 143,976 persons—61,626 males and 82,350 females. The ultimate total obtained in 1911 was 142,551 persons—60,415 males and 82,136 females—showing a nett shrinkage of 1,425 persons, equal to 0.98 per cent. of the population of 1901. The numbers of males and females enumerated in 1901 and 1911 in the Borough are shown in Table 1. The whole of the shrinkage (except 6 persons) occurred at ages under 30 years, males at ages 20–25 years showing the largest absolute loss (1,086 individuals). The "True Mean Population" for the decennium 1901–10 is also given in Table 1, those figures being obtained by the use of the formula devised by the late Mr. Waters, of the General Register Office, which was published in the Journal of the Royal Statistical Society (vol. xliv.).

The diminution in the population of the Borough, as shown by the census figures, of 1,425 persons (1,211 males and 214 females) gives a very inadequate idea of the real loss of inhabitants. In the report for 1911 certain figures were adduced to show that the loss by migration during the ten years had probably been as much as 16,000 persons. That estimate is confirmed by the Census Report, in Vol. II. of which (p. 429) it is stated that the births registered during the ten

years numbered 31,588 persons, and the deaths 21,437. In neither case had any corrections been made for non-residents or out-lying institutions. Taking the figures as they stand, the increase in the population of the Borough by natural increment, and apart from any immigration, ought to have been 11,576 persons. Experience of the "transfer system" for births and deaths recently set up by the Registrar-General shows that (roughly speaking) some 200–250 births belonging to the Borough take place each year outside its area, and that from 100–150 deaths of non-residents should be deducted, after allowing for deaths of residents outside the Borough. The foregoing figures would give an annual addition of from 300–450 persons per annum to the natural increment given above. Taking the estimated addition at 350 per annum, to be on the safe side, and adding 3,500 as the total for the decennium to the figure given above (11,576), the total natural increment becomes 15,076 persons, and if to that be added the loss of 1,425 persons disclosed by the census, a total of 16,501 is obtained as the final index of the loss of inhabitants between 1901 and 1911 resulting from migration.

TABLE 1.
Populations—Borough.

		Enumerated	Population.		True Mean		
Ages.	190	01.	193	11.	1901-10.		
	Males.	Females.	Males.	Females.	Males.	Females.	
0— 5— 10— 15— 20— 25— 30— 35— 40— 45— 50— 65— 66— 65— 80— 85— 90— 95— 100—	6,384 5,581 5,239 5,601 6,928 6,178 5,194 4,420 3,882 3,342 2,684 2,177 1,679 1,033 691 348 182 66 15 2	6,388 5,743 5,646 7,683 10,070 9,698 7,545 6,298 5,208 4,425 3,819 2,957 2,478 1,800 1,281 726 396 146 32 9	6,028 5,366 4,786 5,103 5,842 5,775 5,243 4,712 3,891 3,505 3,046 2,439 1,786 1,384 834 404 193 62 14 2	6,011 5,405 5,022 6,714 9,388 9,341 7,588 6,872 5,611 5,041 4,192 3,169 2,580 2,118 1,471 906 477 171 49 9	6,226 5,487 5,036 5,378 6,436 5,999 5,221 4,558 3,889 3,420 2,852 2,299 1,729 1,195 757 374 187 64 15 2	6,22 5,590 5,360 7,244 9,760 9,543 7,571 6,560 5,393 4,711 3,990 3,057 2,527 1,947 1,360 809 433 158	
All ages	61,626	82,350	60,415	82,136	61,124	82,323	

During the year much valuable information relating to the Borough has been obtained from the Census Commissioners under the provisions of Section 9 of the Census Act. From that source it has been possible to prepare Table 2, which shows the changes in the populations of the Wards of the Borough in six sex-age groups. The actual numbers of each sex in much finer age groups (many of single years) are in the possession of the Department, but considerations of space prevent their inclusion here. The age groups given are those which have been found most useful in the preparation of these reports. In Maida Vale and Lancaster Gate (West) Wards only are increases in both sexes to be noted.

	Rop	OUGH.	Ousen	n's Park.	Uarro	w Road.	Maid	a Vale.	Wast	bourne.	Ch	t		Lancas	ster Gate			D 1	
	100	ocon.	Queen	is raik.	Harro	w Koau.	Maid	a vaic.	West	bourne.	Cn	urch.	W	est.	E	ast.	Hyde	Park.	
	1901.	1911.	1901.	1911.	1901.	1911,	1901.	1911.	1901.	1911.	1901.	1911.	1901.	1911.	1901.	1911.	1901.	1911.	
								Ma	les.										
0— 5— 15— 25— 45— 65—	6,384 10,820 12,529 19,674 9,882 2,337	6,028 10,152 10,945 19,621 10,776 2,893	919 1,829 1,827 2,487 1,359 190	910 1,621 1,573 2,417 1,287 280	1,666 2,451 2,377 4,463 1,772 399	1,403 2,296 2,128 4,238 2,111 512	693 1,281 1,540 2,406 1,265 312	786 1,317 1,395 2,815 1,490 449	968 1,524 2,059 3,034 1,649 541	928 1,621 1,730 2,881 1,833 640	1,460 2,447 2,493 3,826 1,889 371	1,403 2,279 1,976 3,663 1,976 426	153 329 748 975 505 137	139 252 782 1,125 629 188	136 299 481 747 484 143	160 254 492 780 529 155	389 660 1,004 1,736 959 244	299 512 869 1,702 921 243	
All ages	61,626	60,415	8,611	8,088	13,128	12,688	7,497	8,252	9,775	9,633	12,486	11,723	2,847	3,115	2,290	2,370	4,992	4,546	
0— 5— 15— 25— 45— 65—	Increase. — — — — — — — — — — — — — — — — — — —	Decrease. 356 668 1,584 53 —	Increase. — — — — — — — — 90	Decrease. 9 208 254 70 72	Increase. — — — — — — — — — — — — — — — — — — —	Decrease. 263 155 249 225 —	Increase. 93 36 	Decrease	Increase. 97 — 184 99	Decrease. 40 - 329 153	Increase. — — — — 87 — 55	Decrease. 57 168 517 163 —	Increase.	Decrease. 14 77 — — — — — —	Increase, 24 — 11 33 45 12	Decrease. 45 — 45 — — — — — — — — — — — — — — — —	Increase.	Decrease. 90 148 135 34 38 1	POPULATION-V
All ages	-	1,211	-	523	_	440	755		-	142	-	763	268	-	80	_	-	446	VARDS
								Fem	ales:										S.
0— 5— 15— 25— 45— 65—	6,388 11,389 17,753 28 749 13,679 4,392	6,011 10,427 16,102 29,412 14,982 5,202	915 1,847 1,615 2,395 1,450 348	849 1,636 1,356 2,390 1,339 454	1,640 2,492 2,375 5,014 2,270 785	1,464 2,309 2,220 4,767 2,635 975	733 1,405 2,702 3,916 1,871 594	785 1,351 2,571 4,730 2,342 800	944 1,670 3,091 4,652 2,583 1,061	948 1,554 2,804 4,512 2,797 1,212	1,419 2,444 2,642 4,403 2,285 598	1,352 2,336 2,309 4,372 2,242 716	193 402 1,592 2,244 890 288	133 340 1,442 2,559 1,219 338	180 346 1,540 2,511 835 237	147 317 1,434 2,538 933 268	364 783 2,196 3,614 1,495 481	333 584 1,966 3,544 1,475 439	
All ages	82,350	82,136	8,570	8,024	14,576	14,370	11,221	12,579	14,001	13,827	13,791	13,327	569	6,031	5,649	5,637	8,933	8,341	
0— 5— 15— 25— 45— 65—	Increase	377 962 1,651 — —	Increase	66 211 259 5 111	Increase. — — — — — — — — — — — — — — — — — — —	Decrease. 176 183 155 247	Increase. 52 — 814 471 206	Decrease. 54 131 — — —	Increase. 4 — — — — — — — — — — — — — — — — — —	116 287 140 —	Increase.	Decrease. 67 108 333 31 43	315 329 50	Decrease. 60 62 150 — — —	Increase. — — — — — — — — — — — — — — — — — — —	Decrease. 33 29 106 —	Increase.	Decrease. 31 199 230 70 20 42	
All ages	_	214	_	546	-	206	1,358		-	174	-	464	422	-	-	12	-	592	

When examining the populations of the individual Wards account has to be taken of the influence of the various institutions situated therein. In this respect Westbourne and Church Wards are notable examples, there being in the former the Workhouse, the Infirmary, the Casual Wards, the Lock Hospital, and the London County Council Place of Detention, and in Church Ward, St. Mary's and the Children's (Paddington Green) Hospitals. The populations of the larger institutions are given in Table 3, which is extracted from Table 17 of the First Volume of the Census (1911) Report. The proportions of the "inmates" in the various institutions mentioned not belonging to Paddington are not known, but the institutions which are likely to receive more non-residents than residents of the Borough are indicated by italic type. The 10 institutions included in Table 3 contained a total population of 2,184 persons, 5 of the institutions (population, 1,628) being in Westbourne Ward, while the institutional population in Church Ward numbered 500. In Vol. VI. of the Census Report the term "institution" is used in a much wider sense, as in Table 2 of that volume no fewer than 68 "institutions" are tabulated (without being specified) with a total population of 3,551 persons.

TABLE 3.

PRINCIPAL PUBLIC INSTITUTIONS.

Census, 1911.

		Inn	nates.	Offi	Total Inhabitants	
Ward.	Class and Name of Institution.	Males.	Females.	Males.	Females.	Persons.
	Poor Law Institutions—					
W.	Workhouse	496	462	13	27	998
W.	Infirmary	159	130	5	30	324
W.	Casual Wards	38	7	2	1	48
	Hospitals—					
W.	Lock	6	180	2.	34	222
Ch.	St. Mary's	160	122	21	140	443
Ch.	Children's	15	20	2	20	57
CII.	Nursing Homes—		70.70			
M.V.	177 7	1	13	2	21	37
M.V.	77 77 1 1	1	5		4	10
	Others—					
W.	L.C.C. Place of Detention	28	_	4	4	36
***		_	7	_	4 2	9
	Auxiliary Girls' Home					
	Totals	904	946	51	283	2,184

W .-- Westbourne.

Ch.—Church.

\* Now closed.

M.V.-Maida Vale.

Housing.—The methods of tabulating the information obtained in the last census relating to this subject having been completely changed, comparison with the results of former census work is difficult and uncertain. Table 4 is an extract of that part of Table 2 given in Vol. VI. of the Census Report which relates to the Borough. In examining Table 4 the following definitions given in the Census Report require to be taken into consideration.

"Ordinary dwelling houses" include all buildings designed for occupation by single private families.

A "block of flats" comprises all the space within the external and party walls of a building. Each flat forming with a lock-up shop (on ground floor) a separate building is counted as a "block of flats." (In 1901 each block of flats was counted as a "house.")

"Shops" are reckoned as inhabited only where the staff, &c., sleep on the premises.

"Hotels. Inns, Public-houses" include temperance hotels.

"Offices, Warehouses, Workshops, Factories" have been counted as inhabited only where resident caretakers or managers have been enumerated.

"Institutions" include :-

- (a) Public institutions;
- (b) Naval and military establishments; and
- (c) Registered lodging houses.

Nursing homes

Boarding schools, colleges.

Convents.

Orphanages and almshouses.

(Each institution in this group returned one schedule only.)

"Others" include dwellings over stables, quarters of caretakers of clubs, town halls, libraries, &c.

"Uninhabited dwellings" were such as were not slept in on the night of the census.

TABLE 4.
BUILDINGS USED AS DWELLINGS.

	Totals, 1901.	Totals, 1911.	Ordinary Dwelling Houses.	Blocks of Flats.	Shops.	Hotels, Inns, Public Houses.	Offices, Warehouses, Workshops, Factories.	Institutions.	Others.	Vessels, Sheds, Vagrants, &c.	
Number Inhabited	17,684	16,686	13,104	373	1,569	165	98	68	1,309	-	3,018
Separate Occupiers Inhabitants	33,661 143,976	33,925 142,551		3,065 9,519	2,462 9,653	176 2,443	115 475	75 3,551	1,363 5,995	42 135	3,065 9,519
Uninhabited Building	1,021	920	406			_	13	_	357		709

See text of Report (supra) for meanings of headlines.

It should be added that the designation "inhabited" used at the last census is equivalent to the "in occupation" used in 1901, and the same remark applies to "uninhabited" (1911) and "not in occupation" (1901).

In addition to the buildings used as dwellings, 921 other buildings, not being "dwellings," were enumerated in the Borough, comprising:—

Places of					***				***	47
Governme	ent and	Munici	pal Bui	ldings			***			7
Shops			***	***		***	***	***	***	532
Offices							***	***		66
Warehous	ses, Wo	kshops,	and F	actories	***			***	***	262
Theatres	and oth	er Place	es of A	musemer	nt	2222				7

The following notes explain the classes of buildings included in each of the above categories:—

"Places of Worship" include churches, chapels, mission halls, Sunday schools, &c., but do not include

- (a) any of the foregoing with a resident caretaker or other officer; or
- (b) any building part of which only is used for any of the purposes specified, and the remainder for other purposes.
- "Government and Municipal Buildings" include
  - (a) all such buildings not occupied at night;
  - (b) buildings connected with municipal gas, electricity, water, tramway, &c., undertakings; and

- (c) police stations, fire brigade stations, public libraries and baths, and provided schools;
   but do not include
- (a) prisons;
- (b) workhouses; and
- (c) isolation hospitals.
- "Shops" (it was intended should) include only shop premises without dwellings attached to them.
- "Theatres and Places of Amusement."—The number given does not represent the full count of these places, as many are included under "Buildings used as Dwellings."

The following comparison of the results of the 1901 census with those of that of 1911 must be accepted with some reserve. At the census of 1911

the inhabited dwellings were 998 fewer, and

the separate occupiers 264 more.

The averages usually calculated are those of families or separate occupiers to inhabited dwellings and of individuals to families.

To every 1,000 inhabited dwellings

there were 1,903 families in 1901 and 2,033 in 1911-increase, 130.

there were 8,141 inhabitants in 1901 and 8,543 in 1911 " 402

Every 1,000 families or separate schedules comprised

4,275 persons in 1901 and 4,201 in 1911-a decrease of 74.

To the occupants of 1,000 separate flats 1,015 schedules were issued, that number of flats being occupied by 3,154 persons. Among the inhabitants of flats 1,000 families or separate occupations comprised 3,106 persons.

As very rough approximations,

a "family" in 1901 averaged 4:27 persons, and in 1911, 4:20.

In 1901 the occupants of flats were not tabulated separately. In 1911 the average "family" of a flat comprised 3:11 persons, as compared with 4:20 in an "ordinary dwelling house."

As some use will be made later on of the number of properties rated in the Borough, it should be stated here that there is no correspondence between the numbers of buildings and ratings.

Tenements.—Previous to 1911 "heads of families" were asked to state the number of rooms in their houses or tenements only in the event of their occupying less than five rooms, and the tables relating to the sizes of tenements did not extend beyond four rooms. At the last census particulars as to the number of rooms were asked for in every case, and the tabulation given in Vol. VIII. of the Census Report shows the numbers of tenements of 1–9 rooms (for each increase of one room) according to the number of occupants in each individual tenement up to 14 occupiers, with a supplementary column for tenements with 15 or more occupiers. There is also a tabulation of tenements of 10 or more rooms according to the number of occupants. Moreover, not only is the subdivision of each class of tenement made according to the total number of occupants, but the families are subdivided according to the number of children under 10 years of age. The method of tabulation will, perhaps, be better understood from the following scheme.

- 2. Each tenement of 1, 2 .....rooms distributed according to the total number of occupants, 1, 2, 3......14, 15 and upwards.
- 3. The latter further subdivided according to the number of children under ten years of age, 1, 2, 3......

As regards the Metropolis such minute division has been made for the County only, the third distribution (by number of children) stopping at tenements of four rooms in the tables for the individual Metropolitan cities and boroughs. There is, however, appended to each of that

series of tables a supplementary statement showing the numbers of tenements of five or more rooms containing averages of more than two persons per room, which statement shows the numbers of children under ten years of age enumerated in such tenements.

Before proceeding to refer to the tables which have been prepared to show the housing conditions in the Borough, it may be stated that at the census of 1901 a proportion of occupiers who, from the details contained in their schedules, evidently occupied tenements the number of rooms of which ought to have been entered in the schedules, omitted to do so. Such tenements were distributed by the Census Commissioners, and, to the extent of the omissions, the data of 1901 were estimates. At the last census that source of error was reduced to a minimum, as every occupier was required to enter the number of rooms of his tenement, so that the only errors which were likely to occur would be due to misstatements wilfully made or arising from erroneously counting rooms (such as sculleries, offices, &c.) which the instructions directed not to be included in the total.

In Vol. VIII. of the Report which deals with "Tenements" a new term, viz., "Private Families," has been introduced, and the tabulation described above has been confined to the tenements occupied by the families coming within the meaning given to that term by the Census Commissioners. The following passage from the text of that part of the Census Report contained in Vol. VIII. will explain the use of the new term.

A "dwelling" or "tenement" was defined in the instructions issued to the enumerators as "a place in which any person entitled to receive a schedule usually lives," and the persons entitled to receive schedules, and therefore for census purposes regarded as heads of families, were stated to be:—

- (a) Every head of a family occupying the whole or part of a house or flat.
- (b) Every separate lodger occupying a room or rooms in a house or flat. (Where two or more lodgers shared a room or rooms, they were treated for census purposes as a single family.)
- (c) Every resident caretaker of a house to be let, of a shop or other business premises, or of a public building.
- (d) Every out-door servant (with or without family) occupying separately any building or rooms in a building, such as a lodge, gardener's cottage, dwelling rooms over a stable or coachhouse, &c., which is detached from the house to which it belongs or has no internal communication therewith.
- (ε) Every resident proprietor, manager or head of an hotel, club, business establishment, school, etc.
- (f) The chief resident officer of every institution.
- (g) The master or person in charge of every barge, boat, or other vessel.

The families under headings (a) to (d) have been treated as "private families," those under heading (e) as "private" only when the domestic members of the occupier's family exceed the non-domestic (i.e., trade servants, visitors, scholars, etc.), and those under heading (f) and (g) have been treated as "non-private families."

The headings given in the above quotation correspond generally with the divisions of Table 4, but it is impossible to fit the figures now to be given with any summation of parts of that table.

If the number of separate schedules issued be taken as representing the number of "families" or separate establishments in the Borough, the selected "private families" (33,048) formed 97.41 per cent. of the total families enumerated. (See Table 5.) That table also shows that the proportions of "private families" to all families varied from 96.54 per cent. (Westminster) to 99.68 (Willesden) in the districts circumjacent to the Borough, that for the Metropolis as whole being 99.04. The individuals included in "private families" formed 90.52 per cent. of the total population of the Borough, as compared with a maximum proportion of 98.63 per cent. in Willesden and a minimum of 80.38 per cent. in Westminster.

TABLE 5.

HOUSING—TENEMENTS.

Census, 1911.

	London.	Padding- ton.	Kensing- ton.	West- minster.	St. Maryle- bone.	Hamp- stead.	Willes- den.
1901— Enumerated Population Total Number of "Families"	4,586,267	143,976	176,628	183,011	133,301	81,942	114,811
	1,019,588	33,661	38,349	41,344	31,623	16,998	25,657
1911— Enumerated Population Total Number of "Families" "Private Families" Percentage of All Families Population in "Private Families" Percentage of Total Population	4,521,685	142,551	172,317	160,261	118,160	85,495	154,214
	1,033,861	33,925	38,387	35,984	28,509	18,625	35,478
	1,023,951	33,048	37,475	34,741	27,876	18,130	35,365
	99-04	97.41	97·62	96·54	97.78	97·33	99-68
	4,253,123	129,041	156,353	128,818	102,350	78,469	152 111
	94-06	90.52	90·73	80·38	86.62	91·78	98-63
Tenements with Averages exceeding Two Persons per room— Total Number Population therein: All ages Under 10 years Average number of Occupants	121,638	3,535	4,501	2,893	3,731	881	3,050
	758,786	20,885	26,681	16,596	21,178	5,547	21,175
	289,862	8,157	10,262	5,987	7,592	2,214	8,363
	6-22	5-91	5.92	5.73	5-67	6·29	6-94
per Tenement Percentage of "Private Families" Population in such Tenements	17.8	16.2	17:1	12-9	20.7	. 7-1	13-9

The proportions\* of individuals included in "private families" in the Wards are given in Table 6, and ranged from 63.72 per cent. in Lancaster Gate, West, Ward to 99.44 in Harrow Road. The proportions were under 90 per cent. in three other Wards, viz., Westbourne (83.60), Lancaster Gate, East (81.26), and Hyde Park (88.46). The explanation for the low proportions in Westbourne and Lancaster Gate, West, Wards is probably to be found in the presence of commercial houses in those Wards, but in the case of Lancaster Gate, West, Ward—as also in Lancaster Gate, East—the numbers of boarding houses and private hotels have to be taken into consideration. No suggestion can be offered at the present time for the relatively low proportion recorded in Hyde Park Ward.

Table 6 also gives a "survey" of the accommodation enjoyed by "private families." No similar information has hitherto been available. The highest proportions of population living in homes of less than five rooms were recorded in Harrow Road (82.63 per cent.) and Church Wards (76.65), but there are great differences in the proportions of the individual classes of tenements included in that group—the distribution in Church Ward being the worse, owing to the high proportions of one and two room tenements. At the other extreme striking variations are to be noted in the proportions of tenements of "ten or more rooms," the percentages ranging from 74.98 in Lancaster Gate, East, Ward, to 0.22 in Queen's Park.

In Table 7 the actual number of "private families" living in each Ward will be found, together with the proportions of such families living in tenements of each class. The proportion of tenements of less than five rooms to all tenements occupied by "private families" ranged from 3161 in Lancaster Gate, West, Ward to 88:14 in Harrow Road. The excessive preponderance of tenements of one and two rooms in Church Ward is clearly brought out. The

<sup>\*</sup>The actual numbers on which the proportions given in Tables 6 and 7 are based will be published, together with other data, in a later report.

contrast between the distributions of tenements consisting of one to four rooms in that Ward and in Harrow Road shows that the lower proportion of tenements of less than five rooms in Church Ward (82.88) does not, in comparison with the figure for Harrow Road (88.14), imply superior housing conditions.

TABLE 6.

Housing—"Private Families."
Inhabitants.
Census, 1911.

	al tants rated.	Total Inhabitants enumerated. Percentage of Total Population.	Percentages of Inhabitants enumerated in Tenements of — Rooms.												
	Total Inhabitants enumerated.	Percei of To Popult	1	2	8	4	1-4	5	6	7	8	9	and over.		
BOROUGH	129,041	90.52	7:17	17:80	21.56	18:71	59.74	8:79	6.56	3.18	2-83	1.92	16-99		
Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West Hyde Park	23,378 5,828	99·24 99·44 93·19 83·60 93·48 63·72 81·26 88·46	4·19 5·15 5·59 9·16 16·54 1·30 0·94 2·75	9.96 16.71 15.31 21.51 32.59 4.49 2.89 8.50	18:27 44:02 16:16 19:98 17:49 7:12 7:45 8:79	16.75 11.78 12.58 10.03 10.96 6.90	1000	25·20 7·11 11·76 5·63 4·68 5·18 2·26 4·10	12*83 3:76 11:74 4:94 4:62 6:00 1:06 5:68	3·03 1·78 4·28 3·86 2·62 7·65 1·40 3·61	0·28 1·98 3·12 3·95 2·02 8·84 0·98 5·78	0°20 0°75 2°68 3°29 2°04 5°08 1°14 2°14	0-25 2-09 17-67 15-14 7-33 43-26 74-99 50-83		

TABLE 7.

Housing—" Private Families."

Tenements. Census, 1911.

	Total fumbers.			Perce	entages	of Totals	s compri	rising — Rooms.						
	Tot Numl	1	2	3	4	1-4	5	6	7	8	9	10 and over.		
Borough	33,048	15.62	20.03	21.93	12.70	70.27	7.65	5.73	2.66	2.15	1.45	10.08		
Queen's Park		11·01 12·54	13·85 19·51	19·40 42·58	23·87 13·51	68·14 88·14	19·61 5·12	9·49 2·73	2.29	0.26 1.22	0.08 0.45	0.13		
Harrow Road Maida Vale	5,344	11.54	16.56	15.18	13.55	56.83	13.08	11.94	3.72	2.19	1.87	10.37		
Westbourne Church Lancaster Gate,	5,407 6,193	19·34 29·42	24·15 30·78	19·40 14·69	10.60 7.99	73·50 82·88	4·59 3·83	4·01 3·86	3.09	3.05	2·25 1·42	9.51		
337	1,276	4.78	8.70	9.09	12.46	35.03	5.88	7.21	8.30	8.62	5.01	29-94		
East	1,139	3.95	6.06	12.55	9.04	31.61	2.81	1.49	1.84	1.23	1.40	59.61		
Hyde Park	2,381	8.73	14.78	11.97	9.32	44.81	4.49	5.21	3 23	4.6	2.27	35.35		

In 1901 no distinction was made between "private" and "public families," and the proportional distributions of tenements and their inhabitants were based on the total numbers of tenements ("separate occupiers" being taken as equivalent to tenements), and on total populations. It has been necessary to resort to the same method this time in order to make comparison between the results obtained in 1901 and 1911. It has to be admitted, however, that some doubt is entertained as to the true comparability of the statistics. The results, such as they are, will be found in Tables 8 to 11.

In Table 8 the numbers of tenements of less than five rooms enumerated in 1911 are compared with the numbers enumerated in 1901. Tenements of less than five rooms increased from 21,815 in 1901 to 23,224 in 1911, that is, by nearly 6.5 per cent. The greatest proportional

increase (17.7 per cent.) took place in tenements of four rooms, the increase in number of three-room tenements being 10.5, and of one-room tenements, 2.4. Tenements of two rooms decreased by a trifle under 1 (0.8) per cent.

TABLE 8.
HOUSING—TENEMENTS.
Numbers Enumerated and Proportions.

			Num	bers of T	enements	of		Per	rcentage	es of all	Teneme	ents
		All Sizes	Less than Five Rooms	One Room	Two Rooms	Three Rooms	Four Rooms	Less than Five Rooms	One Room		Three Rooms	
BOROUGH	1901	33,661	21,815	5.035	6,668	6,548	3,564	64·8	14·9	19·8	19·4	10·5
	1911	33,925	23,224	5,159	6,620	7,247	4,198	68·4	15·2	19·5	21·3	12·3
Queen's Park	1901	4,087	2,563	480	676	639	768	62·7	11·7	16•5	15·6	18·8
	1911	3,811	2,592	419	527	738	908	68·0	11·0	13·8	19·4	23·8
Harrow Road	1901	7,441	6,179	790	1,362	3,042	985	63·0	10·6	18·3	40·9	13·2
	1911	7,520	6,614	941	1,464	3,195	1,014	87·9	12·5	19·5	42·5	13·5
Maida Vale	1901	4,313	2,368	506	814	689	359	54·9	11·7	18·9	16·0	8·3
	1911	5,450	3,037	617	885	811	724	55·7	11·3	16·2	14·9	13·3
Westbourne	1901	5,750	3,607	952	1,201	962	492	62·7	16·5	20·9	16·7	8·5
	1911	5,604	3,974	1,046	1,306	1,049	578	70·9	18·7	23·3	18·7	10·2
Citaten	1901	6,528	5,205	1,870	2,140	732	463	79·7	28·6	32·8	11·2	7·1
	1911	6,324	5,133	1,822	1,906	910	495	81·2	28·8	30·1	14·4	7·8
	1901	1,442	384	68	85	87	144	26·6	4·7	5·9	6·0	10·0
	1911	1,455	447	61	111	116	159	30·7	4·2	7·6	7·9	10·9
Lancaster Gate,	1901	1,333	390	54	66	155	115	29·2	4·0	4·9	11·6	8·6
East	1911	1,219	360	45	69	143	103	29·5	3·7	5·7	11·7	8·4
Hyde Park	1901	2,767	1,119	315	324	242	238	40 4	11·4	11·7	8·7	8·6
	1911	2,542	1,067	208	352	285	222	42·0	8·2	13·9	11·2	8·7

Table 8 also shows the ratios (per cent.) of each class of tenement to all enumerated tenements, from which it appears that the proportion of tenements of less than five rooms increased during the ten years by nearly 6 per cent., the major part of such increase taking place in the larger tenements (three and four rooms). The greatest increase in the proportion of tenements of less than five rooms took place in Harrow Road Ward, where it amounted to nearly 17 per cent., and the least (0.3 per cent.) in Hyde Park. The absolute changes in the percentage proportions of each tenement in each Ward are shown in Table 9, which does not appear to require any explanation. It may be permitted, however, to observe that it is much to be desired that the proportions of tenements of one and two rooms should decrease and those of the larger increase. Overcrowding is rare except in tenements of one or two rooms.

In Table 10 the percentage proportions of the total population enumerated in the Borough (and in each Ward) living in each class of tenement of less than five rooms, as observed in 1901 and 1911, will be found. There appears to have been an increase in the proportion living in all tenements of less than five rooms, of 4.6 per cent. in the Borough, the proportion being greater in 1911 than in 1901 in all the five northern Wards. The maximum increase occurred in Harrow Road Ward, and the minimum (2.0) in Church. A decrease of 1.4 per cent. is recorded in Lancaster Gate, East. In the whole Borough the changes in the proportions living in one and two rooms are insignificant, the increase in the total being entirely due to changes in the pro-

portions living in three and four rooms, in the former of which there was an increase of 2.2 per cent. and in the latter of 1.0 per cent. The falls in the percentages of persons living in tenements of one and two rooms in Queen's Park and Church Wards are satisfactory.

TABLE 9.
TENEMENTS.
Changes in Ratios (per cent.) to all Tenements, 1901-11.

Ward.		One Room.	Two Rooms.	Three Rooms.	Four Rooms
Queen's Park		-0.7	-2.7	+3.8	+5.0
Harrow Road		+1.9	+1.2	+1.6	+0.3
Maida Vale		-0.4	-2.7	-1.1	+5.0
Westbourne		+2.2	+1.4	+2.0	+1.7
Church		+0.2	-2.7	+3.2	+0.7
Lancaster Gate,					
West	244	-0.5	+1.7	+1.9	+0.9
East	***	-0.3	+0.8	+0.1	+0.2
Hyde Park		-3.2	+2.2	+2.5	+0.1

TABLE 10.
HOUSING—TENEMENTS.
Inhabitants occupying each class of Tenement.

			Total		Living	in Tener	nents of				of Total		
			Popula- tion	Less than Five Rooms	One Room	Two Rooms	Three Rooms	Four Rooms	Less than Five Rooms	One Room		Three Rooms	
Bor	OUGH		143,976 142,551	73,232 77,090		22,596 22,321			50·8 54·1	6·4 6·5	15·7 15·6	17·3 19·5	11·4 12·4
	Queen's Park	1901 1911	17,181 16,112	8,884 9,319	742 670	2,099 1,592	2,421 2,921	3,622 4,136	51·7 57·8	4·8 4·1	12·2 9·9	14·1 18·1	21·1 25·7
	Harrow Road	1901 1911	27,704 27,058	20,908 22,236	1,262 1,387		11,046 11,846	4,479 4,507	75·5 82·2	4·5 5·1	14·9 16·6	39·9 43·8	16·2 16·6
fs.	Maida Vale	1901 1911	18,718 20,831	8,130 9,472	896 1,085	2,773 2,972	2,823 3,137	1,638 2,278	48·4 45·5	4·8 5·2	14·8 14·3	15·1 15·0	8·7 10·9
Wards.	Westbourne	1901 1911	23,776 23,460	11,010 12,392	1,591 1,796	3,685 4,220	3,533 3,920	2,201 2,457	46·3 52·8	6·7 7·6	15·5 18·0	14·9 16·7	9.2
	Church	1901 1911	26,277 25,050	18,208 17,919	4,063 3,866	8,510 7,620	3,296 4,090	2,339 2,344	69·3 71·3	15·5 15·4	32·4 30·4	12·5 16·3	8·9 9·3
	Lancaster Gate, West	1901 1911	8,456 9,146	1,287 1,392	101 76	208 262	328 415	650 639	15·2 15·2	1·2 0·8	2·4 2·9	3·9 4·5	7·7 7·0
	Lancaster Gate, East	1901 1911	7,939 8,007	1,286 1,183	79 61	187 188	571 485	449 449	16·2 14·8	1·0 0·8	2·3 2·3	7·2 6·1	5·6 5·6
	Hyde Park	1901 1911	13,925 12,887	3,519 3,173	499 314	1,013 969	915 1,002	1,092 888	25·3 24·6	3·6 2·4	7·3 7·5	6-6 7-8	7·8 6·9

So far the question of housing has been considered simply as one of numbers, whereas it should be one of accommodation. For the full consideration of that point information would be required of the sexes and ages of the occupants, the sizes, structure, &c., of the buildings, and of many other factors which are not furnished through the census. Much of the required informa-

tion is in the possession of the Department, but time and opportunity for collating the records with the census figures have so far been wanting. The only test-a very imperfect one at the best-which can now be applied is that of averages. In Table 11 the results of this test will be found. The average number of occupants per tenement in tenements of less than five rooms fell during the ten years from 3:35 persons to 3:31, or to avoid fractions, whereas in 1901 in every 100 tenements there were 335 inhabitants, in 1911 there were 331. In tenements containing five or more rooms, there were in 1901 597 inhabitants in every 100 tenements, which figure had increased to 611 in 1911. Higher averages in tenements of less than five rooms were recorded in 1911 than in 1901 in two Wards, viz., Queen's Park (average 1901, 3:46; 1911, 3:59) and Westbourne (average 1901, 3:05; 1911, 3:11). On the other hand, lower averages were recorded in the case of tenements of five or more rooms in Harrow Road (average 1901, 5:38; 1911, 5:32), and Church (average 1901, 6:09; 1911, 5:98). The averages for tenements of one room were uniformly lower in 1911 than in 1901, except in Queen's Park Ward, as also those for tenements of two rooms, except in Westbourne and Church Wards. In tenements of three rooms higher averages were recorded in 1911 in Queen's Park, Harrow Road, Westbourne, and Church Wards; while in those of four rooms, the average noted in Lancaster Gate, East, Ward is the single exception to the general lowering. The average per room in tenements of two rooms was higher in 1911 in Westbourne (0.8) and Church (0.2) Wards, while that in tenements of three rooms was higher in Queen's Park (0.06) and Harrow Road and Westbourne (0.2 in each case), and that in tenements of four rooms lower in all Wards except Lancaster Gate, East, Ward.

TABLE 11.
HOUSING TENEMENTS.
Averages of Inhabitants.

_					Average	01 1	THIRDICAL	11101					
			Average	No. Occ	cupants.	A	rerage pe	r Teneme	ent.		Average	per Roon	1.
			All Tenements.	Tenements,	Tenements. 5 + Room.	One Room	Two Rooms.	Three Rooms.	Four Rooms.	One Room.	Two Rooms.	Three Rooms.	Four Rooms.
Во	ROUGH	1901 1911	4·27 4·20	3·35 3·31	5·97 6·11	1·83 1·79	3·38 3·37	3·80 3·74	4·62 4·21	1·83 1·79	1.69 1.68	1·27 1·25	1·15 1·05
	Queen's Park	1901 1911	4·20 4·22	3·46 3·59	5·44 5·57	1.54 1.59	3·10 3·02	3·78 3·96	4·71 4·56	1·54 1·59	1·55 1·51	1.26 1.32	1·18 1·14
	Harrow Road	1901 1911	3·72 3·59	3·38 3·36	5·38 5·32	1·59 1·47	3·02 3·07	3·63 3·71	4·54 4·44	1·59 1 47	1·51 1·04	1·21 1·23	1·13 1·11
3.	Maida Vale	1901 1911	4·34 3·82	3·43 3·11	5·44 4·70	1·77 1·75	3·40 3·36	4·09 3·87	4·56 3·15	1·77 1·75	1·70 1·18	1·36 1·29	1·14 0·79
Wards.	Westbourne	1901 1911	4·13 4·18	3·05 3·11	5·95 6·79	1.67 1.07	3·06 3·23	3·67 3·73	4·47 4·29	1.67 1.07	1·53 1·61	1·22 1·24	1·12 1·07
	Church	1901 1911	4·02 3·96	3·49 3·49	6·09 5·98	2·17 2·12	3·97 4·00	4·50 4·49	5·05 4·73	2·17 2·12	1.98 2.00	1.50 1.50	1 26 1·18
	Lancaster Gate, West	1901 1911	5·86 6·28	3·35 3·11	6·77 7·69	1·48 1·24	2·44 2·36	3·77 3·58	4·51 4·02	1·48 1·24	1·22 1·18	1·26 1·19	1·13 1·00
	Lancaster Gate, East	1901 1911	5·95 6·56	3·29 3·28	7·05 7·94	1·46 1·35	2·83 2·72	3·68 3·39	3·90 4·36	1·46 1·35	1·41 1·36	1·22 1·13	0.97 1.09
	Hyde Park	1901 1911	5·03 5·06	3·14 2·97	6:31 6:58	1·58 1·50	8·12 2·75	3·78 3·51	4·58 4·	1.58 1.50	1.56 1.38	1·26 1·17	1:14

Having obtained averages, it is a natural step to fix some standard as a measure by which to arrive at an idea of the quality of accommodation available. From what has been already written, it is manifest that any standard proposed can be nothing but an arbitrary one. In adopting the standard of an average of two persons per room as a dividing line between "good" and "bad" housing, it must be understood that it is not intended to convey any suggestion that rooms with averages in excess of two persons are of necessity overcrowded or otherwise undesirable or unfit for habitation. It is a matter of common experience that more than two persons can, given sufficient air space, occupy a single room for all purposes without detriment to health, but unless such persons are particularly accommodating individuals, their enforced association is not always conducive to sweetness of temper and general comfort.

In Table 12 will be found the numbers of tenements of from one to four rooms in which the average number of occupants exceeded two. As the table was drawn up to institute comparisons between the data obtained in 1901 and 1911, it was necessarily limited to tenements of those dimensions. The total number of such tenements in the Borough was slightly greater in 1911 than in 1901, three Wards—Harrow Road, Maida Vale, and Westbourne—being responsible for the increase (97). Looking at the question in another way, it will be seen that the numbers of one and four room tenements in the Borough decreased, those of two and three room increased. Evidence of changes in this direction were adduced in the report for 1912 in connection with certain inquiries made in the Borough on behalf of the Board of Trade. The general run of the figures for the Wards is much the same as that of the figures for the Borough, with one exception, viz., Church Ward, where the tenements of one and two rooms will be seen to have fallen in numbers, while those of three and four rooms have increased.

TABLE 12.

HOUSING—TENEMENTS.

Tenements with more than Two Persons per Room. Numbers enumerated.

					Numbe	rs of Te	nements			Numbe	rs of Inh	abitants	
				Totals.	One Room.	Two Rooms	Three Rooms	Four Rooms.	Totals.	One Room.	Two Rooms.		Four
Boi	ROUGH		1901 1911	3,404 3,501	1,035 1,002	1,585 1,599	607 731	177 169	19,531 20,475		9,406 9,486	4,695 5,711	1,736 1,644
	Queen's Park		1901 1911	258 257	58 66	104 80	61 76	35 35	1,571 1,577	191 218	586 434	465 585	329 340
	Harrow Road		1901 1911	516 606	103 83	196 246	177 239	40 38	3,179 3,861	330 270	1,115 1,383	1,341 1,842	393 366
	Maida Vale	***	1901 1911	385 427	84 116	186 207	94 87	21 17	2,350 2,459		1,109 1,209	736 685	209 163
Wards.	Westbourne		1901 1911	481 631	152 194	221 305	84 105	24 27	2,703 3,577	533 677	1,289 1,802	643 832	238 266
Wa	Church		1901 1911	1,578 1,444	592 518	800 696	150 190	36 40		2,183 1,983	4,871 4,281	1,195 1,512	361 396
	Lancaster Gate West		1901 1911	31 23	6 2	8 8	9 8	8 5	219 158		44 44	72 60	80 47
	Lancaster Gate East	-	1901 1911	26 23	4 2	8 9	13 10	1 2	171 150		44 49	101 75	10 19
	Hyde Park		1901 1911	129 91	36 21	62 48	19 17	12 5	728 532		348 284	142 131	116 47

Of all the figures submitted with reference to the tenements with averages of more than two persons per room, those of the average numbers of inhabitants (Table 13) are the most interesting. In the Borough as a whole the averages for tenements of one, two, and three rooms are slightly higher in 1911 than in 1901, that for tenements of four rooms, slightly lower. The differences are in every instance very small, but such as they are, they are disappointing.

On this occasion no comparisons have been instituted between the housing conditions in the Borough and in the circumjacent districts. Material for such comparisons has been extracted from the volumes of the Census Report, but it has not been possible to complete the necessary calculations in time for inclusion in this report. Table 5, however, which has been compiled direct from the Census Report, gives one comparison of housing to which a brief reference should be made. The actual numbers of the tenements of "private families" enumerated in each area in which the members averaged more than two persons per room are given together with the average number of occupants in each of such tenements. In the Borough the average was 5:91 persons, as compared with 6:22 for the whole County. The maximum average (6:94) was observed in Willesden, and the minimum (5:67) in St. Marylebone. In the Borough 16:2 per cent. of the total population included in the "private families" were enumerated in tenements with an average of over two persons per tenement, as compared with 17:2 in the whole County. The maximum percentage (20:7) was found in St. Marylebone, and the minimum (7:1) in Hampstead.

The figures given in Table 5 can be supplemented by the following particulars relating to tenements of five rooms and upwards in which the inhabitants averaged more than two persons per tenement.

Housing: Tenements of Five Rooms and upwards. Occupants averaging more than two persons per room.

	Total No. of Tenements.	Total All ages.	Population. Under 10 years.	Average number of Occupants per Tenement.
London	2,750	32,835	9,963	11.93
Paddington	33	895	108	11.97
Kensington	41	509	142	12.41
Westminster	33	389	96	11.78
St. Marylebone	17	203	48	11.94
Hampstead	16	192	59	12
Willesden	57	702	207	12:31

Estimated Population, 1913.—In accordance with the usual practice, the population of the Borough at the middle of 1913 was estimated from the rate of change observed to have taken place during the ten years 1901-10, as deduced from the census data. The actual method used for the calculation was what is known as Waters' formula, recommended and described in the Annual Reports of the Registrar-General. The result obtained (142,261 persons) agrees very closely with the figure published in the Quarterly Reports of the Registrar-General. The estimated numbers for the various Wards will be found in Table II., Appendix.

For some little time past considerable doubts have been entertained about the continued shrinkage of the population of the Borough, which is indicated by the result just set out. Such doubts arose from a consideration of (i.) the increase in the annual value (absolute) of the natural increment, and (ii.) the fact that the number of "empties"—rated premises—has been decreasing.

The natural increment in the population—being the excess of births over deaths, both fully corrected—was 1,069 in 1911-12, and 1,126 in 1912-13. The corresponding figures for 1909-10 and 1910-11 were 1,127 and 991 respectively. The total addition to the population by such increment, supposing no disturbances have been caused by migration, since the date of the last census amounts to 2,385 persons, whereas the estimated population given above indicates a loss of 290.

TABLE 13. HOUSING—TENEMENTS.

Tenements with more than Two Persons per Room. Percentages and Averages.

			1	'ercenta	ges of T	enement	5.	Perce	ntages o	of Popula	ations livenement	ring in	Ave		umber o		ants
			Totals.	One Room.	Two Rooms,	Three Rooms,			One Room.	Two Rooms.	Three Rooms.		All Rooms.	One Room.	Two Rooms.	Three Rooms.	
Во	ROUGH	1901 1911	15·60 15·07	20·55 19·42	23·77 24·15	9·27 10·08	4·96 4·02	26·67 26·56	40 00 39·26	41·62 42·49	18 83 20-53	10·54 9·29	2 90 2·89	3·56 3·62	2·95 2·96	2·57 2·60	2·45 2·43
	Queen's Park	1901 1911	10-06 9-91	12·08 15·75	15:38 15:18	9·54 10·29	4·55 3·85	17·68 16·92	25·74 32·55	27·91 27·25	19·20 20 02	9:08 8:23	2-66 2-65	3·29 3·30	2·82 2·71	2·54 2·56	2·35 2·43
	Harrow Road	1901 1911	8:35 9:16	13·09 8 82	14·39 16·80	5·81 7·47	4·06 3·74	15·20 17·36	26·14 19·46	27·05 30·74	12·14 15·56	8·77 8·12	2 68 2·67	3·20 3·25	2·84 2·81	2 52 2 57	2·45 2·41
	Maida Vale	1901 1911	16·25 14·06	16·60 18·80	22 85 23 38	13·64 10·72	5·84 2·34	28·90 25·96	30-03 37-05	39-99 40-67	26-07 21-83	12·75 7·15	2·85 2·86	3·52 3·46	2·99 2·92	2·61 2·62	2·49 2·39
Wards.	Westbourne	1901 1911	13·33 15·87	15 96 18·54	18·40 23·35	8·73 10·09	4·87 4·71	24·55 28·86	33.50 37·69	34·94 42·70	18·19 21·22	10·81 10·82	2·87 2·91	3·50 3·48	2·91 2·95	2·55 2 64	2·48 2 47
Wa	Church	1901 1911	30·31 28·31	31-66 28-43	37·38 36·51	20·49 20·88	7·77 8:08	47·28 45·60	53·72 51·29	57·23 56·24	36·25 36·97	15 43 16 88	3.09	3.68 3.82	3·04 3·08	2·65 2·65	2 50 2·47
	Lancaster Gate, West	1901 1911	8 07 5·14	8·82 3 28	9·41 7·20	10·34 6·89		17·01 11·35	22:77 9:21	21·15 16·33	21·95 12·00	12:30 7:35	2·70 2·54	3·83 3·50	2·78 2·78	2·67 2·50	2·50 2·35
	Lancaster Gate, East	1901 1911	6-66 6-38	7·40 4·44	12·12 13·04	8·38 6·99	0.86 1.63	13·29 12·67	20·25 11·47	23·52 26·09	17.68 15.25	2·22 4·23	2·71 2·58	4·0 3·5	2·77 2·72	2·59 2·50	2·50 2·37
	Hyde Park	1901 1911	11·52 8·52	11·42 10·09	19·13 13·63	7·85 5·96	5·04 2·25	20-68 16-76	24·44 22·28	34·35 29·30	15:51 12:07	10 62 5·29	2·74 2·82	3-83 3-33	2·80 2·95	2·49 2·57	2·41 2·35

Particulars of the numbers of assessments on April 1st in each of the years 1911, 1912, and 1913 have been furnished by the Borough Treasurer, together with the numbers of empty properties during the quarters ending March 31st, 1911, and June 30th, 1911, 1912, and 1913. From the data supplied the numbers of occupied assessments in each Ward (Lancaster Gate, East and West, being combined) were determined at April 1st, 1911, which numbers were taken as representing the numbers on the day of the taking of the census. Averages of the numbers of

16 METEOROLOGY.

inhabitants per occupied assessment were calculated, and those averages applied to the numbers of occupied assessments—separately for each Ward—on June 30th, 1911, 1912, and 1913. By this method the following estimated populations for those years were obtained:—

#### ESTIMATED POPULATION.

#### BOROUGH.

	1911.	1912.	1913.
By Waters' method	142,513	142,362	142,261
On Occupied Assessments	143,789	145,164	146,691
Differences	+1,276	+2,802	+4,430

The estimated population for 1913 thus obtained shows an increase of 4,140 persons, instead of a decrease of 290. On the whole it would appear that such increase is a closer approximation to the truth than the estimate first given. It is, however, undesirable to use the suggested population, as it would render impossible any comparison with the rates for other districts. The estimates on occupied assessments will be calculated each year until the next census, with a view to putting the method to a crucial test.

#### METEOROLOGY.

The usual data, taken from *The Times*, of the results of the observations made at the Royal Botanic Society's Garden, are submitted in Table 14.

The year may be described as an average one, devoid of specially interesting phenomena. The mean temperature at 9 a.m. was slightly higher in 1913 than in 1912, but not quite so high as in 1911. With the exception of the record of 1910, when it was 82°, the absolute maximum last year (84°) is the lowest for the six years (1908-13). The absolute minimum temperature (27°) is notably above the minima recorded during the preceding five years. The total amount of rainfall measured (22.52 ins.) was below the amounts recorded in each of the years 1908-12, and while the amount of bright sunshine (1,206 hours) was also the lowest of the records for the six years, the number of days upon which records were obtained (278) was higher than for any year except 1908 (285), when over 200 hours of additional bright sunshine were recorded.

From a public health point of view, the weather of the "summer" quarter is of most interest from the too frequent occurrence of summer diarrhoea when the weather is seasonable. Last year the summer months (June-August) were not marked by an excessive prevalence of diarrhoea, and the data for those months, summarised below, are such as might be expected when diarrhoea

		SUMME	R.					
	June.			July.			August.	
1911.	1912.	1913.	1911.	1912.	1913.	1911.	1912.	1913.
Mean Temperature (9 a.m.) 61.3°	60.0°	62·3°	69·5°	64.60	59.9°	68-0°	57·4°	61.80
Absolute Maximum 85.0°	81·0°	84·0°	91·8°	88.0°	78·0°	96.0°	70·0°	81·0°
Minimum 39·5°	44.5°	43·0°	47.0°	46.0°	43.6°	47.0°	44.0°	45.5°
Total Rainfall 2.79"	3.40"	0.44"	1.80"	1.30"	1.98"	0.86"	4.98"	1.54"
No. of Days of Measurement 9	19	7	4	10	11	7	22	10
н. м.	н. м.	н. м.	н. м.	н. м.	н. м.	н. м.	н. м.	н. м.
Total Bright Sunshine212 53	192 22	210 51	320 18	156 26	103 46	246 1	114 8	146 8
No. of Days of Measurement 27	28	30	25	30	28	30	27	28
Temperature of Earth (mean) 57:0°	57·2°	58·1°	60·5°	61·8°	59·6°	64.20	61·0°	60·4°

is not prevalent. There was, however, an exceptional incidence of diarrhœa, evidenced both by cases and deaths, during the "autumn" (September-November), and for that reason the principal meteorological data have been specially summarised.

			AUTUMN	٧.					
	S	September.			October.		N	ovember	r.
19	911.	1912.	1913.	1911.	1912.	1913.	1911.	1912.	1913.
Mean Temperature (9 a.m.) 5	58·4°	55·1°	58-6°	50-1°	45.70	53·0°	44.20	43·2°	47·2°
Absolute Maximum 9	92·5° 39·8°	67·8° 38·0°	77·0° 41·5°	63·0° 29·8°	62·5° 31·0°	66·5° 36·5°	58·5° 28·5°	55·0° 28·0°	59·5° 31·0°
	9	2·22" 5	1·85" 11	2·90" 12	2·09" 13	3·21" 14	3:54" 17	1.65" 14	2·47" 16
Total Bright Sunshine20 No. of Days of Measurement	и. м. 05 54 28	26	н. м. 129 46 26	н. м. 73 28 20	н. м. 77 30 20	н. м. 85 32 27	н. м. 39 17 17	н. м. 20 56 13	н. м. 55 33 22
Temperature of Earth (mean) 6	52·8°	57.5°	59·4°	56.0°	52.30	56.3	50·1°	49·0°	51 7°

TABLE 14.

METEOROLOGICAL ELEMENTS.

		Mea	ns at 9	a.m.		Extr	eme Te	empera	tures.		Rai	nfall.	Sun	shir	ne.
Year.	Month.	meter: re- duced to sea	Dry bulb.	Wet bulb.	Maxi	Sha mum.		mum.	Sun. Max.	Grass. Min.	Total depth.	No. of days of fall.	Brigh Sunshi register	ne	No. of days of record
1913.	January February March April June July August September October November December	30·17 29·87 29·86 29·89 30·05 30·03	Deg. 40-9 40-3 44-9 48-4 57-5 62-3 59-9 61-8 58-6 53-0 47-2 -41-1	Deg. 40°2 38°8 48°2 46°1 54°6 57°7 57°6 58°6 56°9 52°0 46°7 40°4	Deg. 58:0 52:0 56:5 66:0 82:0 84:0 78:0 81:0 77:0 66:5 59:5 54:0	Date. 4th 4 & 7 5th 24& 29 25& 26 16& 17 28th 28th 2nd 11th 9th	Deg. 27·0 27·0 28·0 48·6 45·5 41·5 36·5 31·0 27·0	Date. 18th 23rd 18th 13th 7th 8th 25th 15th 25th 23rd 31st	Deg. 700 7700 940 1090 1250 1250 1190 119-5 114-0 101-0 90-7 74-0	Deg. 190 190 22:5 23:0 31:0 40:0 44:5 42:5 41:0 34:0 29:0 23:5	Inches 2:53 0:81 2:87 2:74 1:74 0:44 1:98 1:54 1:85 3:21 2:47 0:84	16 10 21 21 21 11 17 7 11 10 11 14 16 8	25 2 35 3 78 5 102 4 210 4 210 5 103 4 146 0 129 4 88 5 55 8	ins. 8 5 7 2 1 1 6 6 8 6 2 13 5 5	14 14 22 27 29 30 28 28 26 27 22 11
	Totals Means Highest	29-96	51.8	49.3	84.0	June	27.0	Jan. Feb. Mar. Dec.	125-0	19.0	22-52	156	1,207	04	278
1912.	Totals Means Highest Lowest	29 91	50.5	47·9 	 88·0	July		 Feb.	180-0	10-0	27.76	158	1,242	4	251
1911.	Totals Means Highest Lowest	29.99	51.5	49-3	96.0	 Aug.	22.0	 Feb.	184.0	12.0	25.34	148	1,644	4	267
1910.	Totals Means Highest Lowest	29.89	49-8	46.6	82-0	June	19-5	Jan.	120.0	17-0	25.92	168	1,249	22	277
1909.	Totals Means Highest Lowest	29.96	48.7	46.1	85.5	Aug.	19-0	 Mar.	124.0	14.0	27:08	192	1,460	7	278
1908.	Totals Means Highest Lowest	30.01	50-4	46.5	85.0	July	16.5	  Dec.	128.0	 iï-o	24:49	178	1,461	48	285

18 BIRTHS.

#### BIRTHS.

#### Natality, Fertility.

The statistical year 1913 contained 53 weeks, a fact which renders the comparison of the numbers of events recorded in 1913 with those in 1912 fallacious, unless a mental correction (in the ratio of 52/53) be performed. It has also made it necessary that all the rates calculated on the totals for the 53 weeks should be adjusted to render them comparable with the records of years of 52 weeks. Such adjustment has been made throughout, the result being that a rate equal to unity on the unadjusted total (53 weeks) is reduced to one of 0.983.

During the year 2,832 births (1,429 of males and 1,403 of females) were registered in the Borough. For the reason given above the annual totals for previous years are omitted from this paragraph. They are, however, to be found in Table I. in the Appendix. The crude birth-rate, duly adjusted, was 19:58 per 1,000 persons, as compared with one of 19:48 in 1912, and an average for the five years (1908-12) of 20:31. Multiple births last year numbered 45 (all of twins), the same as in 1912, but half as many again as in 1911. In 15 instances both the twins were males, in 11 both females, and in the remaining 19 the sexes were mixed. One of the last group was born to non-resident parents. There were 80 births in the Lying-in Wards of the Workhouse, equal to 2:8 per cent. of the total births in the Borough, as compared with 3:2 per cent. in 1912, 3:8 in 1911, and 2:8 in 1910.

The births registered locally included those of 58 children born to non-resident parents, 16 of the children (8 of each sex) being born in the Workhouse. The inward transfers received at the end of the year from the Registrar-General numbered 242, 133 being births of males and 190 of females. The places where such births occurred are sufficiently indicated below.

# BIRTHS IN OUTLYING INSTITUTIONS. "INWARD TRANSFERS."

				Legi	timate.	Illeg	gitimate.
				Males.	Females.	Males.	Females.
Queen Charlotte's I	ying-in	Hosp	ital	 92	75	22	17
Other Lying-in Hos	pitals			 7	4	2	3
General Hospitals		***		 4	2	4	3
Workhouses				 	_	2	5
						-	
				103	81	30	28
				11	84		58

The corrected total of births during the year was 3,019, comprising 1,540 of males and 1,479 of females. The numbers of the births, after correction, to be allocated to the different Wards are shown in Table 15. The corrected birth-rate for the year was 20.87 per 1,000 persons, as compared with a rate of 21.18 in 1911, and an average (1908-12) of 21.47. (See Table I., Appendix.) The rates recorded last year in Harrow Road and Church Wards were higher than those recorded in 1912, and in the latter Ward last year's rate was in excess of the average for the preceding five years. In Table II., Appendix, the births allocated to each Ward during the six years 1908-13 are set out.

For the purposes of comparison with the rates of adjacent districts, the data have been specially extracted from the Quarterly Reports of the Registrar-General. It was only by the use of the uncorrected totals \* obtained from those Reports that a comparable series for the years 1908-13 could be obtained. Hence the figures given in Table 16 do not agree with those published in the tables for the year included in the Registrar-General's Report for the fourth quarter of last year. It will be seen from Table 16 that the rate for the Borough (19:60) was exceeded only by the rates for the whole County (24:71) and for Willesden (24:01). The

<sup>\*</sup>In the case of St. Marylebone the corrected total has always been used on account of the great excess of non-resident births taking place in Queen Charlotte's Lying-in Hospital registered in the Borough.

BIRTHS. 19

rate observed in Westminster (12.63) was the lowest of the series, that for Hampstead (14.34) the next lowest, being nearly 2 per 1,000 higher. Doubtless the great differences to be seen in the rates included in Table 16 are, in part at least, due to different proportions of married women at fertile ages. In the next report it is hoped that it may be possible to include standard rates for all the districts, and thus make the corrections rendered necessary by such differences in the populations.

TABLE 15.

			Births I	Recorded.		1	Birth-rates		
		То	otal.	Illegit	imate.				Percentage of Illegitimate to
		Males.	Females	Males.	Females.	1913.	1912,	1908-12.	Total Births, 1913.
Borough		1,540	1,479	101	87	19.57	19.48	20.30	6.22
Wards.						- 4		22.50	
Queen's Park		176	179	6	5	22.03	24.98	24-89	3-09
Harrow Road		376	376	13	12	27.50	25 95	27.48	3.32
Maida Vale		222	200	15	20	19.45	20.69	19.93	8-29
Westbourne	***	235	216	13	14	18.97	20.32	20.16	5 99
Church	***	401	360	40	28	30 24	27:36	28:70	8.93
Lancaster Gate									
West	***	30	32	4	1	6.54	6 93	6.81	8.06
East		26	31	3	2	6.98	7.98	7.56	8.70
Hyde Park	***	74	85	7	5	12:36	13.33	13.48	7.54

TABLE 16.

		London.	Paddington.	Kensington.	Westminster.	St. Marylebone	Hampstead.	Willesden.
Births,	1913	113,822	2,834	3.181	1,988	2,221	1,259	3,995
	1912	111,512	2,774	3,079	2,132	2,246	1,224	3,914
Birth-rates,	1913	24·71	19·60	18·26	12·63	19:07	14·34	24·01
	1912	24·67	19·48	17·92	13·56	19:30	14·24	24·55
	1908–12	25·63	20·30	18·08	14·48	20:47	14·80	26·05

Illegitimacy.—Included in the total of 2,832 births registered in the Borough were 156 births of illegitimate children, 83 of whom were males and 73 females. Such births formed 5.5 per cent. of the total births registered, as compared with 5.7 in 1912 and 6.0 in 1910. The births of such children in the Workhouse numbered 53 (64.5 per cent. of all births in that Institution, the corresponding figure for 1912 being 70.3, and for 1911, 66.3), those of males numbering 30 and of females 23. Twenty-six out of the 53 births were born to non-resident mothers, 9 of the 26 children (34.4 per cent.) being born in the Workhouse. The transfers numbered 58 (30 of males and 28 of females), so that the corrected total of such births was 188 (101 of males and 87 of females), equal to 6.2 per cent. of the corrected total of births. In 1912 the proportion was 6.2 per cent., and in 1911, 5.7. The numbers of such births allocated to the Wards are given in Table 15, together with the proportions (per cent.) to total births. The highest proportion in any Ward recorded last year was 8.9 per cent. (Church Ward, 9.5 per cent. in 1912), and the lowest 3.1 per cent. (Queen's Park Ward, 4.5 per cent. in 1912). The only Wards in which the proportion was lower last year than in 1912 were Queen's Park and

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Westbourne, last year's figure for the latter being 69 per cent. The contrast between the proportions recorded in Lancaster Gate, East, Ward in the two years was striking (1.5 in 1912, 8.7 in 1913), but it has to be observed that in both years the proportions are based on very small numbers, the illegitimate births in the former year numbering 1, and in the latter 5.

Notification of Births.—The Notification of Births Act, 1907, was adopted by the Council in 1908. During the past year 3,088 notifications were received, of which 238 related to births already notified, so that the nett number of births notified in accordance with the Act was 2,850, 18 more than the number registered within the Borough. Midwives notified 1,112 births (36.0 per cent.), medical practitioners, 992 (32.1 per cent.), parents, 703 (22.8 per cent.), and other persons, 281 (9.1 per cent.). The statement given below shows the changes which have taken place in the proportions notified by medical practitioners.

#### NOTIFICATIONS OF BIRTHS.

Percentages of Total Notifications received

From	-	CI CCIIII	1913.	1912.	1911.	1910.	1909.
Medical Pra	actition	ers	32.1	36-3	23.3	18.9	18.4
Midwives		***	36.0	34.5	34.6	36.0	38-3
Parents			22 8	22.7	36.3	39.7	35.5
Others			9.1	6.5	5.8	5.4	7.8

In the statement given below the notifications have been distributed according to the addresses at which the births were said to have taken place, the total notifications allocated to each Ward being compared with the births registered locally and allocated to the Wards according to the home addresses of the parents. The figures are not strictly comparable as a birth notified at one address may be tabulated after registration in another Ward; but such instances are not numerous, and the only Ward in which a serious discrepancy has arisen is Westbourne, owing to the presence of the Workhouse Lying-in Wards. There were altogether 91 births notified as having taken place in those wards, and one in the Lock Hospital (also in Westbourne Ward). Twenty-eight births were notified from nursing homes in the Borough.

Births registered Births notified	Queen's Park. 338 336	Harrow Road. 700 733	Maida Vale. 391 390	West- bourne. 413 472	Church. 694 691	Lancaste West. 54 47	East. 51 58	Hyde Park. 138 116
including Legitimate, living	323	714	373	413	677	44	54	113
Legitimate, dead		15	10	8	11	3	4	3
Illegitimate, living	_	4	7	50	2	-	-	
Illegitimate, dead	-	-	-	1	1	-	-	-

There was a reduction in the percentage of births registered after notification, 4.8 per cent. of the registered births not having notified last year, as compared with 3.5 in 1912. The progress of notification, as judged by the percentages of births registered subsequent to notification, is indicated in the subjoined statement.

### Percentages of Births Registered after Notification.

TOTAL BIRTHS.

				2020							
Ouarters.	1.	2.	3.	4.	Registratio	n Areas	4	1910.		1912.	1913.
1910	76.0	81.0	92.1	84.4	North Pad	dington		87.8	96.1	97.2	96.1
1911	92.3	95.0	96.7	93.2	Central	33		81.7	95.5	97.2	96.5
1912	95.5	97.1	96.4	93.6	South	,,	***	78.3	79.5	85.8	80.9
1913	95.9	93.4	94.8	96.5	Borough			84.4	94.4	96.4	95.2

ILLEGITIMATE BIRTHS.

BOROUGH: 1910, 74.5. 1911, 93.5. 1912, 94.9. 1913, 91.0.

SICKNESS. 21

The births of illegitimate children notified during the year numbered 65 and formed 2.3 per cent. of the total births notified, the corresponding figure for 1912 being 2.6. The proportion of illegitimate births notified is strikingly lower than that observed among births registered locally, viz., 5.5 per cent. The large number of notifications of illegitimate births recorded above in Westbourne Ward is due to the presence of the Lying-in Wards.

There were 47 twin births notified last year, as compared with 54 in 1912, two of such births occurring to unmarried women. In three of the births both children were still-born and one of a third pair of twins. An analysis of the sex composition of the twin births, distinguishing the children stillborn is given below:—

	To	otal Birt	hs.		Illegit	imate 1	Births.
Twin Births-	M.M.	M.F.	F.F.		M.M.	M.F.	F.F.
Both children living	 14	16	13	***	_	2	_
One child dead	 _	*1			_	-	-
Both children dead	 2	-	-		-	-	
	*The fen	nale still-	born.				

Still-births.—The Notification of Births Act requires the birth of a child born dead after twenty-eight weeks' gestation to be notified. Last year 65 still-births were so reported, 67 of legitimate and 2 of illegitimate children, equal to 24 per cent, of the total births notified. In 1912 the percentage was 2.6, in 1911, 3.1 and 1910, 2.6. Last year the percentage of still-births among legitimate children was 2.4 per cent., and that among illegitimate, 3.1, the corresponding proportions recorded in 1911 being 2.5 and 6.5 per cent. respectively. In the County of London the still-births notified in 1913 were equal to 2.6 per cent. of all births notified, as compared with 2.4 in 1912, 2.3 in 1911 and 2.2 in 1910.

#### SICKNESS: MORBIDITY.

No changes were made during the year in the list of diseases to be certified under the provisions of Section 55 of the Public Health (London) Act, 1891. In this section of the report only those diseases which are of annual occurrence will be dealt with, the more rarely reported diseases being reserved for special consideration at a later stage. It should be explained that the figures now quoted relate to the cases certified, irrespective of errors of diagnosis, but corrected for duplicate certification.

Table 17 contains the numbers of cases of the more common diseases reported in 1912 and 1913. In comparing the two years it has to be remembered that there were 53 weeks in the latter year, as compared with 52 in the former. It is therefore desirable to pass at once to the morbidity rates (per 1,000 persons of all ages, except the rates from puerperal fever and ophthalmia neonatorum, which have been calculated on the numbers of births). It will be seen that last year's rates were higher than those recorded in 1912, except those from membranous croup, erysipelas, puerperal fever, and ophthalmia neonatorum. The quinquennial averages from membranous croup and enteric fever were higher than the rates recorded in 1913, the others lower. Table 18 has been constructed from the numbers of cases reported in the Quarterly Reports of the Registrar-General, such data being selected to secure uniformity in comparisons. The table is drawn up in a form identical with that of Table 17. In quite a general way it may be said that the rates from diphtheria and scarlet fever recorded last year were higher than those recorded in 1912, and also higher than the five-yearly averages. On the other hand, the rates from erysipelas and enteric fever were generally lower. The table permits of comparisons between the rates recorded in the Borough and in the circumjacent districts, but inasmuch as each disease has its own special sex-age incidence, the comparisons which the table allows cannot be accepted unreservedly. Hitherto no standard morbidity rates have been suggested by which the necessary adjustments for variations in the sex-age compositions of populations

<sup>\*</sup> The question of the proportion of still-births is referred to under HEALTH VISITING, and some results of nquiries are given in Table 48.

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could be made. Material has been collected in the Department from which it is hoped, in a future report, to submit properly standardised morbidity rates for the districts whose statistics are dealt with in these reports. The maximum and minimum rates recorded last year are set out on the opposite page.

TABLE 17. Notifications. Paddington.

	Diphtheria. Membranous Croup.		pelas,		Fes	er.		bro- nal ngitis.	Acute omyelitis.	Ophthalmia Neonatorum
	Dipht	Membr	Erysipelas.	Scarlet.	Enteric.	Con- tinued.	Puer- peral.	Cerebro- Spinal Meningitis.	Acute Poliomyelitis	Ophtl
Cases— 1913 1912	293 244	3 4	112 117	484 272	25 15	-	8 11	7	<b>2</b> 6	22 31
Morbidity Rates*— 1913 1912 1908-12	2·03 1·71 1·17	0·02 0·03 0·02	0.76 0.82 0.76	3·34 1·91 2·89	0·17 0·10 0·21	<u>-</u> 0.00	2·80 3·96 2·50	0.05	0-01 0-04	7 76 11·17

<sup>\*</sup> Per 1,000 persons of all ages, except for puerperal fever and ophthalmia neonatorum, per 1,000 births (corrected).

TABLE 18.
MORBIDITY RATES.

	London.			Paddington.			Kensington.			Westminster.		
Disease.	1913.	1912.	1908- 12,	1913.	1912.	1908- 12.	1913.	1912,	1908- 12.	1913.	1912.	1908 12.
Smallpox Diphtheria Erysipelas Scarlet Enteric Puerperal Cerebro-spinal A. Poliomyelitis Ophthalmia Neonat	0 00 1·60 0·83 3·82 0·16 3·08 0·00 0·03 5·68	0·00 1·57 0 91 2·50 0·15 3·42 0·02 0·03 6·27	0·00 1·71 1·14 4·29 0·30 3·00 0·26	2·09 0·76 3·36 0·17 2·61 	1·78 0·82 1·89 0·10 3·96 0·05 0·04 11·17	1·22 0·76 2·88 0·21 2·50 0·03	0·83 0 64 3·20 0·16 3 87 0·01 0·02 5·06	1·05 0·67 1·77 0·09 2·60 0·00 7·14	 1·12 0·75 1·90 0·19 2·74 0·01	1·22 0·47 2·40 0·18 2·69 0·02 7·18	1·02 0·58 1·51 0·11 8·91 0·02 0·04 6·09	0·00 1·06 0·51 2·38 0·19 3·76 0·01

	St.	Maryleb	one.	Н	ampstea	ıd.	Willesden.			
Disease.	1913.	1912.	1908- 12.	1913.	1912.	1908- 12,	1913.	1912.	1908- 12,	
Diphtheria Erysipelas Scarlet Enteric Puerperal Cerebro-spinal	1·11 0·67 3·57 0·16 1·79 0·02 0·01 4·03	1·28 0·77 2·23 0·09 2·23 0·01 0·02 8·45	1·07 0·96 2·77 0·17 1·95 0·02	1·45 0·37 2·36 0·17 0·75 0·04 8·29	1·88 0·51 1·26 0·12 2·45 0·01 0·02 4·08	1·22 0·44 2·15 0·20 3·47 0·02	1·41 0·57 2·98 0·10 2·72	0·01 1·40 0·61 2·69 0·08 2·55	0·00 1·32 0·61 3·26 0·17 2·71	

Rates calculated per 1,000 persons of all ages, except in the cases of puerperal fever and ophthalmia neonatorum, per 1,000 births (corrected).

#### MORBIDITY RATES, 1913.

		Maximum		Minimum	
		(per	1,000 pers	sons, all ages).	
Diphtheria		Paddington	(2.09)	Kensington	(0.83)
Erysipelas	***	Paddington	(0.76)	Hampstead	(0.37)
Scarlet fever		St. Marylebone	(3.57)	Hampstead	(2.36)
Enteric fever		Westminster	(0.18)	Willesden	(0.10)
			(per 1,000	) births).	
Puerperal fever		Kensington	(3.87)	Hampstead	(0.75)
Ophthalmia neonato	rum	Hampstead	(8-29)	St. Marylebone	(4.03)

The variations in the prevalence of scarlet fever and diphtheria during the year in the Borough and the whole County of London are exhibited in the chart facing page 24. The curves represent annual morbidity rates deduced from the numbers of cases reported in each week, the rates for 1913 being contrasted with the corresponding means for the years 1903-12. It will be more convenient to deal with the variations exhibited by the chart when discussing the individual diseases.

Table 19 has been compiled from the Annual Report of Statistics of Notification issued by the Local Government Board, such Reports having been published since 1912 only. It will be seen that there were increased prevalences of scarlet fever and diphtheria in the country generally last year, and a considerable reduction in the morbidity from enteric fever.

TABLE 19.

	In E	xtra-Metr	opolitan E	ingland a	and Wal	les.	4	At Ports.	
	Ca	ses Report	Mort	oidity R	ates.	Cases Reported.			
	1913.	1912.	1911.	1913.	1912.	1911.	1913.	1912.	1911.
Smallpox Typhus Fever Scarlet Fever Diphtheria Enteric Fever Continued Fever Puerperal Fever Erysipelas Pulmonary Tuberculosis Cerebro-spinal Fever Acute Poliomyelitis Other Forms of Tuberculosis Plague	87 13,058 43,182 7,355 94 1,635 18,955 73,898 211 581 31,762		193 64 94,117 40,343 12,706 153 1,724 20,035	0·00 0·00 3·48 1·33 0·22 0·00 2·13 0·58 2·28 0·00 0·01 1·06	0·00 0·00 3·00 1·17 0·23 0·00 2·36 0·58 2·41	0·00 0·00 2·97 1·27 0·40 0·00 2·24 0·63	25 81 53 146 9 18 308 1 10	12 - 31 67 124 8 - 21 155	30 34 55 122 3 — 11

Rates per 1,000 persons of all ages, except puerperal fever-per 1,000 births.

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TABLE 20.

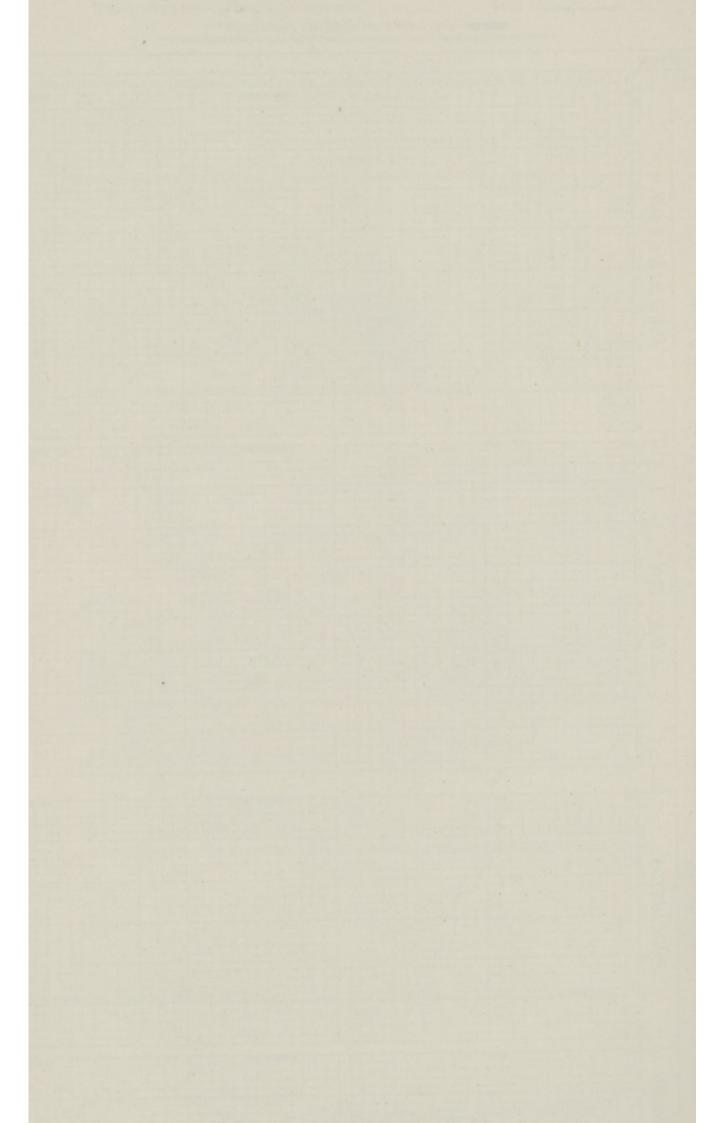
Notifications: Ward Distribution.
1908-1913.

Disease.	Diphtheria, including Membranous 'Croup.	Erysipelas.	Scarlet Fever.	Enteric Fever, including Continued Fever.	Puerperal Fever.
Year.	1913 1911 1910 1909 1908	1913 1911 1910 1909 1908	1913 1912 1910 1909 1908	1913 1911 1910 1909 1908	1913 1912 1910 1909 1908
Harrow Road Maida Vale Westbourne Church Lancaster Gate, West	54 60 42 24 48 44 32 22 24 12 22 21 74 48 83 18 27 27	$\begin{array}{c} 201217121611\\ 181520202228\\ 272535192943\\ 1\ 1\ 2\ 1\ 1\dots\\ 3\ 3\ 2\ 3\ 1\ 3\\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 2 9 7 2 6 1 2 9 7 5 4 6 3 2 3 2 1 8 3 71310 6 1 2 3 2 4 1 1 3 1 2 1	3 2 2 2 1 1 8 3 1 1 1 3 4 1 1 2 2

TABLE 21.

Notifications: Ward Averages.

	One	en's	Har	rrow	Ma	ida	W	est-	Chu	rch.	L	ancast	er Gat	e,	Н	yde
Wards	Pa	rk.	Re	oad.		ile.		rne.	Citu	iren.	We	est.	E	ist.	Pa	irk.
Year	1913.	1908- 12.	1913.	1908- 12.	1913.	1908- 12.	1913.	1908- 12.	1913.	1908- 12.	1913.	1908- 12.	1913.	1908- 12.	1913.	1908 12.
						Dip	hthe	ria.								
$ \begin{array}{c} 1 \dots \\ 2 \dots \\ 3 \dots \\ 4 \dots \end{array} $	3 9 6 17	9 4 4 9	8 11 9 26	12 10 8 13	11 3 3 15	6 4 4 6	18 24 16 16	8 9 5 6	17 17 7 22	9 6 8 11	2 2 3 6	2 2 1 2	2 3 5	2 1 1 2	4 2 4 5	1 1 1 4
Year	35	26	54	43	32	20	74	28	63	34	13	-7	10	6	15	7
						Sca	rlet	Feve	r.							
$ \begin{array}{c} 1 \dots \\ 2 \dots \\ 3 \dots \\ 4 \dots \end{array} $	6 7 29 46	9 13 15 14	18 22 21 56	23 31 34 28	6 3 10 33	9 12 9 14	8 14 21 39	16 14 14 16	6 17 21 49	16 25 24 35	3 3 6	3 2 3 4	1 4 8 11	1 1 1 3	1 4 6 5	4 10 5 5
Year	88	51	117	116	52	44	82	60	93	100	12	12	24	6	16	24
						Ente	ric F	ever.								
$0 = \begin{pmatrix} 1 & \dots & 2 & \dots $	_ 1 1	0 0 1 1	2 1 - -	1 2 1 1	1 -	1 1 2 2	1 2 3 —	1 1 0 0	1 -4 3	2 1 2 3	_ _ 1	- 1 0 1	_ _ 1	0 -1 1	_ 2 1	1 1 1 1 1
Year	2	2	3	5	1	6	6	2	8	8	1	2	1	2	3	4



#### DEATHS: MORTALITY.

During the year the deaths registered in the Borough numbered 2,071, comprising 1,028 of males and 1,043 of females. The crude\* mortality rate was 14:33 per 1,000 persons of all ages. being 106 above the rate for 1912 (13:27) and 0:04 above the average rate (14:29) for the five years 1908-12. The average rate for the quinquennium 1903-07 was 14:97. In 1908 the rate was 1430 and in 1910 14:05, but in each of the other years, except 1912, of the decennium 1903-12 the rate exceeded that of last year. (See Table I. Appendix.) In the second quarter of the year the mortality (12:37) was below that of the corresponding quarter of 1912 (12:57) and the quinquennial average (13:20), but in each of the other quarters it was above both rates. (See below.) MORTALITY RATES: CRUDE.

Paddington. Per 1,000 persons. 1st. Quarter-2nd. 3rd. 4th. 12:37 1913 18.08 12.03 14.62 16.09 12.57 9.65 14.82 1908-12 ... 16.84 13.20 11.19 14.08

The "partially corrected" rates for three of the quarters of the year (see below) were also higher than the corresponding rates for 1912 and 1908-12, notably in the first quarter. The same rate for the year was 13:32. Since 1891 rates for the whole year below 13:32 have been recorded in 1906 (12.86), 1908 (13.01), 1910 (12.58), 1911 (13.22), and 1912 (12.20).

> MORTALITY RATES: PARTIALLY CORRECTED. Paddington

				1,000 per	sons.			
Quarter-		1st.		2nd.		3rd.		4th.
1913		17-62		11-11		10.74	***	13-65
1912	***	14.96	***	11.25	***	9.42	***	11.81
1908-12		15.60	***	11.91	***	10.02		12.56

The finally corrected number of deaths for the year was 1,979, 939 of males and 1,040 of females, the "corrected" mortality being 13:68 per 1,000 persons of all ages, 1:26 in excess of the rate (12:44) for 1912. Last year's rate was higher than the means for the decennium (13:36) or either quinquennium. (See Table I., Appendix.) To a certain extent the comparisons instituted in that table are misleading, owing to the inclusion of the special transfers of deaths in Extra-Metropolitan England and Wales since 1911. If such deaths be excluded, last year's rate becomes 13:32, and the average for the five years 1908-12 12:95, making the rate for 1913 0.73 less than the average for 1903-07, but 0.37 above than for 1908-12. The factors producing the increase in the rate will become apparent when the individual causes of death are discussed.

Table 22 gives the mortality rates for each sex in the Borough, and in each of the Wards, and Table 23 the sex-age-group mortalities for the same areas. The total numbers of deaths (persons) allocated each year since 1908 to each Ward are shown in Table II. of the Appendix, the sex-age distribution of deaths of residents of the Borough during 1913 from selected causes of death in Table III., and a distribution by sex and causes of deaths allocated to each Ward in Table IV.

The total death-rate (Table 22) was higher last year than the average in each of the Wards except Lancaster Gate, East (rate, 1913-7:23: average, 7:40) and Hyde Park (rate, 1913-9.75: average, 10:42). The mortality among males was above the average in the whole Borough and in all the Wards save Harrow Road (rate, 1913-13-52: average, 14-72), while that among females followed the lines of the total mortality and was below the average only in Lancaster Gate, East (rate, 1913-5.68: average, 6.10) and Hyde Park (rate, 1913-7.65: average, 8:86) Wards. As regards sex-age-group mortalities (Table 23) it must suffice to

<sup>&</sup>quot; "Crude" mortality rates have been calculated on the deaths registered within the Borough.
"Partially corrected" rates, on numbers obtained by deducting the deaths of non-residents recorded within the Borough and adding the deaths (reported weekly) of residents of the Borough occurring in other parts of the Metropolis; and
"Corrected" rates, on the numbers obtained by adding the deaths of residents of the Borough in other parts

of England and Wales, such deaths being reported quarterly.
"Standardised" rates are "corrected" rates multiplied by "standardising factors" to make the adjustments necessary for variations in the sex-age compositions of the populations of the various districts referred to. Thes last have on former occasions been designated "corrected" rates, and those now called "corrected" rates, "nett."

remark that in the whole Borough increases above the averages (1908-12) have to be noted in the case of males at ages 5–15, 25–65, and 65 and upwards; and in the case of females at ages 0–5, 15–25, and 65 and upwards. No deaths were recorded last year at ages 0–5 in Lancaster Gate, West (females), 5–15 in Lancaster Gate, East (males and females), and 15–25 Lancaster Gate, East and Hyde Park (males).

In Table 24, the data for which have been extracted from the Quarterly Reports of the Registrar-General, the total mortality in the Borough is compared with the like rates for the Metropolis and the districts circumjacent to the Borough. The highest rate for 1913 included in the table is that of St. Marylebone (14·02), and the lowest, that for Willesden (10·07). In the last-named district only was the rate for 1913 lower than that for 1912, and in that district and in St. Marylebone the 1913 rates were less that the respective averages, in all the others above.

TABLE 22.

MORTALITY RATES: CORRECTED.
(per 1,000 individuals of each sex).

		Mortality Rates.										
Area.				Person	ns.		Male	s.	Females.			
-			1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	
Boi	ROUGH		13 68	12.44	13.11	15.36	14.60	15.01	12.45	10.85	11.63	
Wards.	Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, V Eas Hyde Park		14·20 14·36 12·63 15·06 18·63 7·62 7·23 9·75	11·58 13·52 11·32 12·38 16·83 8·12 7·98 10·51	12:65 13:87 12:30 13:62 17:44 7:14 7:40 10:42	14·69 13·52 15·06 16·59 20·27 8·97 11·13 13·50	12·21 15·11 13·65 13·10 19·95 11·75 8·40 13·80	13·46 14·72 14·93 15·33 19·18 8·81 10·54 13·65	13·57 15·10 11·07 13·91 17·19 6·90 5·68 7·65	10·93 12·12 9·80 11·87 14·09 6·24 7·54 8·71	12:08 13:26 10:71 12:56 15:90 6:30 6:10 8:86	

Mortality rates based on total populations are not strictly comparable, either between district and district or over a lengthy period of time in any district. Each sex and age has its special liability to death, and consequently the total mortality observed in any given population represents the resultant effect of the varying mortalities of the sex-age constituents of such population. Total mortalities are without scale. Just as an ordinary photograph fails to convey any true conception of the size of the subject unless some object of known dimensions be included in a known relation to the primary subject, so total mortalities by themselves require to be brought into relationship with a standard of known dimensions. The ideal method of comparing mortalities is to apply the observed age-group rates of each locality to a standard population, e.g., that of England and Wales in 1901, which is the standard at present in use at the Register Offices of this country and of the United States of North America. application would involve each year very laborious calculations, which can be obviated by the use of "standardising factors" yielding very nearly identical comparisons. By this method the average mortalities for a number of age-groups of each sex recorded in (say) England and Wales are applied to the corresponding age-groups of the different populations, and from the resulting totals of deaths so obtained "standard death-rates" for the different populations are determined. The ratio of the standard death-rate of a district to a given standard death-rate (e.g., of England and Wales) gives the "standardising factor" for that district. The Registrar-General in his Report for 1911 published factors \* (the mortality of England and Wales being taken as unity) for all the sanitary areas in the country, and Table 25 (first section-All Causes) shows the standardised rates for the Borough and the circumjacent districts obtained from the use of those factors. It will be noted that the standardised mortality rate in 1913 in the Borough (13:30) is the third lowest of the series, lower rates being observed only in Hampstead (11:29) and Willesden (10:57).

<sup>\*</sup> The factors for pulmonary tuberculosis and cancer have been obtained from another source and will be discussed later on.

TABLE 23.

SEX-AGE MORTALITY RATES.

Per 1,000 Individuals in each Group.

Age			Males.		Females.					
Group.	Area.	1913.	1912.	1908-12.	1913.	1912.	1908-12			
0—5.	Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West Do. East	42 33 31 41 30 00 35 57 46 03 66 52 21 69 40 74 35 02	42·11 36·30 40·14 43·85 34·66 56·59 34·69 — 45·13	43:55 35:21 39:20 42:98 46:44 59:64 21:50 13:95 38:90	37·02 42·46 25·56 28·38 43·53 53·70 7·02 33·19	28·00 26·15 17·33 24·02 37·94 37·20 16·00 34·96 24·31	34·70 28·04 26·36 31·65 36·99 51·58 17·73 20·20 30·95			
5—15.	Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West Do. East	2.94 5.62 3.47 0.74 2.39 2.63 4.18	2·48 3·76 1·31 1·51 1·83 3·98 4·13 4·03	2.64 3.07 2.67 2.42 2.34 3.15 3.12 0.81 1.47	2·40 2·45 1·30 5·13 3·22 1·69 3·01 —	1·84 1·24 2·18 2·97 2·59 1·29 — — 1·78	2 56 1·81 2·40 2·94 2·37 3·38 8·86 2·44 1·96			
5—25.	Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West Do. East	2.04 3.24 1.41 2.16 2.37 3.17 1.24	2 04 1·94 3·33 1·45 1·18 3·13 — 2·34	2·20 2·73 2·97 1·99 2·03 3·04 1·02 1·63 2·04	1 81 1 51 3 60 1 16 2 51 2 63 0 69 0 69 0 51	1.95 2.26 3.63 1.95 1.44 2.20 1.40 1.40 1.03	1·78 2·18 2·78 1·46 1·56 1·19 1·38 1·38			
25-65.	Queen's Park Harrow Road Maida Vale Westbourne Church	12·35 13·12 10·02 12·82 15·83 15·22 4·87 6·67 11·32	11·76 9·49 11·47 10·03 12·29 15·27 10·06 9·85 12·24	11:99 11:38 11:98 11:14 12:98 14:68 6:89 8:68 11:46	7-56 7-97 10-59 7-48 7-11 10-28 4-51 3-93 4-92	7·43 6·73 7·68 6·49 8·60 11·96 3·62 4·01 6·58	7 75 9·32 9·03 7·06 8·83 10·45 2·40 3·91 5·43			
65 and upwards	Borough Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West Do. East Hyde Park	80·45 85·25 102·59 77·88 53·50 101·06 73·78 69·37 79·66	74-92 72-16 100-76 66-52 47-46 120-09 67-01 38-21 61-72	79·57 88·75 84·67 81·27 60·13 108·68 58·29 65·99 80·94	76:37 78:21 88:91 65:12 70:62 104:74 64:83 57:24 59:48	64·49 74·94 79·17 60·53 46·30 68·39 58·13 84·55 64·66	63:48 73:39 76:41 65:83 55:12 83:70 51:29 50:01 73:37			

TABLE 24.

MORTALITY RATES.

Per 1,000 persons of all ages.

Disease	London.			don. Paddington.			Kensington.			Westminster.			St. Marylebone.			Hampstead.			Willesden.		
Disease.	1913	1912	1908-12	1913	1912	1908-12	1913	1912	1908-12	1913	1912	1908-15	1913	1912	1908-18	1913	1912	1908-13	1913	1912	1908-18
ALL CAUSES	14.16	13:52	14:34	13.41	12:30	12:96	13.64	12:96	13:39	12.65	12:35	12:56	14.02	13.79	14.48	10.68	9.79	9.64	10.07	10:03	10.89
Smallpox	-	0.00	0.00	-		-				-	-	0.00	-		-	-		-	-		
densles	0.33	0:40	0:45	0.37	0.25	0:31	0.48	0.16	0.31	0.14	0.23	0.16	0.27	0.34	0.33	0.24	0.13	0.14	0.40	0 21	0.28
carlet Fever	0.03	0.03	0 06	0.04	0.03	0.06	0.01	0.03	0.03	0.04	0.02	0.04	0.08	0.09	0.07	0.04	0.01	0.03	0.04	0.01	0.05
Diphtheria	0.09	0.10	0.15	0.08	0.04	0.07	0.03	0.03	0.10	0.05	0.07	0.08	0.02	0.07	0.07	0.03	0.20	0.11	0.02	0.06	0.13
Whooping Cough	0.12	0.21	0:24	0.25	0.17	0:20	0.16	0.14	0-18	0.04	0.10	0.11	0.08	0.16	0.22	0.15	0.05	0-10	0.14	0.17	0.26
Enteric Fever	0.03	0.03	0.03	0.04	0.01	0.03	0.05	0.03	0.03	0.01	0.02	0 03	0.04	0.04	0.03	0.01	0.01	0.04	0.03	0.02	0.03
Diarrhaa*	27.50	12.29	21:13	23-21	15.20	21:36	23 82	12.01	22.64	23:34	17.82	15:35	16.28	11:57	16:36	13.57	0.81	5.72	12:38	4.20	18.08
Phthisis	1.30	1.34	1.34	1.08	0.87	1 03	1.07	1.06	0.97	1.31	1.16	1.23	1.35	1.26	1.28	0.57	0.64	0.68	0.81	0.93	0.85
Other Tuberculous Diseases	0.30	0.31	0.43	0.21	0.32	0.31	0.16	0.28	0.32	0.58	0:25	0.30	0.18	0.09	0.18	0.07	0.12	0.18	0.17	0.25	0.32
Cancer	111	1:11	1.11	1.27	1.23	1.19	1.08	1.33	1.15	1'41	1.38	1-22	1.32	1.18	1.27	1.13	1.19	1:04	0.95	0.96	0.86

All data, except those relating to other tuberculous diseases and cancer, have been taken from the Quarterly Reports of the Registrar-General.

\* Rates in this case per 1,000 births.

The population of the Borough, as determined at the census, included a number of persons who were non-residents, and did not take account of those residents who were away from their homes on the night of the census. The latter would include residents travelling, away on holiday, in hospitals or other institutions. Manifestly in calculating standard death-rates the included non-residents ought to be excluded from the calculations, and the excluded residents, included. In technical phraseology, the standard death-rate should be based on the population de jure and not on that de facto. It has been ascertained that the Registrar-General when calculating the published standardising factors did not use the census populations, but certain estimates (or approximations) to represent the populations de jure. When the Department came to calculate standardising factors for the Wards of the Borough, it was found necessary to re-determine the factor for the Borough, and to preserve the comparability of the standardised rates, similar re-calculations were made for all the districts circumjacent to the Borough. The results are given in the first section of Table 26.

The standardised rates observed in the Wards in 1913 ranged from 8:38 per 1,000 in Lancaster Gate, East, to 18:68 in Church Ward. The order of the Wards according to the magnitudes of the mortality rates has not been the same in each of the three years covered by the table, but one or other of the Lancaster Gate Wards has been at one end of the scale each year and Church Ward at the other. The following statement shows how the recorded numbers of deaths in the Wards have differed from the numbers obtained from the application of the average mortality rates (sex-age-group) of England and Wales. The differences may be said to represent the results of the influences of environment—including therein sanitary, social, and economic factors—on mortality.

							A	LL CAU	USES									
				Queen's Park.		Harrow Road.		Maida Vale.		West- bourne.		Church	1.	Lanca		Gate, East.		Hyde Park.
								Male	s.									
Standard	Numb	pers		125		205		139		176		190		49		41	***	72
Recorded	1913	100		119		173		129		163		238	***	29		27		61
"	1912		***	98	***	191		114		126		232		37		20		62
"	1911	***	***	119		178		139						27		34		63
								Femal	les.									
Standard	Numb	ers	***	117		226		176		231		189		78		63		103
Recorded	1913	***		110		220		145		195		231		43		32	***	64
31	1912			87		174		125		164		187		38		44		72
39	1911			103		205		137	***	176	***	214		38	***	32	***	17

TABLE 25. Standardised Mortality Rates.

		ALL C	AUSES.		PULMO	NARY T	CUBERCU	CANCER.					
	Factor.		Standardised Mortality Rates,				andardis rtality R		Factor.	Standardised Mortality Rates.			
		1913.	1912.	1911.		1913.	1912.	1911.		1913.	1912.	1911.	
London	1.0000	14:16	13.52	15.00	.9628	1.25	1.29	1.29	-9634	1.07	1.07	1.01	
Paddington Kensington Westminster St. Marylebone Hampstead	·9941 ·9957 1·0540 1·0198 1·0572	13·30 13·58 13·33 14·30 11·29	12·23 12·90 13·03 14·06 10·35	13·23 13·59 13·09 15·35 10·16	·9198 ·9217 ·8422 ·8932 ·9021	0·99 0·99 1·10 1·20 0·51	0.80 0.98 0.98 1.12 0.58	1·11 0·85 1·01 1·30 0·54	·8542 ·8117 ·8484 ·8556 ·8657	1·08 0·88 1·20 1·13 0·98	1.05 1.08 1.17 1.01 1.03	1·03 0·92 1·09 1·17 0·86	

Factors for "all causes" calculated in General Register Office, those for pulmonary tuberculosis and cancer by the Medical Officer of Health of the County.

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TABLE 26. Standardised Mortality Rates.

		ALL C	AUSES.		PULMO	NARY T	UBERCU	LOSIS.		CAN	CER.	
	Factor.			ndardised ulity Rates.			andardis tality R:		Factor.		andardis tality R	
		1913.	1912.	1911.		1913.	1912,	1911.		1913.	1912.	1911.
Borough	99495	13.61	12:36	13.44	92067	0.98	0.75	1.05	-85887	1.10	1.06	1.00
Harrow Road Maida Vale Westbourne	1·01124 ·95489 1·00243 ·87683 1·00290	14·32 13·71 12·66 13·21 18·68	11·71 12·91 11·34 10·85 16·88	13·89 13·24 12·95 13·34 16·40	-98003 -94456 -90899 -93040 -96137	1·39 0·95 0·83 1·09 1·48	0.68 0.98 0.64 0.75 1.19	1.65 1.22 0.78 1.34 1.27	1·00377 ·89191 ·92744 72294 ·98841	1·11 1·07 1·58 1·22 1·18	0·94 1·39 1·23 0·92 1·30	0.99 1.19 1.37 0.80 1.19
West East	1·13407 1·15924 1·11855	8·64 8·38 10·90	9·21 9·25 11·75	7·91 9·26 11·13	·83572 ·85441 ·83898	0.62 0.31 0.52	0·27 0·21 0·53	0·43 0·71	·78849 ·85240 ·85079	0·50 0·72 0·66	1·02 0·10 0·93	0.69 0.64 0.98
St. Marylebone Hampstead	·99158 1·08952 1·02191 1·05805 1·05790	13·52 13·78 14·33 11·31 10·65	12.85 13.45 14.09 10.36 10.61	13·52 13·53 15·37 10·17 12·40	·98653 ·90340 ·89491 ·90256 ·98611	1.05 1.18 1.21 0.51 0.80	1·04 1·05 1·13 0·58 0·92	0.91 1.08 1.31 0.54 0.84	·77233 ·92004 ·87213 ·86961 1·13904	0.83 1.30 1.15 0.98 1.08	1·03 1·27 1·03 1·03 1·09	0.88 1.18 1.19 0.87 0.84

Calculated by the Department.

#### SMALLPOX.

No case of smallpox has been recorded in the Borough since 1906. In the Metropolis 4 cases were reported during the past year, as compared with 5 in 1912, and 72 in 1911. Of the 4 cases reported last year, 3 were subsequently found to have been erroneously diagnosed. Complete returns of the notifications in the extra-metropolitan sanitary areas are available for the three years 1911-13. (See Table 19.) The number of cases reported in each year has declined from 193 in 1911 to 87 in 1913. Nothing is known as to the proportions of cases reported which have been erroneously diagnosed. The cases discovered on inspection of ships in home ports numbered 25 last year, as compared with 12 in 1912 and 30 in 1911. The majority of such cases would have acted as centres for the spread of the disease in the country had they not been held up at the ports.

Vaccination.—Table 27; compiled from information supplied annually by the Vaccination Officer, continues to demonstrate the increasing neglect of this most valuable protective. The proportion of infants surviving to their first birthday without being vaccinated has increased from 11·0 per cent, in 1901 to 22·4 per cent, in 1912 (the last year for which complete returns are available), equal to an increase of over 100 per cent. The increase in the numbers of children in respect of whom exemption was taken out under the Vaccination Act, first observed in the returns for 1908, shows no signs of abatement. Doubtless it will be argued that the continued freedom from smallpox at present enjoyed by the country at large renders vaccination unnecessary, and that, should occasion arise, the majority of those at present unprotected would hasten to cover their risk. The natural reply to such arguments is that no one knows when he may unknowingly come into contact with the disease, and that it is, therefore, sheer folly to neglect to cover a risk which cannot be foreseen. Moreover, to delay seeking vaccination until the occasion arises involves a strong probability of finding that the covering of the risk has been undertaken too late, and, further, there is a real danger of vaccination when done under the

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stress of an emergency being less efficiently performed than when no hurry exists. The nation is exposing itself to an absolutely unnecessary chance of an epidemic of smallpox on a huge scale, and individual parents are not acting in the best interests of the future of their children.

TABLE 27.

Vaccination Returns.

	Children Born.	Successfully Vaccinated.	Insusceptible to Vaccination.	Died Unvaccinated.	Per cent. of Children Born. (Cols. 1-4.)	Vaccination Postponed.	Exempted under Act.	" Rest."	Per cent of Children Born. (Cols. 6-8.)
Cols.	1	2	3	4	5	6	7	8	9
1901	3,364	2,676	5	313	89-0	23	34	313	11.0
1902	3,262	2,692	12	291	89.8	85	19	276	10.1
1903	3,315	2,621	10	296	88.2	48	32	308	11.7
1904	3,311	2,578	8	307	87.4	52	22	344	12.6
1905	3,188	2,495	11	261	86.8	61	40	320	13.2
1906	3,174	2,545	9	224	87.5	36	41	319	12.5
1907	3,092	2,349	7	255	86.4	28	97	356	15-6
1908	3,098	2,346	8	244	83.8	28	201	271	16.1
1909	2,920	2,242	11	207	84.2	27	243	190	15.7
1910	2,916	2,093	6	232	79-9	26	356	203	20.1
1911	2,821	2,014	10	228	79.8	31	367	171	20.2
1912	2,808	1,990	5	185	77.6	34	388	206	22.4
1913 JanJune	1,400	909	1	92	71.6	53	234	111	28.4

#### DIPHTHERIA.\*

Last year 296 certificates† of diphtheria were received, or 48 more than in 1912, the morbidity rate being equal to 2.05 per 1,000 persons, as compared with 1.74 in 1912 and an average rate for the five years 1908-12 of 1.19. (See Table 17.) The local rate deduced from the figures published in the Quarterly Reports of the Registrar-General was 2.09, 0.49 higher than that for the County and the highest of all the rates for the year included in Table 18. In the County (see chart facing p. 24) as a whole, the prevalence of the disease was generally below the average for the ten years 1908-12 until the thirty-sixth week, after which it was slightly above. In the Borough the prevalence was generally above the average, and there were some wide oscillations. The principal periods of high prevalence were (a) during the tenth to the eighteenth weeks, and (b) from the forty-first week to the end of the year. It should be explained than an addition of three cases to any week's total produces an increase of nearly 1.5 per 1,000 in the corresponding annual rate, which fact makes it easy to understand the numerous wide excursions exhibited in the chart.

The number of cases recorded as belonging to each Ward in each quarter of the year are shown in Table 21, in contrast with the corresponding averages for the years 1908-12. The variations in the morbidity rates in the different Wards are shown on the next page.

<sup>\*</sup> Unless otherwise stated, cases of membranous croup are included in the figures of "diphtheria."

<sup>†</sup> A case of rather severe diphtheria in the person of a woman, aged 26, in service in the Borough, was reported from Bedford. The patient was ill when she left Paddington.

Two cases originally certified as diphtheria have been transferred to scarlet fever, owing to the after history of the cases.

Two patients, both males, aged 6 and 10 years, were certified to have "diphtheria and scarlet fever." Four patients were reported during the year with second attacks of the disease.

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#### DIPHTHERIA: MORBIDITY. Per 1,000 persons.

	Queen's	Harrow	Maida			Lancaste	er Gate,	Hyde
1913	Park. 2:23	Road. 1.94	Vale. 1.46	Westbourne.	2.42	West. 1.58	East. 1.22	Park. 1.10
1912	3.32	2.22	1.04	2.05	1.72	0.97	0.25	0.86
1908-12	1.63	1.57	0.98	1.18	1.36	0.75	0.72	0.56

It has already been intimated that the actual number of cases recorded last year cannot be compared with the figures of other years, owing to the fact that the statistical year 1913 included 53 weeks instead of the usual 52. In the case of diphtheria, another factor requires to be considered when making comparisons either of recorded numbers or of the resulting morbidity rates. The factor in question is the practice which has arisen during more recent years of reporting "carrier" cases as "diphtheria." The Metropolitan Asylums Board's Hospitals are intended for the reception of persons suffering from (among other diseases) diphtheria, i.e., persons acutely ill with the disease, which cannot be said to be the case with "carriers." The Board distinguish in their Annual Reports between cases of clinical diphtheria and "carriers" (described in the Reports as cases of "bacteriological diphtheria"). In 1910 the latter class constituted 5.7 per cent. of all "diphtheria" cases admitted to the hospitals; in 1911, 66; and in 1912, 7·1. It is probable that the proportion of "bacteriological" to all cases of "diphtheria" notified is higher than that indicated above, as it is to be expected that many cases notified are not sent to hospital on account of the absence of symptoms. "Carrier" cases are undoubtedly sources of danger to the community, and it is desirable that the sanitary authority should be kept informed of their occurrence; but, to enable proper comparisons to be made year by year, or even between district and district, provision should be made for the two classes to be distinguished in notification certificates, the more so as the extent to which bacteriological tests are resorted and "carrier" cases thereby discovered varies greatly in different districts. Having regard to the danger to the community and to the difficulty of freeing the throat from the bacilli, the majority of "carriers" require hospital isolation, and specially those "carrying" bacilli which are virulent. It will be apparent later on that "carrier" cases helped very considerably last year to swell the number of notifications of diphtheria.

The total of 296 cases recorded last year included 64 in two institutions, viz., the Infirmary (55 cases) and the Orphanage of Mercy (9 cases), which, for reasons to be set out later, it is thought should be excluded from the general figures for the Borough. The effect of such exclusion on the morbidity rates of the several Wards is shown in the appended statement. The adjusted rate for the Borough—i.e., the rate due to the prevalence of the disease among the general population—was 1.60 per 1,000, as compared with a recorded rate of 2.05 and an average of 1.19, showing an increase of 34 per cent. The greatest increase in prevalence was recorded in Westbourne Ward.

#### DIPHTHERIA: MORBIDITY.

			Pe	er 1,000	persons.				
		Queen's	Harrow	Maida			Lancast	er Gate,	Hyde
Cases—		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park.
As recorded		35	54	32	74	63	13	10	15
Adjusted		34	48	21	38	54	13	10	14
Morbidity-									
As recorded	***	2.23	1.94	1.46	3.07	2.42	1.58	1.22	1.10
Adjusted	***	2.10	1.74	0.97	1.59	2.14	1.58	1.22	1.08
Averages (190	08-12)	1.63	1.57	0.98	1.18	1.36	0.75	0.72	0.56
0					2.27			V 17V	0.00

Among the 232 cases notified from the general population there were 33 in which the original diagnosis of diphtheria was not confirmed, the total number of "errors" in the 296 reported cases being 37, or 12.5 per cent. of the notifications. In 1912 the proportion was 6.0

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per cent., and the average for the five years 1908-12 11.4. Moreover, there were 9 cases of "bacteriological diphtheria" among the cases reported in the general population, and 25 among the Infirmary patients, and 1 among those from the Orphanage, making the total of such cases 35, equal to 11.7 per cent. of the total notifications. A few years ago such cases of "bacteriological diphtheria" would have been counted as "errors," inasmuch as the patients present no clinical signs of the disease. It is hardly an exaggeration to say that upwards of one-quarter of the cases notified last year were not cases of clinical diphtheria, a statement which discounts the recorded increase in the prevalence of the disease to a very considerable extent. At the same time it has to be recognised that the notification of the non-clinical cases is advantageous, as it allows precautions to be taken whereby the possibility of transmission of infection, may be resulting in a severe form of the disease, is reduced to a minimum. In 13 patients the nasal form of diphtheria was reported, and in 5 others the nasal combined with the faucial.

Of the 199 "definite" cases in the general population there were 12 which were contracted in institutions other than the Infirmary or the Orphanage, 3 which appeared to be due to sources of infection outside the Borough, and 4 which followed the return home of earlier cases from hospitals.

The 232 cases were reported from 213 houses, there being 29 secondary cases in all, equal to 12·5 per cent. of the whole group, as compared with 15 per cent. in 1912. The house distribution of the *notifications* is given below in comparison with the experience of the preceding five years.

DIPHTHERIA: HOUSE DISTRIBUTION.

Notifications.

Excluding cases (1913) in the Infirmary and Orphanage of Mercy.

Houses with	2	cases		1913. 15	1912. 20	1911.	1910. 2	1909. 10	1908. 8
>>	3	**	***	2	4	5	_	1	3
"	4	11.		-	1	1	_	1	1
**	5	11		1	1	-	-	-	-
11	7	"	***	1	_	-	-	-	_

In two houses the infection spread outside the original family, in one instance (the house with seven cases notified) to three families. In the houses with 2 or more cases, 5 "errors," 4 cases of "bacteriological diphtheria," and 4 return cases were noted. The distribution of multiple cases—for houses and families—is shown below. On seven occasions 2 cases were reported on the same day from the same house, and on four, 3.

# DIPHTHERIA: 1913. Distribution of Cases. (After correction.)

Houses with 2 ca	ases	12	Families with	2 cases		11
,, 3 ,	,	1		3 ,,	***	3
,, 5 ,		1	"	5 ,,	***	1

The following information was obtained by the Department with reference to the houses with 5 and 7 cases.

House with 5 cases.—Family, consisting of man, wife, and four children aged 12 to 7 years:—
 W. S., f., at. 12; sickened 3 iii.; admitted to hospital 8 iii.; B+\*\* (throat).

Note.—"B + "" means that the Kleb-Löffler bacillus was found in throat or nose, as the case may be. The patient G. S. appeared to have been the origin of the disease. She was sent to hospital ill with scarlet fever on December 20th, 1912, and discharged February 14th, 1913. On March 11th G. S. and A. S. were brought to the Town Hall and examined by the Medical Officer of Health. In a letter to the medical

<sup>\*</sup> After correcting for "errors" the secondary cases in the general population constituted 120 per cent. of the total of the cases from that source, as compared with 15-6 per cent. in 1912.

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practitioner attending the family the Medical Officer of Health summarised the results of his examinations in the following terms:—

"G. S.—Child very pale and looking far from well; thick purulent discharge from nose; glands of neck hard and swollen; fauces normal to eye, except that the tonsils are slightly enlarged and tongue slightly furred.

"A. S.-Slight mucoid discharge from nose; submaxillary glands large and hard; right tonsil

much enlarged, left slightly enlarged; tongue slightly furred."

Swabs were taken from the nose and throat of both children, and the Klebs-Löffler bacillus was found in both swabs from G. S. and from the throat swab from A. S.

The only member of the family who was not reported was the father.

 House with 7 cases.—House occupied by 4 families, comprising 29 persons (13 aged 10 years and over, and 16 under 10 years).

M. P., f., æt. 8; sickened 29 vi.: to hospital 3 vii.; discharged 18 viii.; B + \*\*
V. P., f., æt. 1; ,, 10 vii.; ,, 22 vii.; ,, 21 viii.; B + \*\*
S. P., f., æt. 32; ,, 25 vii.; ,, 26 vii.; ,, 21 viii. 8 ix.; 28 x.; B + \*e A. H., f., aet. 8; ,, 5 ix.; 12 .33 6 ix.; 3 xi. M. H., f., æt. 8; 8 ix.; 33 9 x. G. H., f., æt. 10; C. C., m., æt. 6; 9 ix.; 9 ix.; 33 9 ix.; 9 ix.; 28 x. 55

The P. family comprised 7 persons, including 4 children under 10 years of age. In 1912 the mother (S. P.), 3 of her children (H. P., m., æt. 2; M. P., f., æt. 7; and S. P., f., æt. 11), and the servant were removed to hospital with diphtheria. (Notes of the outbreak were included in the Report for 1912, page 20, Case 2). The sequence of events last year—discharge of 3 patients on August 18th and 21st, followed by the first of the second group of cases from September 5th onwards—suggests very strongly that the cases in the H. and C. family were return cases, A. H. being the primary return case, and the others secondary. All members of the P. family were swabbed on September 11th with negative results.

In 121 instances bacteriological tests were known to have been applied in respect of the 232 cases reported among the general population. In 108 instances the Klebs-Löffler bacillus was found, in 12 (certified on clinical symptoms) it was not present, and in one the Hoffman (pseudo-diphtheria) bacillus was present. Six of the patients in whose swabs the Klebs-Löffler bacillus was not present were subsequently found to be not suffering from diphtheria. Bacteriological tests were used in all the cases reported from the Infirmary, and in 8 out of the 9 reported from the Orphanage. In addition, there is no doubt that the test was used in the 12 cases which occurred in institutions other than those just referred to, and (privately) in some of the cases reported from the three southern Wards of the Borough in which the proportion of cases certified after bacteriological investigation by the Department is disproportionately low.

Of the 296 notified cases 281 were removed to hospital (9 cases of "bacteriological diphtheria" kept at the Infirmary being regarded as in hospital), equal to 94.9 per cent. of the total notifications, as compared with 93.1 per cent. in 1912, and an average of 92.1. Of the 232 cases in the general population 217 (93.5 per cent.) received hospital treatment. (See Tables 28 and 29.)

There were 15 deaths among the notified cases, all but one occurring in hospital (Table 28) and all among the cases notified from the general population. After deducting the 4 deaths of patients subsequently found not to be suffering from diphtheria, the fatality per 100 definite cases from all sources will be found to be 42, as compared with 34 per cent. in 1912, and an average (1908-12) of 68. (Table 29.) The fatality calculated on the number of definite cases receiving institutional treatment was 41 per cent. in 1913, 32 in 1912, and 65 during the five years 1908-12. Inasmuch as all the 11 deaths from diphtheria occurred amongst patients drawn from the general population, the true fatality last year was 43 per cent.

The total number of deaths registered during the year was 14, one being certified as due to membranous croup. The difference from the number mentioned in the last preceding paragraph is due to (a) one of the deaths included in the 10 deaths in institutions being transferred to Liverpool, and therefore not appearing in the local mortality returns, and (b) to two of the deaths included therein having been notified in 1912, and two others not notified at all. The 14 deaths were equal to a mortality of 0.09 per 1,000 persons, as compared with one of 0.04 in 1912, and an average of 0.07. (Table 29.) The local rate appears in Table 24 as 0.08, which is the highest of the series included in that table, except that of the County. All the rates for the

DIPHTHERIA, 35

past year were below the averages. The rates recorded in the individual Wards of the Borough will be found in Table 30. Last year's rates in Maida Vale and Church Wards were just double the respective averages.

TABLE 28.

		Diphthe	ria.			Scarlet F	ever.	Enteric l	Fever.
	Ca	ses.	Dea	aths.	Ca	ses.	Deaths.	Cases.	Deaths.
Wards, &c.	Totals Reported.	Removed to Hospital.	At Home.	In Hospital.	Totals Reported.	Removed to Hospital.	At Home. In Hospital.	Totals Reported. Removed to Hospital.	At Home. In Hospital.
Queen's Park Harrow Road Maida Vale Westbourne Church	35 (5) 54 (8) 32 (4) 74 (7) 63 (8)	32 (4) 52 (8) 32 (4) 73 (7) 60 (8)	_ _ _ 1	1 (-) 2 (1) 1 (-) 3 (1) 5 (2)	117 (5) 52 (3) 82 (4)	116 (4) 50 (3)	- 2 (1) - 1 - 1 - 2	2 (-) 2 (-) 3 (1) 3 (1) 1 (1) 1 (1) 6 (1) 6 (1) 8 (2) 7 (2)	- 2 (-  - 2 (- - 3 (2
Lancaster Gate, West East Hyde Park	13 (3) 10 (1) 15 (1)		=	2 (-)	12 (-) 24 (1) 16 (-)	12 (-) 20 (-) 16 (-)		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	 1 (-
Borough 1913 ,, 1912	296 (37) 248 (15)	281 (36) 231 (15)	1		484 (26) 272 (12)		- 7 (1 - 4 (1)		8 (5

NOTE.—The figures in parentheses indicate the numbers of "errors of diagnosis."

TABLE 29.

			Diphthe	ria.	S	carlet F	ever.	Enteric Fever.		
		1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12
Removed to Hospit	al (1)	 94.9	93.1	92.1	95-9	92.2	95.2	96.0	58.3	77-2
Fatality (2)—Total At Home In Hospital		 4·2 7·1 4·1	3·4 5·8 3·2	6·8 10·7 6·5	1·5 — 1·6	1·5 1·6	2.1	31·5  33·3	6·6 14·2 —	13·5 17·8 12·2
Mortality (8)		 0.09	0.04	0.07	0.04	0.02	0.06	0.04	0.01	0.02

<sup>(1)</sup> Per cent. of reported cases. (2) Per cent. of cases corrected for errors of diagnosis. (3) Per 1,000 persons of all ages.

TABLE 30.

MORTALITY RATES: CORRECTED.

Per 1,000 persons, all ages.

			Diphthe	ria.	S	carlet F	ever.	Enteric Fever.		
Wards.		1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12
Queen's Park Harrow Road Maida Vale Westbourne Church Lancaster Gate, West East Hyde Park		0·06 0·03 0·12 0·08 0·16 —	0·12 0·04 0·09 0·04 —	0·10 0·09 0·06 0·08 0·08 0·04 0·10 0·01	0·12 0·03 0·04 		0-05 0-07 0-03 0-05 0-14 0-02 	0·12 — 0·08 0·04 — 0·07	0.06	0·01 0·04 0·02 0·02 0·03 

36 DIPHTHERIA.

Infirmary Cases.—On February 27th a case of diphtheria was certified after bacteriological test ("positive") in the person of a nurse. Between that date and April 22nd 47 cases were reported among the patients and nursing staff of the institution, all after bacteriological tests. Between April 22nd and August 18th no cases were reported, but between the latter and the end of the year 8 other cases were reported, all after bacteriological tests. There were in all 55 cases reported during the year, 21 among the nursing staff and 34 among the patients (one patient being reported twice). No case ended fatally.

The cases were distributed throughout the year, as shown below, the numbers of staff patients included in the total for each month being indicated in parentheses. All the patients, except 9 of the nursing staff, were removed to the Board's hospitals.

From inquiries addressed to the hospitals to which the patients were sent, it was ascertained that 4 of the cases were "errors"—all patients, 2 of whom were sent to hospital without any previous bacteriological test; that 16 were cases of "bacteriological diphtheria"—15 being patients at the Infirmary and 1 member of the nursing staff; and that the remainder (26)—15 patients and 11 members of the nursing staff—were clinical diphtheria. The 9 cases not sent to hospital were all cases of "bacteriological diphtheria." The seasonal distribution of each type of case is given below:—

February. March. April. ... August. ... October. November. December. Clinical ... 
$$1$$
 (1)  $15$  (7)  $5$  (1) ...  $1$  ...  $1$  (1)  $3$  (1) Bacteriological...  $12$  (1)  $11$  (9) ...  $-$  ...  $1$   $1$   $-$  "Errors" ...  $1$   $2$  ...  $-$  ...  $-$  ...  $1$ 

The origin of the outbreak was thought to be a fatal case of diphtheria which occurred at the Infirmary on December 30th, 1912. Systematic "swabbing" of the inmates and staff lead to the discovery of most of the cases reported, as clinical indications, when present, were of the slightest.

Orphanage Cases.—During December—more precisely, between the 5th and 15th of that month—9 cases were reported from the Orphanage of Mercy, all the patients being sent to hospital. The cases included 8 of clinical diphtheria (all mild) and 1 of bacteriological. Here, again, systematic swabbing was the principal means of discovery of the cases. The origin of the outbreak could not be traced.

The following notes of cases investigated by the Department will be of interest :-

III.—G. D., f., æt. 3, was removed to hospital with scarlet fever on July 1st, 1912, and discharged August 23rd. The Medical Superintendent of the hospital subsequently informed the Medical Officer of Health that the attack was an uncomplicated one.

She was reported to have diphtheria in July of last year and was removed to hospital on the 18th of that month, being discharged on August 23rd. From that date until November 26th she appears to have had good health, and then failed with "pneumonia." A swab from her throat was submitted on December 1st, but although the result was negative, the clinical symptoms were considered to indicate an attack of diphtheria, and she was removed to hospital on December 2nd, where she died two days later.

The Medical Superintendent of the hospital to which G. D. was admitted in July, 1913, communicated the following notes of the case:—

"This child was admitted with several patches (sc. of diphtheritic membrane) on the left tonsil and one on the right. The Klebs-Löffler bacillus was found in the throat swab.

"Later a direct smear showed the fusiform bacillus and spirillum of Vincent's angina. There was much sloughing of soft tissue (cancrum oris?) and some necrosis of upper and lower jaws with exfoliation of bone. At the same time she had whooping cough and broncho-pneumonia. Her condition was critical for three weeks or so, but she ultimately made a good recovery. There is no note of a bacteriological examination previous to her discharge."

The Medical Superintendent of the hospital to which she was admitted in December reported that the child had no diphtheria then, and that the cause of her death was purpura hæmorrhagica and pneumonia. It is not improbable that the illness immediately preceding her death was really of a septic origin.

IV.—S. K., f., act. 66, was certified to have erysipelas on October 2nd by the Medical Superintendent of the Infirmary, to which institution she had been admitted on the 30th of the previous month. Swabs from her throat were received on October 1st and November 4th, both of which contained the Klebs-Löffler bacillus She was removed to hospital on the 7th of that month and discharged thence (to the Infirmary) on the 18th.

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Further swabs were submitted on November 18th (the day of the discharge) and December 8th, both containing the Klebs-Löffler bacillus. A final swab on January 1st of this year was reported "negative."

SCARLET FEVER.

The patient does not appear to have had any clinical symptoms.

V.—A. T., m., act. 11, was excluded from a Kensington school on October 24th. There had been cases of diphtheria at the school, and his throat and nose were swabbed in the course of a special inspection, the Klebs-Löffler bacillus being found in the nose. Swabs were examined on November 12th, 19th, and 26th, and December 4th and 17th. All were "positive" except the last. He was certified as a case of nasal diphtheria on November 18th, but was not sent to hospital.

The following appears to have been a case of post-scarlatinal diphtheria:-

VI.-E. S., f., æt. 2, sickened October 1st, removed to hospital October 4th, and died.

E. S. was taken ill with scarlet fever in July of last year and removed to the hospital from her home in Liverpool on the 25th of that month, three weeks after her brother. Both children were discharged on September 2nd. They were brought to London on the 15th of that month. On the 30th the children went to Southend, where E. S. was taken ill the same night. She was seen by a doctor at Southend on October 2nd, who found the child looking ill but no evidence of any infectious disease. "The doctor is confident that there was then no exudate on the tonsils, although he admits the fauces were congested." (Letter from the Medical Officer of Health of Southend.) The patient was brought to London on the 3rd.

Two cases of diphtheria occurred in a distant part of the Borough at the end of the year which were apparently due to the above case. The mother took home some of the clothing left behind by the S. family on their return to Liverpool. One of the two cases was not certified owing to a "swab" being reported "negative." It was subsequently ascertained that the non-reported patient had membrane in his throat, and that the case was complicated by intercurrence of pneumonia and followed by paralysis.

#### SCARLET FEVER.

The cases reported during the year\* (484) were equivalent to a morbidity rate of 3:34 per 1,000 persons, as compared with a rate of 1:91 in 1912, and an average of 2:89 for the five years 1908-12. The disease was markedly more prevalent throughout the country than in 1912, as is shown by the figures given in Table 19. The chart (facing page 24) shows clearly that in London the increased prevalence began as early as end of the second quarter of the year—about the 25th week—but was checked, about the 30th week, by the commencement of the school holidays, and did not again cross the curve of the 1903-12 average until the last week in September (38th week). The curve for Paddington (1913) shows wider excursions than does that for London, owing to the smaller numbers to which it relates, but the local curve for last year crossed the average curve finally in the 37th week—a week earlier than did the London curve—and remained above until the end of the year, save for the Christmas (52nd) week, when the descent was almost certainly accidental and due to the intervention of the holidays of the Clerical Staff resulting in delay in booking cases.

The total of 484 cases recorded last year is the highest noted since 1910, but is considerably lower than the totals for 1901 (503), 1906 (715), 1907 (579), 1908 (681) and 1909 (629). Last year's prevalence was, however, remarkable for the very great differences observable in the numbers of cases reported in the two half-years (123 during January to June, 361 July to December), and also for the limitation of the disease to the Northern Wards of the Borough. (See Tables 20 and 21.) In Church Ward, Lancaster Gate, West, and Hyde Park Wards, the numbers recorded last year were less than the quinquennial averages. (Table 21.) The greatest proportional difference from the average is to be noted in Lancaster Gate, East, Ward, last year's total being four times the average, but the absolute maximum increase in cases (37 in excess of the average) occurred in Queen's Park Ward. From the morbidity rates given below it will be seen that the disease was (in comparison with 1912) much more prevalent in Harrow Road, Westbourne and Lancaster Gate, East, Wards than in the others. In comparison with the averages the greatest increases were recorded in Queen's Park and Lancaster Gate, East, Wards.

<sup>\*</sup> Including two cases originally certified as having diphtheria but transferred to scarlet fever by reason of the subsequent course of the attacks, and three patients certified to have "scarlet fever and diphtheria." One patient was reported during the year with a second attack of the disease.

# SCARLET FEVER: MORBIDITY. Per 1,000 persons.

		Oueen's	Harrow	Maida	Westbourne.	Chamb	Lancast	er Gate,	Hyde
		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park.
	1913	 5.45	4.27	2:39	3.90	3.69	1.26	2.94	1.24
	1912	 2.94	1.63	1.70	1.92	2.85	1.19	0.50	1.10
+	1908-12	3.14	4.27	2.16	2.51	3.87	1.32	0.75	1.85

The subsequent course of the disease in 26 cases (5·4 per cent. of the total) showed that the diagnosis of the disease had been erroneous. In 1912 the proportion of errors was 4·4, the average for the five years 1908-12 being 7·3. Of the residue (correct diagnosis, "definite cases") —458 in number—10 (2·1 per cent.) were contracted in institutions, 22 (4·8 per cent.) were "imported," and 41 (8·9 per cent.) were "return cases," i.e., followed at varying intervals the return home of patients discharged from the fever hospitals. In 1912 the return cases constituted 5·3 per cent. of the "definite" cases.

The 484 notifications were received from 376 houses, 70 of which furnished two or more certificates. The house distribution of *notified* cases during the past five years is given below.

#### SCARLET FEVER.

	(Notifi	cations.	Uncorrected	1.)		
		1913.	1912.	1911.	1910.	1909.
Houses with 2 cases each	***	47	32	16	23	62
,, 3 ,,		16	8	3	9	26
,, 4 ,,		5	-	2	3	3
,, 5 ,,	***		-	1 .	1	1
,, 6 ,,	***	1	_	_	-	-
,, 7 ,,		_	-	1	-	
,, 10 ,,		1	-	-	-	-

There were 8 cases of erroneous diagnosis among the 178 cases reported from houses with two or more notifications, and in 11 of the houses the patients were members of two families residing in the same house. The distribution of multiple cases, after correcting for errors of diagnosis, according to the number of cases per house and family, is given below.

SCA	RL	ET	FE	VER	
-					

				(	Cases	-Corre	cled.)					
				1913.		1912		1911.		1910.		1909.
Houses	with 2	cases	each	42		29		14		21	***	59
"	3	, ,,		16		8	***	2	***	7	***	22
11	4	**	***	4	***	-		1	***	2	***	3
***	5	23	***	_	***	_		1	***	1		1
33	6	,,		1	***		***	-	***	-	***	
,	10	,,	***	1	***	-	***	-		-	***	-
Families	with 2	cases	each	46	***	27		14		22	***	51
,,	3	99	***	12		8		2		6		14
23	4	"	***	6		-	***	1	***	1	***	4
33	5	25				-	***	1	***	1	***	-
33	8	33	***	1	***	-	***		***	-	***	

The occurrence of return cases played an important part in producing multiple cases. In the 64 houses with multiple cases (164 in all, 100 secondary) there were 36 return cases, equal to 36 per cent. of the secondary cases. There were as many return cases in the 65 families with multiple cases (160 cases in all, 95 being secondary), so that the return cases constituted 37.8 per cent. of the secondary cases. In 19 instances two cases were reported at the same time from the same house or family, and in one instance each, three and four cases. From one family four cases were notified at very short intervals, but three of the four were found to have been erroneously diagnosed. Multiple cases were much more numerous in Queen's Park and

Church Wards than in other parts of the Borough. The following records of the two houses in which the largest number of cases (6 and 10) were recorded should be of interest. The second instance must be a record.

I .- House with six cases.

House occupied by three families, containing 18 persons (8 of whom, in two families, were under 10 years of age).

```
H. Th., m., æt. 3; sickened 2 i.; to hospital 3 i.; discharged 19 iii.
R. Th., f., æt. 9;
                            24 iii. ;
                                                26 iii. ;
                                                                   7 viii.
                                         19
                                                                   28 vi.
                                                15 iv. ;
A. Th., f., æt. 6;
                             6 iv.;
                      77
                                         11
                            16 iv.;
                                                16 iv. ;
                                                              died 24 iv.
T. Th., f., æt. 1;
                                         22
                      99
                             2 xi.;
                                                6 xi.
I. Tr., f., æt. 4;
                                         22
                                                18 xi.
                            10 xi.;
A. Tr., m., æt. 5;
```

II .- House with ten cases.

House occupied by two families (one tenement empty), comprising 18 persons (of whom 10 were under 10 years of age).

```
E. C., f., act. 17; sickened 31 iii.; to hospital 5 iv.; discharged 19 v.; to hospital 9 vi.; discharged 16 vii.
                                                 28 v.;
                            21 v.;
                                                                    16 vii.
M. C., f., æt. 15; ,,
                                                             11
                             22 v.;
                                                 28 v.;
                                                                     8 vii.
H. D., m., æt. 13;
                                                             11
                      33.
                                           19
                             29 v.;
                                                  5 vi.;
                                                                     16 vii.
G. C., m., æt. 14;
                                           22
                                                             33
                      22
                             6 vi.;
                                                  8 vi.;
                                                                    29 vii.
J. C., m., æt. 12;
                                                             22
                                          .33
                                                  9 vi.;
                                                                     19 ix.
                              7 vi.;
D. D., f., æt. 2;
                                                             15
                                          33
                      23
D. C., m., æt. 4;
B. C., f., æt. 8;
                                                 26 ix.;
                                                                     13 xi.
                             24 ix.;
                                                             33.
                                                 26 ix.;
                                                                     4 xi.
                             24 ix.;
                      9.9
                                          22
C. C., f., æt. 11;
                              3 xi.;
                                                  7 xi.
                             10 xi.;
                                                 14 xi.
D. C., f., æt. 6;
                      11
                                          53
```

In the first group of cases the three secondary cases in the Th. family appeared to have been due to the return home of the first patient. The cases in the Tr. family were thought to be quite independent of the earlier outbreak. The second family was not in the house in the earlier part of year.

In the second group the first patient was brought to the Town Hall on June 6th and examined by the Medical Officer of Health. The girl was pale and there was a history of a "continuous cold" since her return from hospital. There was nasal discharge, the throat was congested, the tonsils enlarged, with a considerable quantity of mucus accumulated at the back of the throat. The medical practitioner was informed of the facts, and it was agreed that the girl should be returned to hospital. It is noteworthy that she was detained there until July 16th.

The girl just mentioned was not the only patient returned to hospital after discharge. In another family a girl aged 9 was sent to hospital on February 2nd, and was discharged on April 2nd. Two other members of her family sickened with the disease on April 21st and 30th. The mother brought the first patient to the Town Hall on May 16th, when she was examined for the second time (she had been examined on April 29th) by the Medical Officer of Health. The following is the material part of a letter addressed to the medical practitioner in charge of the family.

The only abnormalities which I found . . . . on April 29th were the state of the nostrils (excoriations in both, with a watery discharge) and the throat (some congestion, but no tonsillar enlargement). There was some enlargement of the submaxillary glands on both sides, but that did not appear to me to be important. I took swabs from the nose and throat, and the report of the Bacteriologist showed that an organism resembling the micrococcus catarrhalis was found in the nose, and organisms resembling pneumococci in the throat. Since I saw R. on the 29th her brother H. has been sent away with scarlet fever. R. has been associating with a family S., one of whom, a girl C., was removed with scarlet fever on the 13th of this month (May). A second child in that family is ill and under observation, scarlet fever being suspected.

The girl R. was returned to hospital on May 19th, and detained there until July 30th.

The following is another interesting instance of a return case :-

—. P., living in Battersea, was taken ill with scarlet fever at Great Yarmouth, and admitted to hospital there. He returned to Battersea on September 11th, and his sister sickened with the disease on the 19th. She was sent to hospital, from which she was discharged on October 27th. E. P., residing in Paddington sickened with scarlet fever on November 10th. She visited the P. family at Battersea on the previous day. The Battersea girl had been in attendance at school for some days, apparently without giving rise to any infection in school.

Of the 484 persons notified to have scarlet fever during the year, 464 (including 22 of the 24 cases of erroneous diagnosis) were removed to hospital, equivalent to 959 per cent. of the total notifications, as compared with 9·22 per cent. in 1912 and an average of 95·2 per cent. during the five years 1908-12. All the reported cases were removed from Lancaster Gate, West, and Hyde Park Wards, the smallest proportion of cases removed (91·4 per cent.) being recorded in Westbourne Ward. Further information on this subject can be obtained from Tables 28 and 29.

From about October 18th to December 15th there was some difficulty in securing hospital accommodation. Altogether some 50 cases were not removed on the day of first application to the Board. The maximum delay was not, however, more than 48 hours, and in the majority of instances less than 24.

The deaths among those notified ill with scarlet fever numbered 8, but in one case (in Queen's Park Ward) scarlet fever was intercurrent with measles, and the death has been entered under measles. In another case (in Maida Vale Ward), the death took place during the past year, but the attack was reported in the previous. The number of deaths on which the rates in Tables 29 and 30 are based was 7. The fatality during the year (the fatal case belonging to Maida Vale Ward being included) was 1.5 per cent., the same as in 1912, and 0.5 below the average (2.0) for the years 1908-12. The mortality for the whole Borough was 0.04 per 1,000 persons of all ages, double the rate for the previous year, but 50 per cent. below the quinquennial average (0.06). In St. Marylebone the mortality last year was 0.08 per 1,000 (see Table 24), that being the highest rate for the year in all the districts included in the table. The lowest rate (0.01) was recorded in Kensington. In St. Marylebone and Hampstead the rates recorded during the past year were above their respective averages, in all the others, below. The changes in the mortality rates observed in the individual wards are shown in Table 30.

#### ENTERIC FEVER.

Last year 25† persons were reported to be ill with enteric fever, as compared with 15 in 1912. The morbidity rate (0·17 per 1,000) was 0·07 in excess of the figure for 1912, but 0·04 less than the average for 1908-12. (See Table 17.) The local rate recorded last year was equal to that of the County and that recorded in Hampstead, but was exceeded by the rate (0·18) recorded in Westminster. (Table 18.) The lowest rate recorded in the circumjacent districts during the year was 0·10 (Willesden). In all the districts last year's rates were below the respective averages. In the areas outside the Metropolis (Table 19) last year's rate (0·22) was little more than half that recorded in 1911. The Ward distribution of notified cases is shown in Table 20, the numbers for the past year (in each quarter) being contrasted with the averages for the five years 1908-12 in Table 21. In Westbourne Ward only did the cases reported in 1913 (6) exceed the quinquennial average (2). The morbidity rates observed in the Wards are set out below.

## ENTERIC FEVER: MORBIDITY.

Per 1,000 persons.

	0	ueen's	Harrow	Maida			Lancaste	er Gate,	Hyde
		Park.		Vale.	Westbourne.	Church.	West.	East.	Park,
1913		0.12	0.11	0.03	0.24	0.31	0.10	0.12	0.23
1912		0.06	0.07	0.09	0.13	0.12	0.22	0.12	0.08
1908-12		0.16	0.19	0.26	0.09	0.31	0.24	0.20	0.29

In 1912 no errors of diagnosis were discovered among the notified cases of this disease, that being the first occasion since 1902 of freedom from errors. Last year 6 of the 25 notified cases

<sup>\*</sup>Otherwise called Typhoid Fever. Cases reported as Continued Fever are included in the statistics of Enteric

<sup>†</sup> A boy, aged 6, was notified at Eastbourne as ill with the disease five days after leaving his home in Paddington. His sister had previously passed through an illness thought to be of the nature of a B. coli infection.

proved to have been erroneously diagnosed, the percentage of errors being 24·0, or 3·3 above the average for 1908-12 (20·7). Of the 19 definite cases 6 were believed to have been imported, and one each due to the consumption of winkles and watercress. Only one patient was treated at home, the patients removed to hospital forming 96 per cent. of the total cases reported, as compared with 53·3 per cent. in 1912 and an average (1908-12) of 77·2.

Of the 25 persons reported to have the disease 8 died, but in 2 of the fatal cases the disease (enteric fever) had been erroneously diagnosed. The fatality (Table 29) among the definite cases was 31.5 last year, as compare with 6.6 in 1912, and an average for the preceding five years of 13.5. It is somewhat remarkable that all 6 deaths occurred in the Paddington Infirmary, to which Institution 13 cases (including 1 error) were admitted, while among the 11 cases (including 5 errors) admitted to other institutions—hospitals of all kinds and nursing homes—there was not a death. Among the patients treated at the Infirmary there were two men received from the same common lodging house (one in August and the other in December), that being the only house with more than a single case during the year. In one house, however, where resided a married man who was reported to have the disease, it was ascertained that all his 6 children had been previously ill with diarrhœa at intervals before the father's attack. Enteric fever not being suspected until the father's illness, no Widal tests were made while the children were ill. Subsequently such tests were applied at the request of the Medical Officer of Health and in 4 of the 6 children the reactions were found to be positive.

The Widal test was known to have been used in 17 instances before notification. Positive reactions were obtained in 16 instances, but in two instances the diagnosis of enteric fever based on the results of the test was subsequently set aside. In the remaining instance a diagnosis of enteric fever was given although the reaction was negative. The further progress of the case failed to confirm the diagnosis.

The mortality from enteric fever last year was at the rate of 0.04 per 1,000 persons, as compared with 0.01 in 1912 and an average (1908-12) of 0.02. The mortality in St. Marylebone was at the same rate as in Paddington (Table 24), but lower in all the other districts. The Ward mortalities are shown in Table 30.

#### SEPTIC DISEASES.

PUERPERAL FEVER.—The reported cases of this disease after increasing from 7 in 1911 to 11 in 1912 fell to 8 last year, the annual average for the five years 1908-12 being 7.2. The numbers of cases reported from each of the Wards during the past six years are given in Table 20.

In the last report (page 24) arguments were adduced in favour of the use of the births registered, rather than of the number of women of child-bearing ages, for the purposes of calculating the various rates required. It is unnecessary to recapitulate those arguments here.

The morbidity rate was 2:80 per 1,000 births last year (Table 17), as compared with a rate of 3:96 in 1912, and an average (1908-12) of 2:50. According to the data used in the preparation of Table 18, the local rate was 2:61 last year, that rate being exceeded by the rates recorded in Kensington (3:87), Westminster (2:69), and Willesden (2:72). In Westminster, St. Marylebone and Hampstead last year's rates were below the averages, in the other districts, above. In Extra-Metropolitan England and Wales (Table 19) last year's rate was 2:13 per 1,000 births, as compared with 2:36 in 1912 and 2:24 in 1911.

The morbidity rates recorded (see next page) during the year in Queen's Park and Lancaster Gate, West, Wards were higher than the corresponding rates in 1912, while, in comparison with the quinquennial averages, Harrow Road Ward has to be added to the two Wards just mentioned as having excessive rates.

#### PUERPERAL FEVER: MOREIDITY.

#### Per 1,000 births.

		Queen's Park.	Harrow Road.	Maida Vale.	West- bourne.	Church.	Lancaster West.	Gate, East.	Hyde Park.
1913	***	5.63	3-99	2.63	2.21		16.12	_	-
1912	***	5.01	2.86	6.86	6.30	-	15.62	-	-
1908-12	2	1.97	1.91	3.81	3.79	1.64	3.12	_	1.25

Among the 8 cases reported there was 1 in which the septic intoxication followed an illegal operation, and the woman (a married multipara) died, her death forming the subject of an inquest. Of the remaining 7 patients 4 were primiparæ and 3 multiparæ. Only 1 patient was unmarried, and all were delivered of living children. Four of the confinements were attended by medical practitioners, 3 being assisted by trained nurses and 1 by an untrained woman; 2 were attended by midwives, assisted, in one instance, by an untrained woman; and 1 by an untrained woman alone. Dirty attendants and surroundings were reported in 2 instances, and in 2 others the labour was not of the normal type, placenta prævia occurring in I case and contracted pelvis (requiring the use of instruments) and adherent placenta being recorded in the other. Four cases of puerperal fever were known to have occurred during the year in the practice of a local midwife, 2 of the patients being residents of Paddington, 1 of St. Marylebone, and 1 of Willesden. The cases occurred in April, May, June, and July. At three of the confinements (those in May, June, and July) one particular nurse or pupil was present, at the first two another. The facts were reported to and investigated by the County Council, the supervising authority of midwives, but the conclusion arrived at was "that the cases . . . . appear to have no connection with each other."

Two of the 7 patients died as well as the victim of the illegal operation. The fatality from natural, as distinct from accidental, puerperal fever was 28.5 per cent. One death was reported from a lunatic asylum from this cause, but as the case was not "notified" it should not be included for local purposes in calculations of fatality; such discrimination is, however, not possible when comparing the rates observed in different localities as in Table 31. In that table the various rates are based on the numbers recorded without any adjustments. It will be noted that, owing to the inclusion of the death in the lunatic asylum and of the notification of the disease in the case of criminal abortion, the fatality in the Borough during the past year is given as 27.5 per cent., instead of the more correct figure 28.5. The local fatality is lower than that recorded in any other district, except Willesden, where a rate of 18.18 was recorded. The rate of 200 per cent., recorded in Hampstead, can only be taken to mean that certain cases were not notified. The only district besides Hampstead with a fatality in excess of the average (1908-12) was St. Marylebone.

Mortality in Childbed.—Besides the three deaths from puerperal fever there were seven others from "accidents and diseases of the puerperium," a somewhat vague group of causes of death which are not notified during life. The mortality from such causes was at the rate of 247 per 1,000 births last year, as compared with one of 2·16 in 1912, and an average (1908-12) of 2·47. Higher rates of mortality were observed in St. Marylebone (4·50) and Westminster (3·01). In those districts and in the County as a whole last year's mortality was in excess of the average. The total mortality in childbed in the Borough (Table 31) was 3·52 per 1,000 births registered, as compared with 3·70 in 1912, and an average of 3·57. The maximum rate recorded last year (5·40) was that of St. Marylebone and the minimum (2·25) that of Willesden. The mortality rates recorded in the Wards of the Borough are given below. It should be remarked that in the three southern Wards, viz., the two Lancaster Gates and Hyde Park, puerperal fever has an almost insignificant effect on the mortality in childbed.

# MORTALITY IN CHILDRED: TOTAL

#### Per 1,000 births registered.

		Queen's Park.	Harrow Road.	Maida Vale.	West- bourne.	Church.	Lancaster West.	Gate, East.	Hyde Park.
1913		-	5.31	-	8.86	1.31	16.12	_	_
1912		5.01	2.86	2.28	2.10	1.46	15.62	31.25	
1908-12	***	4.44	2.40	6.77	2.52	4.15	12.69	9.86	6.84

TABLE 31.

MORTALITY IN CHILDBED.

		London.		Pa	Paddington.		Kensington.			Westminster.		
	1913.	1912.	1908- 12.	1913.	1912,	1908- 12.	1913.	1912.	1908- 12,	1913.	1912.	1908-
Puerperal Fever— Morbidity Fatality Mortality Accidents and Diseases of Parturition—	3·09 39·82 1·23	3·41 41·73 1·42	2.56 52.21 1.33	27.5	3·96 36·36 1·44	2·47 33·33 0·82	38.46	2·59 75·00 1·94	2·74 51·16 1·40	33.33	8-91 31-57 2-81	3.56 42.85 1.53
Mortality Total Mortality in	1.53	1.57	1.42	2.47	2.16	2.74	1.57	2.92	2:48	3.01	1.87	2.5
Childbed	2.76	3.00	2.76	3.52	3.60	3.57	3.14	4.87	3.89	4.02	4.69	4.00

	St.	St. Marylebone.			Hampstead.			Willesden.		
	1913.	1912.	1908- 12.	1913.	1912.	1908- 12.	1913.	1912.	1908- 12,	
Puerperal Fever-										
Morbidity	1.80	2.22	1.93	0.79	2.45	3.47	2.75	2.55	2.68	
Fatality	50.00	40-00	45.81	200.00	66 66	54.54	18-18	30.00	39-62	
Mortality	0 90	0.88	0.89		1.63			0.76	1.06	
Accidents and Diseases of Parturition—										
Mortality	4 50	4.89	3.66	1.58	3.26	3.31	1.75	2.29	2.43	
Total Mortality in				200						
Childbed	5.40	5.78	4.56	3.17	4.89	5:21	2.25	3.06	3.49	

All rates per 1,000 births registered, except "Fatality," per 100 cases notified.

ERYSIPELAS.—The notified cases numbered 112 last year (Table 17), the morbidity rate being 0.76 per 1,000 persons, as compared with one of 0.82 in 1912, and an average (1908-12) of 0.76. The rate recorded in the Borough was the highest of the series included in Table 18, the lowest rate (0.37) being that of Hampstead. In all the districts except Paddington last year's rates were below the averages. The greatest increase in the number recorded in 1913 above that recorded in the previous year occurred in Maida Vale Ward. (Table 20.)

The notified cases comprised 50 in males and 62 in females. In 9 instances only (5 in males and 4 in females) did the inquiries made elicit any history of an open wound as the seat of infection. In 5 instances the part of the body affected was not recorded, the remaining 107 attacks being distributed as follows:—

Head, neck,	79		Males,	37 (3)	 Females,	42 (1)
Arm, hand,	8		33	3 (1)	 "	5 (2)
Trunk,	1	***	33	-	- 11	1
Leg, foot,	19		**	8 (1)	 "	11 (1)

NOTE.—The figures in parentheses indicate the numbers of cases in which a history of a wound was obtained.

Three patients were reported twice during the year with attacks of the disease, 1 being a female, aged 66, who had attacks in January and December, and the other 2 males, aged 41 (attacks in October and December), and 38 (attacks in September and November). There were 2 cases reported from one house in two families, the first case occurring in July, the other in December.

Twenty-seven of the patients received institutional treatment, equivalent to 24·1 per cent., as compared with 16·2 per cent. in 1912 and 18·9 in 1911. All except 4 of the patients were admitted to the Paddington Infirmary, the exceptions being received at Middlesex Hospital (2 cases), and 1 each at the Fulham Infirmary and a nursing home. There were only 2 deaths among the 112 patients, equal to a fatality of 1·7 per cent., as compared with 2·6 in 1912, 7·6 in 1911, and 3·0 in 1910.

Other Septic Diseases.—The deaths from erysipelas are included under this general heading as they are too few to be worth the labour of separate tabulation. The total number of deaths was 7 last year, the mortality being 0.04 per 1,000 persons, as compared with 0.04 in 1912 and an average (1908-12) of 0.10. The numbers of deaths from the several diseases included under this head during the past six years are shown below.

#### OTHER SEPTIC DISEASES.

#### Deaths Recorded.

				1913.	1912.	1911.	1910.	1909.	1908.
Erysipelas			,	2	3	9	3	4	5
Pyæmia	***			1	1	1	3	2	4
Infective endoc	arditis			2	1	6	4	3	2
Noma		***		-	1	-	_	_	-
Carbuncle				-	-	-	1	1	
Cellulitis	***	***	***	-	-	-	4	3	
Angina Ludovi	ci	***		4		3	_	-	-
Septic pneumor	nia			-	-	-	-	-	1
Cancrum oris	***	***		2	-	1	1	-	1

The mortality rates recorded in the individual Wards of the Borough fluctuate very considerably from year to year, as is apparent from the subjoined figures.

#### OTHER SEPTIC DISEASES: MORTALITY RATES.

#### Per 1,000 persons.

	-	Queen's Park.	Harrow Road.	Maida Vale.	Westbourne.	Church.	Lancast West.	er Gate, East.	Hyde Park.
1913		_	_	0.09	0.08	-	-	0.12	_
1912		0.12	_	_		0.12	0.11	_	-
1908-12		0.08	0.06	0.07	0.12	0.15	0.09	0.10	0.08

#### CEREBRO-SPINAL FEVER.

No case of this disease was reported during the past year. In 1912, 7 cases were reported (1 after death), and in 1911, 4 (2 after death).

#### ACUTE POLIOMYELITIS.

Two cases of this disease were reported during the year, as compared with 6 in 1912. The first case (a male, aged 2 years) was reported from Church Ward in July, and was admitted to the Metropolitan Asylums Board hospital on the 22nd of that month, being discharged on the 22nd of the following month. Enquiries were made at the house early this year to learn the subsequent progress of the patient, but the family had removed and could not be traced.

The second case (a female, aged 25, a servant) was reported on October 15th from Maida Vale Ward. She had been admitted to Middlesex Hospital on the 13th of the month, dying the same day as the notification was received. She was ill for about 8 days only. She had

been in the country, but owing to her early death no definite information could be obtained as to her movements. Microscopical examination of the spinal cord of this patient showed the changes typical of the disease.

The family of the first patient occupied the basement of the house, the first and second floors of which were reported to be verminous. There was no suspicion of vermin at the house where the second patient was employed, but nothing can be said of the houses in the country at which she stayed.

#### ANIMAL DISEASES.

These include glanders and hydrophobia. No case of either was reported in man during the year, and only one outbreak of glanders in a horse—one of a stud of three horses. That case was reported in November. The horse was slaughtered, but enquiries made by the inspector failed to elicit any information as to the mallein test being applied to the other horses.

#### OPHTHALMIA NEONATORUM.

Twenty-two cases were reported during the past year, as compared with 31 in 1912, the first complete year of notification. There were 2 other cases of slight inflammation of the eyes known to the Department which were not deemed to amount to ophthalmia. The 22 cases were equally divided between the two sexes. The morbidity rate last year was 7.28 per 1,000 births, 3.89 less than the rate recorded in 1912 (11.17). The morbidity rate for males was 7.14 (9.84 in 1912), and that for females 7.44 (12.57 in 1912). The cases notified during each quarter of the past two years were as follow:—1st qr., 1913, 9; 1912, 9: 2nd qr., 1913, 3; 1912, 7: 3rd, qr., 1913, 6; 1912, 9: 4th qr., 1913, 4; 1912, 6. The morbidity rates observed in the individual Wards are given below, but it has to be explained that the rates entered for Westbourne Ward are not strictly comparable with those of the other Wards owing to the fact of the Workhouse Lying-in Wards being situated in that Ward. Cases of ophthalmia occurring in the Lying-in Wards are not distributed to the addresses whence the mothers were admitted, whereas the births are so distributed.

# OPHTHALMIA NEONATORUM: MORBIDITY. Per 1,000 births.

	(	Queen's	Harrow	Maida			Lancaster	Gate,	Hyde
		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park.
1913		8.45	9.30	2.37	11.08	7.88	-	_	-
1912		5.01	7.14	6.86	21.00	11.74	_	100	17.64

Five of the reported cases and the 2 unreported were in the persons of illegitimate children, the morbidity rates for such children being 320 last year, as compared with 566 in 1912. The rates for legitimate children were 93 in 1913 and 81 in 1912. Three cases (all in illegitimate children) were reported from the Workhouse, where 5 cases occurred in 1912. In 1912 it was reported that the births of 22 of the 31 infants reported with ophthalmia had been attended by midwives. Last year the number was 19 out of 22; in other words, the midwives' cases constituted close on 71 per cent. of the total in 1912, and just over 86 per cent. in 1913. Some doubt exists as to the completeness of notification of cases in private practice, a doubt which appears to be confirmed by the disproportion of cases among legitimate children reported by the officers of the County Council, the supervising authority of midwives. Nine notifications were received from that source during the year relating to legitimate children, and 1 to illegitimate. From medical practitioners 8 certificates were received relating to legitimate and 4 to illegitimate children, including the 3 born in the Workhouse. The doubt cannot be cleared up in the absence of information as to the proportions of all births attended respectively by midwives and practitioners.

46 MEASLES.

Three swabs only were received for bacteriological examination (to determine the presence or absence of the gonococcus), all proving "negative." In 1 case there was a history of maternal discharge during pregnancy and in another of syphilis (the mother being admitted to the Lying-in Wards from the Lock Hospital). Two of the affected children died, 1 at the age of one week from premature birth) and the other at the age of two months (from congenital syphilis). In 12 instances the District Nurses were sent to assist in the treatment of the eyes, which were under the care of hospitals in 9 instances. All the children, other than the 2 reported as dying, recovered without damage to the eyes.

The incubation period of the disease, and consequently the interval between the onset and notification, were not known in 3 cases. Of the remaining 19 attacks, 2 were reported as commencing on the day of birth, or as congenital, and 12 as beginning within the first 7 days after birth. The longest period of incubation was 14 days (1 case). Half the cases were reported within 7 days of the commencement of the disease, 5 within 7 and 14 days, and 3 at intervals of 15, 24, and 30 days (1 case each). Inasmuch as no damage accrued to the patients' eyes, the delay, indicated by the above figures, which took place in securing treatment was productive of no ill-effects. Nevertheless, it was risky and to be regretted.

#### MEASLES.

As explained in former reports, the Department draws the greatest part of its knowledge of the prevalence of this disease\* from the "Forms 84" sent in by the teachers of the public elementary schools on the exclusion of children arising from the occurrence of the disease in their homes. Supplementary information is obtained by enquiries after the registration of deaths certified as due to measles, broncho-pneumonia, and certain other diseases, on requests for disinfection made by medical practitioners or heads of households, through the discovery of cases in the course of other work, and, in a few cases, by the disease being reported by medical practitioners and heads of households. The main source of information is withdrawn when the public elementary schools are closed, and for that reason it is unsafe to attempt any minute study of the seasonal distribution of attacks.

According to the weekly tabulation of cases coming to the knowledge of the Department during the year, there were 1,234 cases of measles (including "German measles," which disease for administrative purposes is held to be "measles"), but a more accurate analysis at the close of the year gave a total of 1,230 cases of measles and 10 of German measles. The quarterly and annual totals derived from the weekly tabulation during the past six years are given below, together with the corrected annual totals:—

Measles: Recorded Cases.
Borough.

		A	ccording to v	veekly labu	lation.		Corrected
Qua	rters	1.	2.	3.	4.		Total.
						Year.	Year.
1908		413	301	32	74	820	779
1909		133	366	76	127	702	709
1910		571	1,066	72	389	2,098	2,085
1911		659	424	91	135	1,309	1,281
1912		326	423	181	438	1,368	1,374
1913	***	585	462	175	12	1,234	1,230

The first thought that will arise on looking at the figures is the apparent excessive prevalence of the disease during the past four years.

<sup>\*</sup> The observations here made with respect to measles apply equally to whooping cough, chicken-pox, and other "minor" diseases which are not scheduled for notification.

MEASLES, 47

The epidemiological studies of the disease in the past have been almost exclusively based on the mortality rates, and the disease not being notified, very little is known of its normal prevalence measured by the number of attacks. Doubtless some of the increase observed in the annual numbers is due to more complete recording of attacks, but not all. The recorded mortality has been higher during the last four years than usual, and it appears probable that there has been an abnormal prevalence during that period. The disease normally exhibits regular epidemic waves at intervals of some eighteen months to two years, the contrast between epidemic and non-epidemic periods usually being very marked. Such contrast is wanting in the figures given above, i.e., since 1910.

Since 1903 the Department has made every possible effort to check the spread of disease, and a suspicion has arisen as to whether the action taken has not resulted—as a first effect only, it is hoped—in an interference with the natural course of the disease, whereby it has become of a more strictly endemic character and less susceptible to epidemic explosions. Future experience alone can furnish an answer to such question, and experience in epidemiology has an unpleasant trick of upsetting preconceived theories. In the Appendix there will be found two tables which have been prepared to show the course of this disease since 1903-so far as it can be followed from the data available, admittedly incomplete. In the first of the two tables (Table XI.) the numbers of cases reported week by week are set out. The different types indicate the different degrees of epidemicity-"non-epidemic," "transitional," and "epidemic." The degrees have been arrived at by taking the weekly average for the year (1909) of lowest epidemicity as the standard of "non-epidemicity" (averaging less than 11 cases a week), and an average of double that figure as the standard of "epidemicity." Periods with averages lying between 11 and 23 have been regarded as "transitional." Two points will attract attention in the table, the first, the high prevalence of the disease during the earlier half of each of the years 1908-13, and the second, the low prevalence and rarity of epidemics after the summer holidays (29th to 34th weeks inclusive).

In the second table (Table XII.) an attempt has been made to summarise the information contained in the former table by grouping the weeks according to the standards just described, and to show the duration of each period and the average numbers of cases reported weekly in them. It will be noticed that certain of the periods are blank, which means that the progress from non-epidemic through transitional to epidemic and vice versa has been interrupted either by the disease passing at once from the non-epidemic to the epidemic, or stopping at the middle period to revert again to the first or third. The last four epidemic periods have been marked by long duration and high averages. The end of the observation is characterised by a period of exceptionally low prevalence.

The morbidity of the disease last year was 8.71 per 1,000 persons of all ages, as compared with 9.81 in 1912 and an average of 9.13. (See below.) Last year's rates were in striking contrast with those of 1910. The morbidity rates recorded in the Wards are given in Table 32.

Measles: Morbidity Rates. Per 1,000 of each sex and persons.

			BOR	OUGH.			
	1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males	6.12	5.59	17.56	11.09	11.01	10.27	9.89
Females	5.29	4.62	13.37	9.24	8.93	8:29	7.85
Persons	5.64	5.03	15.15	10.03	9.81	9.13	8.71

<sup>\*</sup> The last non-epidemic period lasted from the 32nd week of 1913 to the end of the 15th week of 1914—37 weeks in all—and was even then uninterrupted. The total number of cases reported during that period was 85, giving an average of 2.2 cases per week, with a maximum of 7 cases in any one week and a minimum of zero (11 weeks).

48 MEASLES.

The 1,230 cases recorded during the year occurred in 674 houses, giving an average of 1.8 cases per house, the same as in 1912. In 1910 the average was 1.9. There were in all 556 secondary cases, equal to 45.2 per cent. of the total cases reported, as compared with 44.7 in 1912, 43.7 in 1911, and 46.8 in 1910. The distribution of attacks in houses with two or more cases is given below.

MEASLES: HOUSE DISTRIBUTION.

				F	BOROUGH.				
				1908.	1909.	1910.	1911.	1912.	1913.
Houses w	ith 2	cases		130	104	290	196	191	188
"	3			55	55	164	97	108	89
,,	4	11		15	21	55	36	36	38
,,,	5	,,		6	9	22	13	15	6
,,	6	,,		_		7	2	3	2
"	7	"		_	1	6	-	3	1
,,	8	,,	***	-	-	1	-	1	1
,,,	9	"		1	-	1	-	-	1
"	13	"		-	-	-	-	-	1
11	18	***	***	-		-	-	-	1

The deaths tabled as due to measles numbered 59 last year, as compared with 32 in 1912, 50 in 1911, and 75 in 1910. The deaths comprised 25 of males and 34 of females. The fatality (deaths per 100 known cases) was 4·7 for persons, 4·2 for males and 5·3 for females. (See opposite page.) The averages (1908-12) were 3·5 per cent. (persons), 3·8 (males) and 3·3 (females). Last year's rates of fatality exceeded those recorded in 1910, a fact which is against the suggestion that the higher numbers of attacks recorded during the last four years have been due to more complete reporting of cases. The fatality rates recorded in the Wards (persons only) are to be found in Table 32.

TABLE 32.

Measles: Ward Distribution.

		Queen's	Harrow	Maida		Charl	Lancast	er Gate,	Hyde
		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park
191 Cases Deaths	3.	 198 8	211 8	170 7	160 13	375 22	29	44	43
Morb <b>1913</b> 1912 1908–12	idity.	 12:60 18:53 12:77	7·95 14·23 12·40	7·97 6·86 7·77	6:88 8:45 7:45	15·25 10·72 11·16	3·22 4·22 4·13	5·48 1·74 3·97	3:39 4:31 6:06
Fata <b>1913</b> 1912 1908–12	lity.	 4·04 2·02 2·39	379 1.56 1.77	4·17 0·68 2·23	8·12 5·05 5·14	5·86 2·35 6·72	7·69 2·65	2·27 ———————————————————————————————————	1·81 2·54
Mort 1913 1912 1908–12	ality.	 0·49 0·37 0·29	0-28 0-22 0-22	0·31 0·05 0·17	0·54 0·43 0·38	0.86 0.28 0.75	_ 	0·12 	0·16 0·16

MEASLES. 49

### Measles: Fatality. Per 100 known cases.

			Borot	JGH.			
	1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males	5.3	5.3	3.5	4.4	2.4	3.8	4.2
Females	4.1	4.8	3.6	3.4	2.2	3.3	5.3
Persons	4.6	5.0	3.6	3.8	2.3	3.5	4.7

The mortality (deaths per 1,000 individuals of each sex and persons) was 0.41 last year, all three rates being equal. The increase in fatality of attacks in females is reflected in the increased mortality of that sex, 0.41 last year, as compared with an average of 0.27. Although the fatality rates were higher last year than in 1910, the mortality rates were lower. (See below.) The mortality rates recorded in the Wards are given in Table 32 (lowest section).

Measles: Mortality.

Per 1,000 of all ages of each sex and person.

			Boro	UGH.			
	1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males	0.31	0.29	0.61	0.44	0.26	0.38	0.41
Females	0.20	0.21	0.46	0.28	0.19	0.27	0.41
Persons	0.25	0.26	0.52	0.35	0.22	0.32	0.41

The mortality rate for last year, obtained from the data published by the Registrar-General\* (Table 24), was 0.37 per 1,000 persons, which rate was exceeded by those of Kensington (0.48) and Willesden (0.40). The lowest rate recorded last year was that of Westminster (0.14). The rates were above the averages in about half the districts included in the table.

Sex-Age Incidence.—Table 33 has been prepared to show the variations in morbidity, fatality, and mortality according to the sex and age of the patient. Considering the average rates only as the best indications, it will be noticed that the maximum morbidity occurs at ages 4–5 years, the maximum fatality (and mortality) at ages under one year, and that those rates fall very rapidly with each added year of age. Above the age of 13 years both fatality and mortality are negligible.

TABLE 33.

Measles: Sex-Age Distribution.

	0-	_	1-		2-	_	3-	_	4-	_	5-	_	13	3—	15	-
	M.	F.	M.	F.	M.	F.	м.	F.	M.	F.	М.	F.	M.	F.	M.	F.
1913. Cases Deaths	40 6	47 7	74 12	81 17	78 3	67 4	90	85 4	96	104 1	185	209	15 —	23	12	24
Morbidity. 1913 1912 1908–12	27·97 36·56 26·14	30.69	67.5	70.03	66.45	55·92 54·54 55·07	62.35	75.45	83.83	85.39	23·24 30·18 30·22	37.26	0 53	12:61 2:06 4:31	0.13	0·3 0·2 0·5
	15·0 11·5 14·5	12.2	16·2 6·2 14·4	21·0 8·1 12·5		6·0 4·3 5·0	1.2	1.1	0·9 1·2		1.6	0.4	-	=		- 2.
Mortality. 1913 1912 1908–12	4·19 4·21 3·79	5·02 3·69 3·92	4.16	5.70	2.40		0.75	3:19 0:82 0:77	0.74	0.83	-	0.12	-	=		

<sup>\*</sup> The total number of deaths from measles according to his Quarterly Reports was 55, 4 less than the total obtained by the Department.

Hospital Isolation.—Until the Local Government Board made their Order in May, 1911, the only institutional treatment available for patients suffering with measles was that afforded by the Poor Law Infirmary. Since May, 1911, the hospitals of the Metropolitan Asylums Board have been open to cases of the disease, but the admission is not unrestricted. Poor Law patients are admitted as a matter of routine, subject to accommodation being available, but non-pauper patients are only received on the special recommendation of the Medical Officer of Health, and certain particulars as to the home conditions of the patients, the number of children in the family who have not had the disease, &c., are asked for. Last year 103 cases were admitted to the Board's hospitals, as compared with 74 in 1912. The admissions constituted 8:3 per cent. of the known cases, as compared with 5:4 per cent. in 1911 and 1912. The Board found themselves obliged to suspend the admission of non-pauper cases between April 11th and 26th, but such suspension did not affect the number of admissions from the Borough, as there happened to be no applications.

There were 14 deaths during the year from measles in the Board's hospitals, which would represent a fatality of 13.6 per 100 admissions, as compared with 3.9 among the patients kept at home. It has to be remembered, however, that the patients admitted to the Board's hospitals are selected chiefly on account of the home conditions being unsatisfactory or the serious condition of the patient, both factors productive of a high fatality. As appears from the appended figures, the fatalities at home and in hospital were higher in 1913 than in 1912 or 1911—the only years for which comparative figures are available.

	MEASI	ES: FATA	ALITY.		
	Pe	r 100 cas	ses.		
		1913.		1912.	1911.
At Home	 	3.9		2.3	 3.3
In Hospitals	 	13.6	***	2.7	 12.8

During the five years 1903-7 there were 194 deaths due to measles, 23 of which (or 11.8 per cent.) occurred in institutions. In the following five years (1908-12) there were 229 deaths, 55 (or 24.0 per cent.) being recorded in institutions. Last year 28 out of the 59 deaths (47.3 per cent.) were institutional deaths.

#### WHOOPING COUGH.

The statistics of this disease have been prepared on the same lines as those of measles, but considerable doubt is felt as to the completeness with which cases are reported. There is also a strong suspicion that a good many cases of pulmonary catarrh, associated with a cough of a more or less spasmodic type, are reported as "whooping cough" when they should not be.

Last year the reported cases numbered, according to the weekly tabulation, 653, which figure was reduced to 644 at the annual scrutiny and analysis. There has been an increase in the numbers reported during the last four years, but the signficance attaching thereto does appear to be the same as in the case of measles. The comparatively large number of cases reported during the third (holiday) quarter of the past year is unusual. (See below.)

#### WHOOPING COUGH: RECORDED CASES.

				Boroug	H.				Corrected
		Total.							
Oua	rters	1.	2.	3.	4.		Year.		Year.
1908		34	65	37	35		171		170
1909		234	243	72	26		584		561
1910		137	182	95	134	***	548	***	518
1911		403	219	49	15		686		632
1912		87	126	49	142		404		377
1913		284	194	111	64		653	***	644

The morbidity rate (persons) was 4:52 per cent. last year, as compared with 2:64 in 1912 and an average (1908-12) of 3:16. It will be noticed that there was last year an increased prevalence among females, the morbidity being 4:27 per cent., as compared with 2:33 in 1912 and an average of 2:90. Last year's rate for this sex was the highest noted since 1903. (See below.) The morbidity rates recorded in the Wards are given in Table 34.

WHOOPING COUGH: MORBIDITY RATES.

Per 1,000 individuals of each sex and persons.

		В	OROUGH.				
	1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males	 1.30	4.33	3.86	5.03	3.06	3.52	4.87
Females	 1.10	3.62	3.45	3.99	2.33	2.90	4.27
Persons	 1.18	3.92	3.63	4.43	2.64	3.16	4.52

TABLE 34.
Whooping Cough.
Ward Distribution.

		Queen's	Harrow	Maida			Lancast	er Gate,	Hyde
		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park
Cases Deaths	13.	 113 9	211 6	80 2	70 8	105 11	15 —	30 1	20
Morbi 1913 1912 1908–12	idity.	 7·11 4·69 5·46	7:84 2:22 4:47	3·75 1·46 2·05	2·99 2·00 2·19	4·23 5·22 4·41	1·61 1·95 1·55	3·74 1·12 0·97	1·57 0·54 1·40
Fata 1913 1912 1908–12	lity. 	 7·9 2·9 4·3	2:8 8:3 6:4	2·5 12·9 10·8	11·4 4·2 5·7	10·4 3·0 7·7	5·5 1·4	3.3	42·8 9·9
Mort. 1913 1912 1908–12	ality.	 0·55 0·12 0·23	0·22 0·18 0·28	0·09 0·19 0·22	0·33 0·08 0·12	0·43 0·16 0·34	0·11 0·02	0·12 —	0·23 0·14

The 644 cases were reported from 363 houses, giving an average of 1.7 cases per house, the average in 1912 having been 1.8, the same as in 1911, the figure for 1910 and 1909 being the same as in 1913. There were 281 secondary cases, equal to 43.6 per cent. of the total known cases, as compared with 46.2 in 1912, 45.5 in 1911, and 42.0 in 1910. The house distribution for houses with 2 or more cases is set out below.

WHOOPING COUGH: HOUSE DISTRIBUTION.

				Boro	OUGH.			
			1908.	1909.	1910.	1911.	1912.	1913.
Houses with	2	cases	22	98	95	102	61	110
"	3	- 11	16	41	38	51	24	41
,,	4	,,	5	12	11	15	9	19
,,	5	,,	-	2	1	7	7	4
,,,	6	11	-	1	2	1	2	2
,,	7	**	-	-	-	1	-	1
	8	***	-	1	_	_	_	_

There were 37 deaths from whooping cough last year, 13 of the deceased persons being males and 24 females. The fatality was, for persons, 5.7 per cent., as compared with 5.5 in 1911, and an average of 6.4 for the five years 1908–12. The fatalities recorded in 1911 all exceeded those of last year, but last year's rates are singular by reason of the disparity between the rates for the two sexes (males, 4.4; females, 6.8). The excess of fatality among females is made the more interesting owing to a similar occurrence being noted in the case of measles. The fatality rates recorded in the Wards are set out in Table 34.

Whooping Cough: Fatality. Per 100 known cases.

				BOROUGH	i.			
		1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males		8.8	6.4	9.4	7.2	5.9	7.5	4.4
Females	***	4.3	6.3	4.6	7.0	5.2	5.5	6.8
Persons		6.5	6.4	6.7	7.1	5.5	6.4	5.7

The mortality last year was at the rate of 0.25 per 1,000 persons, as compared with 0.14 in 1912 and an average (1908–12) of 0.20. The mortality among females, in spite of the excess in the fatality rate, was not much higher than that of males. (See below.) It was, however, the highest recorded for that sex since 1908. (For the rates recorded in the Wards, see Table 34.)

WHOOPING COUGH: MORTALITY.

Per 1,000 individuals of each sex and persons.

				Borouge	f.			
		1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
Males	***	0.11	0.28	0.36	0.86	0.18	0.26	0.21
Females		0.04	0.23	0.15	0.28	0.12	0.16	0.29
Persons		0.07	0.25	0.24	0.31	0.14	0.20	0.25

The local rate (Table 24) for last year was the highest of the series, the lowest (0.04) being recorded in Westminster. In Paddington and Hampstead only were last year's rates in excess of the averages.

Sex-Age Incidence.—Examining the average rates given in Table 35, it will be seen that the highest morbidity was, for males, recorded at age 3 years, and for females at age 4, and that the fatality and mortality were highest at ages 1 to 2 years in both sexes. Both fatality and mortality are very nearly negligible at ages above 2 years.

TABLE 35.
Whooping Cough: Sex-Age Distribution.

	0	-	1	_	2	_	3	_3	4	_	5	_	13	_	15	
	M.	F.	M.	F.	М.	F.										
1913.																
Cases	25	38	27	45	29	35	36	34	39	44	136	172	-	1	1	2
Deaths	4	7	7	10	2	4	-	-	-	2		1	-	-	-	-
Morbidity.																
1913		27-26	21.75	36.34	24.80	29.21	29.31	27.13	31.73	36.66	16.72	18:29	_	0.52	0.02	0.03
1912	18.98	16.27	15.00	21.17	12.81	11.85	19.01	20.72	18.71	23.97	8-29	8.24	_	0.51	0.02	0.03
1908-12	15.58	19:46	17.75	17.89	15.08	18.97	19.75	21.46	27.85	28.12	10.07	11:35	0.10	0.03	0.00	0.01
Fatality.															-	
1913	16.0	18.5	25.9	22.2	6-9	11.5	-		-	4.5	-	1.3	_	_	-	_
1912	29.6	13.6	11.1	15.4	6.2	6.7	-	8.0	-		-		_	_	-	_
1908-12	31.3	23.0	23.1	11.2	5.0	3.5	1.5	9.3	1.6	2.2	1.4	6:2	-	-		-
Mortality.	1					-										
1913	2.79	5.02	5.64	8.07	1.71	3.33			_	3.33		0.12	_	_	_	_
1912	5.62	2.21	1.66	3.25	0.80	0.79		1.65	-		-		_		-	_
1908-12	4.87	4.48	4.09	1.98	0.76	0.61	0.29	2.00	0.45	0.60	0.14	0.07	_		_	_

Hospital Isolation.—The hospitals of the Metropolitan Asylums Board were rendered available for the treatment of whooping cough by the Order of the Local Government Board of August, 1912, the conditions regulating admission being the same as those for measles. Last year 27 patients were admitted, as compared with 32 in 1912. The proportion of known cases treated in those hospitals was 4·1 per cent. in 1912 and 8·5 in 1911. There were 8 deaths from the disease in the Board's hospitals, equal to a fatality of 29·6 per cent. of the admissions, while the corresponding rate for 1911 was 21·4. The fatalities recorded in hospitals and among patients treated at home are given below.

WHOOPING COUGH: FATALITIES.

Per 100 cases.

1913. 1912. 1911.

At Home ... 4.0 ... 4.2 ... 6.7

In Hospital ... 29.6 ... 21.4 ... 14.2

There has been a striking increase in the proportion of deaths in institutions to all deaths from this disease of recent years. In the five years 1903-7 there were 182 deaths entered as due to whooping cough, 6 of which, or 3·3 per cent., occurred in institutions (principally in the Infirmary). In the next five years 33 out of 148 deaths (22·3 per cent.) were reported from institutions, and last year 17 out of 37 (45·9 per cent.).

#### OTHER INFECTIOUS DISEASES.

The Department receives information (on "Form 84") from the teachers of the public elementary schools of cases of chickenpox, mumps, ringworm, "blight," "sore throat," &c., and weekly returns are prepared of the cases of the first three. Most of these diseases will be dealt with under "School Attendance," but the results of the weekly tabulation may be briefly referred to here. There were no fatal cases.

Chickenpox.—Six hundred and eight (608) cases were included in the weekly returns last year, as compared with 469 in 1912. The corrected total was 599 cases in 376 houses, as compared with 459 in 282 houses in 1912, and 494 in 288 houses in 1911. The disease was most prevalent in the second and fourth quarters, but the epidemic probably extended from the second quarter right through to the end of the year.

Mumps.—The cases (uncorrected) numbered 223 in 1911, rose to 341 in 1912, and fell to 203 last year. There does not appear to have been any marked epidemic prevalence, but the disease was more general during the first half of the year. It is difficult to say how many tuberculous glands are reported as mumps.

Ringworm.—There was a satisfactory decrease in the number of reported cases from 267 in 1912 to 148 last year.

Pennyary

	. ,		BOROUGH			
		(according	g to weekly ta	bulation).		
	Quarters.	1.	2.	3.	4.	Year.
	/ 1908	46	78	34	83	241
	1909	100	73	43	128	344
Chishanna	1910	220	103	55	140	520
Chickenpox	1911	129	147	100	131	507
	1912	192	135	52	90	469
	1913	74	217	99	218	608
	/ 1908	10	8	3	35	56
	1909	211	114	30	65	420
37	1910	31	23	3	12	69
Mumps	1911	40	39	10	134	223
	1912	159	71	39	72	341
	1913	97	59	24	23	203
	/ 1908	18	35	18	22	93
	1909	45	49	40	42	176
D.:	) 1910	41	24	13	24	102
Ringworm	1911	37	43	31	54	165
	1912	69	71	45	82	267
	1913	46	48	24	30	148

#### TUBERCULOSIS.

#### NOTIFICATION.

In December, 1912, a new Order ["The Public Health (Tuberculosis) Regulations, 1912] was issued by the Local Government Board under the provisions of Section 130 of the Public Health Act, 1875, as amended by the Public Health Act, 1896. The new Order codified the provisions of the three earlier Orders and repealed those Orders. The principal amendment introduced by the Order of 1912 was the extension of notification to all forms of tuberculosis other than the pulmonary. Since February 1st, 1913, every case of tuberculosis has been subject to notification.

The certificates received during the past year numbered 1,967, of which 656 had to be forwarded to the medical officers of health of other districts in which the patients resided. The actual number of certificates belonging to the Borough numbered 1,311. In 1912—the first year of complete notification of pulmonary tuberculosis—the certificates received (belonging to the Borough) numbered 1,362, so that although there was during eleven months of the past year a more extended field of notification, the number of certificates received was actually fewer by 51. The reduction can be explained partly by the limitation to repeated notification imposed by the new Order, and partly by the fact that of the stock of old (pulmonary) cases of the disease having been exhausted by notification in the earlier years. It is to be presumed that the notifications in the current and future years will approximately represent cases of tuberculosis coming under treatment for the first time.

The new cases—perhaps, more correctly described as cases reported to the Department for the first time—numbered 836 last year, viz., 664 of pulmonary tuberculosis and 172 of all other forms of the disease. In 1912 838 cases of pulmonary tuberculosis were reported for the first time, showing a decrease of 174 cases in the record of the past year.\* Table 36 shows the sources from which the notifications received during the year were drawn. The largest number of new cases (380, 454 per cent.) were reported by private medical practitioners, the number reported by the Staff of the Paddington Tuberculosis Dispensary † (172, 205 per cent.) coming next. Attention may be directed to reports by the School Medical Inspectors for which special provision was made in the last Order. The importance of recognizing the presence of tuberculosis in young children cannot be over-estimated, both from the point of view of the children themselves and of that of the prevention of the disease generally.

Of the new patients reported during the year, 13 (10 males and 3 females) could not be allocated to any of the Wards of the Borough, and 8 (all males) were frequenters of common lodging-houses. The distribution of the remaining cases (distinguishing the sexes) is shown below. In nearly all the Wards the morbidity rates were lower last year than in 1912, in spite of the wider range of notification.

TUBERCULOSIS: NOTIFICATIONS.

				1913.				
Males Females Persons	Queen's Park. 58 44 102	Harrow Road. 83 81 164	Maida Vale. 52 52 104	Westbourne. 74 91 165	Church. 100 108 208	Lancast West. 7 15 22	ter Gate, East. 7 5 12	Hyde Park. 18 21 39
			Mo	RBIDITY : Pers	ons.			
1913 1912	. 6·32 . 6·38	5·49 7·04	4·79 4·50	6·91 7·38	8·26 8·63	2·10 1·29	1·46 1·74	3·03 2·36

<sup>\*</sup> The 838 new cases reported in 1912 included 57 previously reported as "suspect," while the 664 reported in 1913 included 24 such cases.

<sup>+</sup>In addition to the 172 "definite" cases certified by the Staff of the Dispensary, information was received of 203 new patients "suspected" to be tuberculous. (See Table 37.)

#### TABLE 36.

#### Tuberculosis: Notifications.

1913.

			Quar	rters.		Year.
		1.	2.	3.	4.	1 car.
Total Certificates received Certificates forwarded on New Cases certified		498 173 217	664 280 267	361 80 176	444 123 176	1,967 656 836
Numbers of Certificates received from- Private Practitioners District Medical Officers Medical Superintendent of Padding		91 (13)* 6 (11)	125 (23) 8 (3)	82 ( <i>I3</i> ) 5 ( <i>I</i> )	82 (10) 6 (4)	380 (59) 25 (19)
Infirmary— On admission On discharge Paddington Tuberculosis Dispensar Other Institutions School Medical Inspectors Other Medical Sources	 ry	12 (23) 1 (10) 52 (19) 47 (32) 7 (0) 1 (0)	17 (31) — (21) 38 (10) 59 (25) 12 (4) 8 (0)	16 (19) (12) 49 (17) 20 (43) 4 (0) 0 (0)	18 (29) 1 (13) 33 (17) 30 (72) 3 (0) 3 (0)	63 (102) 2 (56) 172 (63) 156 (172) 26 (4) 12 (0)

<sup>\*</sup> The numbers of certificates received which related to cases previously reported are shown in parentheses. The figures are to be read: "91 certificates relating to new cases and 13 to old."

The Order of last year provides for "repeat" notifications of cases admitted to and discharged from approved sanatoria and Poor Law institutions, special forms (C and D) being prescribed, such forms being sent to the Medical Officer of Health at the end of each week and not "forthwith." As a consequence the number of certificates relating to cases previously notified, received from the Infirmary, is relatively large. (See Table 36.) An analysis of the institutions, other than the local Infirmary, from which certificates were received follows here.

## TUBERCULOSIS: CASES CERTIFIED OR RE-CERTIFIED.

8	"General" Hospitals.	5 Asylums Board Hospital
	"Chest" "	5 Poor Law Institutions.
	"Tuberculosis",,	3 Lunatic Asylums.
	"Children's" "	12 Sanatoria.
	Other "Special" ,,	8 "Homes."

Of the new cases reported during the year one form of the disease was certified in 784 instances, two forms in 50, and three in 2. In the appended analyses of the parts of the body affected, a scheme of division has been adopted which has been in use for many years past in distributing deaths from Cancer. It should, however, be pointed out that whereas in the case of Cancer the only evidence of systemic infection is to be found in the appearance (not always observed) of secondary new growths in parts of the body other than the site of the primary tumour, in the case of tuberculosis systemic infection may be observed usually from the first onset of the disease. As a consequence an anatomical distribution, such as has been adopted here, is not strictly logical, and it has been used solely as a convenient method of indicating those parts of the body which give signs visible to the naked eye of the disease.

# TUBERCULOSIS: NOTIFICATION.

1913.

Patients certified for the first time with the disease in ONE PART of the body only-784.

				Part aff	ected.			
Head and Neck Meninges			9	10	Respiratory System		 610	624
Nasal Sinuses			1		Larynx		 619	
Digestive System Bowels Peritoneum		•••	2	5	Urinary System Kidney Bladder		 2 2	4
Organs of Generation Testicle	on		1	1	Cutaneous System		 2	6
Head and Neo Thorax Axilla Groin, Inguina		oral	79 1 2 3 4	89	Osseous System Head and Ne Thorax Spine Arm, Hand Leg, Foot	ck 	 3 2 27 2 8	42
		"Ge	neralis	ed" Tul	perculosis 3.			

Patients certified for the first time with the disease in TWO PARTS of the body-50.

						Parts	s affec	ted.						100	
				d		neum.		Hand.	00t.		al Glands.	y Glands.	al Glands.	teric Glands	
Meninges				Larynx	Bowels	Peritone	Spine.	Arm, I	Leg, F	Skin.	Cervica	Axillar	Inguinal	Mesenteric	 Totals.
Lungs				4	1	1	2	_	1	2	29	1	1	_	 42
Spine	***	***		-	-	-	-	1	1	-	-	-	-	-	 2
Cervical L	ympha	tic Glar	nds	-	-	-	-	-	_	-	-	4	-	-	 4

Patients certified for the first time with the disease in THREE PARTS of the body-2.

Parts affected.

Bowels.

Cervical Glands.

Cervical Glands.

Axillary Glands.

Lungs ... 1 1
In 26 instances of "repeat" notifications additional manifestations of the disease were reported. Those notifications have been analysed on the same system, with the result given below.

Tuberculosis: Notifications. 1913. Secondary Certificates.

					S	econdar	y Sites.						÷ 19
Primary Site.	Lungs Vertebræ, Hip		co Larynx.	1 Lungs.	co Peritoneum.	Uterus.	o Vertebræ, Hip.	l Leg.	Cr Cervical Glands.	- Mesenteric Glands.	l to Generalised.	Arm and Foot.	Cutaneous System, Upper Extremities, Cervical Glands,
A	Cervical Glands	***	-	1	-	_		_	-	-	_	_	_

TUBERCULOSIS. 57

The sex-age distribution of the 836 new cases of tuberculosis (all forms) reported during the year is shown in Table 37 (top section). It appears to be undesirable for the present to submit any morbidity rates for the reason that it is thought that notification is as yet of too recent institution to be quite complete. Morbidity rates based on the present data would therefore give rise to misleading conclusions in after years. Attention may, however, be called to certain changes which have taken place in the distribution of attacks in the course of the two years during which the notification of pulmonary tuberculosis has been in force for all classes of patients. In 1912, when 778 new cases were certified, the attacks in males numbered 334 and constituted 42.9 per cent. of the total cases reported, the attacks in females (444 in number) constituting 57.1 per cent. Last year's numbers give proportions of 49.5 per cent. in males and 50.5 in females.\* The proportion of cases in persons under the age of 15 years has also increased, from 25.3 per cent of all cases reported in 1912 to 27.7 per cent. last year. In "other forms of tuberculosis" the proportion of attacks was higher in males than in females, the proportions being 51.1 and 28.9 per cent. of all reported cases. The attacks in persons under 15 formed just on 71 per cent. of the total reported.

TABLE 37.
TUBERCULOSIS.
Sex-Age Distribution of New Cases Reported and Deaths.

												A	ges (	year	rs).										A	ll Ag	es.
			0-		1-		5-		10			-	25		35			-	55		65		75	-	Males.	Females.	Persons.
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	М.	F.	М.	F.	M.	F.	м.	F.	M.	F.	M.	F.	M	Fe	Pe
rtified	Cases— Pulmonary Other Forms		1		13 15	4 10	38 31		46 18	33 13	57 11	80 13		75 7	49 2	42	35	22	19	17 2	7	12	2	-1	329 88	335 84	664
	Totals		2	4	28	14	69	80	64	46	68	93	69	82	51	46	37	22	20	19	7	12	2	1	417	419	836
Cases.	Deaths— Pulmonary Other Forms Other Causes	 ( P (O.F	1	- 2 -	3 1 1	1 1 3	2 1	- 2	=		3 2	6	9 1	5	12 1 1	5 -		4 - 2	_	4 2	5	5	1		46 7 5 1	30 6 5 3	76 13 10 4
	Totals		1	2	5	5	3	2	-	1	5	7	10	5	14	5	10	6	5	6	5	5	1	-	59	44	103
· in	Cases		_	_	13	13	33	35	14	22	3	12	5	25	7	14	_	6	_	1		-	_	_	75	128	203
Certified Cases.	Deaths— Pulmonary Other Forms Other Causes				_	111		_					=	_	_	_			_	-	_		_			_ 2	- 2
0	Totals			_						_		1		1												2	2

† Including 24 cases previously reported as "Suspects."

Much information has been collected by the Department as to the family histories, housing conditions, &c., of patients, but the mass of material available has hitherto proved unmanageable. A new scheme has been devised and put into operation this year whereby it is hoped to present in future reports the results of the investigations made by the Department in useful and

<sup>\*</sup>The proportions of attacks in the two sexes approximated more closely to those observed in the case of the deaths. In 1913 56:4 per cent, of the deaths from pulmonary tuberculosis occurred in males and 43:6 in females. In 1912 the proportions were 62:4 and 37:6 per cent, respectively.

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instructive form. The only information of this character which can be submitted on this occasion is the condensed tabulation of the occupations of the patients which is given in Table 38.

#### MORTALITY.

The total number of deaths during the year from all forms of tuberculosis was 186\* (102 of males and 84 of females), as compared with 163 in 1912 and 212 in 1911. The rise and fall in the numbers of deaths from these causes observed in alternate years—to which attention was first directed in the report for 1912—is still to be observed, as may be seen from the figures given below. The records obtained from the districts circumjacent to the Borough do not exhibit this peculiarity to the same extent.

#### DEATHS FROM TUBERCULOSIS: -ALL FORMS.

				Boroug	h.			
1902	213		1906		216 (- 76)	1910		170(-34)
1903	231 (+	- 18)	1907		219 (+ 3)	1911	***	212 (+42)
1904	218 (-		1908		190 (- 29)	1912	***	163 (-49)
1905	292 (+	74)	1909	***	204 (+ 14)	1913		 186 (+ 23)

The deaths from pulmonary tuberculosis (see below) numbered 156, viz., 154 from "chronic phthisis" and 2 from "acute." The number entered under the latter head shows a notable reduction from the figures of the preceding two years. "Chronic phthisis," on the other hand, shows an increase of 59 above the record for 1912 and 9 above that for 1911. As regards age-distribution (persons, all forms), the only age-groups showing substantial increases are the four groups covering ages from 60 to 80 years.

# Tuberculosis.

						D	eath	s of	Re	sider	ts:	Bor	ough	1.						p	ersons	
Variety. Site.		0-	5-	10-	15-	20-	25-	80-	Age 85-	s. 40-	45-	50-	55-	60-	65-	70-	75-	80-	All Ages.	A	ll age	S
Pulmonary: Chronic Phthisis	s M.	4	1		3	5 2	7	8	15	9	6	7	5 3	9	4 2	8	1		87   67	154	95	145
Acute Phthisis	F. M.			2								1							17	2	22	18
Acute Miliary	F. M.								***		***							***		2	10	5
Meninges	F.		2	2	1			1	***	***	***		***	***	***	***	***		7	16	17	15
Mesentery	F.	4	8			1	1		***			***	***	***	***	***			9 (	2	5	8
Other Abdominal /	F.	1				***			***					***	***				11	2	8	10
Organs	F.	1							***			1							11	2	2	1
Spine	F.	1																	11		-	
Joints	F.		***			***	***			1							***	***	1 (	1	4	6
Other Organs	F.								***				***						21	2	2	***
Generalised	F.	1	1			***	***	1			***		***						102	3	8	8
Totals	M. F.		4 8	2 2	8	5 8	7 10	10 8	15	10	6	9 4	4	9	2	3 4			84			
Persons—	1913 1912	18 26	7 8	4 2	11 4	8 9	17 8	18 27	19 15	23 18	13 15	13	9 8	12	6 2	7 3	1			186	168	212*
	1911	31	6	5 * Inc	16 ludin	12 g 1	16 deat	20 h (m	25 ., æt	22 60)	17 from	17 "S	10 enile	6 Tub	ercu	8 losis.	2	***				212

<sup>\*</sup> Thirty-five of the deaths were recorded without previous notification, viz., 18 from pulmonary tuberculosis and 17 from other forms, 2 of the former and 7 of the latter occurring before February 1st, the day the Order of 1912 requiring their notification became operative. Four of the cases of pulmonary tuberculosis had been reported to the medical officers of other districts. The disease was discovered at post-mortem examinations in 6 instances (3 of the examinations taking place on the Coroner's order). Four notifications of other forms of tuberculosis were received after the deaths of the patients, such cases not being included in the total of 17 mentioned above.

Three deaths certified as due to pulmonary tuberculosis occurred in persons notified with other forms of the disease—viz., laryngeal tuberculosis 2 cases, and tuberculous disease of the cervical lymphatic glands 1 case.

TUBERCULOSIS. 59

The total mortality from all forms of the disease was 1.28 last year, as compared with 1.12 in 1911 and an average of 1.31 during the five years 1908-12. The mortality rates observed in the Wards are shown below. In Queen's Park and the two Lancaster Gate Wards last year's rates were in excess of the averages; in the other Wards, below.

Tuberculosis: All Forms. Mortality per 1,000 persons.

	Oueen's	Harrow	Maida	Westbourne.	Church.	Lancast	er Gate,	Hyde
	Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park
1913	 1.85	1-26	1.02	1.25	1.85	0.74	0.48	0.77
1912	 1.00	1.26	1.04	1.15	1.92	0.32	0.37	0.79
1908-12	 1.35	2.04	1.18	1.44	1.86	0.26	0.35	0.83

In the circumjacent districts last year's rates (all forms) were below the averages, except in Westminster and St. Marylebone, when there were slight increases.

Tuberculosis: All Forms. Mortality per 1,000 persons.

	London.	Paddington.	Kensington.	Westminster.	St. Marylebone.	Hampstead.	Willesden.
1913	 1.60	1.29	1.23	1.59	1.53	0.64	0.98
1912	 1.65	1.19	1.34	1.41	1.35	0.79	1.18
1908-12	 1.77	1.34	1.29	1.53	1.46	0-86	1-17

The numbers of deaths from each form of tuberculosis in the Borough during the year have been given above. A more condensed tabulation will be found in Table III. in the Appendix. Table 39 contains a sex-age distribution of the deaths allocated to the Wards, and Table IV., Appendix, shows the totals for each sex in a more condensed form.

The mortality from pulmonary tuberculosis in the Borough was at the rate of 1.07 per 1,000 persons last year, as compared with 0.82 in 1912, and an average 1908-12 of 1.00. The mortality from all other forms of tuberculosis was 0.21 per 1,000 in 1913, 0.32 in 1912, and 0.31 during 1908-12. According to the figures given in Table 24, the Borough rate from pulmonary tuberculosis (1.08) was exceeded by the rates recorded in Westminster (1.31) and St. Marylebone (1.35). In Hampstead and Willesden last year's rates were below the averages for 1908-12; in all the other circumjacent districts and in the Borough, above. The 1913 mortality from "other forms of tuberculosis" in Westminster (0.28) was the only one in excess of that recorded in the Borough (0.21). All last year's rates were below the averages, excepting St. Marylebone, where the two rates were equal.

The mortality rates for the Wards of the Borough are given below. The high rates for pulmonary tuberculosis recorded in Queen's Park and Church Wards are far from satisfactory, but, although based on small numbers, the increases observed in the two Lancaster Gate Wards are, perhaps, even more disquieting. As compared with the other Wards, Queen's Park, Harrow Road, and Church have unduly high rates from "other forms."

Tuberculosis: Mortality. Per 1,000 persons of all ages. Lancaster Gate, Hyde Queen's Harrow East. Park. Westbourne. Church. West. Park. Road. Pulmonary Tuberculosis. 0.62 0.36 0.74 0.91 1.17 1.54 ... 1.42 1.01 1913 0.63 0.25 0.32 0.81 1.24 ... 0.69 0.71 1.04 1912 0.63 0.30 1.31 0.24 1.19 1.70 1908-12... 1.01 All other Forms. 0.15 0.12 0.31 ... 0.43 0.25 0.12 0.08 1913 0.12 0.16 0.34 0.68 1912 ... 0.31 0.22 0.33 0.20 0.55 1908-12 ... 0.34 0.32 0.25 0.34

60 TUBERCULOSIS.

In what has been written above the mortality rates have been compared without taking cognizance of the differences in the sex-age compositions of the populations. Standardised rates which, as already explained, do make the necessary allowances, have been calculated for pulmonary tuberculosis only. The rates for the circumjacent districts, the Borough and its Wards are given in Tables 25 and 26. The extent to which the recorded numbers of deaths from pulmonary tuberculosis in the Wards depart from the "standard number"—the number determined from the average sex-age mortality rates of England and Wales—is shown by the appended statement.

PULMONARY TUBERCULOSIS. Lancaster Gate, Harrow Maida Queen's Park. Road. Vale. Westbourne. Church. West. East. Hyde Park. Males. Standard Numbers Recorded 1913 ... 1912 ... 1911 ... Females. Standard Numbers Recorded 1913 ... 1912 ... 1911 ... 

Lest it should be thought that data submitted in the foregoing paragraphs indicate that tuberculosis is not really diminishing in the Borough, the annexed review of the recorded deaths from 1901 to 1912 has been prepared. The total population of the Borough, according to the last census, has varied so slightly since 1901 that such comparison is practically as instructive as one of mortality rates. The figures show that there has been during the twelve years a decline of 8 per cent. in the number of deaths from pulmonary tuberculosis, of 35 per cent. in the case of tuberculous meningitis, and of 21 per cent. in that of the remaining forms of the disease.

TUBERCULOSIS: RECORDED DEATHS.

		Pulmor	nary Tub	erculosis.	Т	uberculos ninges, I		Other Forms of Tuberculosis.			
		1901-4.	1905-8.	1909-12.	1901-4.	1905-8.	1909-12.	1901-4.	1905-8.	1909-12.	
Deaths-								1			
Males		360	369	335	42	47	37	79	63	64	
Females		260	234	233	58	32	28	68	62	52	
Persons		620	603	568	100	79	65	147	125	116	
Index Num	bers-	_									
Persons	***	100	97	92	100	79	65	100	85	79	

A distribution of the deaths from tuberculosis during the past year, according to the occupations stated to have been followed by the deceased persons, is to be found in Table 38 (cols. 3 and 5). It is a common experience to find that the occupation given in the death return differs from that recorded at the time of notification. Doubtless, in certain instances, such difference is due to the patient being compelled to seek new work at some date after notification on account of the condition of his health, a change which would be of advantage to the public in certain cases. For the reason already stated it appears to be undesirable to attempt, with the present information, to put forward any fatality rates for occupations.

In Table 37 (second section) the deaths of persons certified for the first time during the year have been distributed on the same lines as the notifications. The deaths of such persons from tuberculosis were known to have numbered 89, that number of deaths being included in official returns received by the Department. In all probability other deaths among the notified cases occurred outside the Borough, and two such cases were informally brought to the knowledge of the Department. The inclusion of those two deaths (making a known total of 91) would represent a fatality of 13.7 per 100 cases reported for the first time during the year. There can, however, be little doubt that that figure understates the truth.

The Registrar's Returns are systematically searched for deaths of notified persons from causes other than tuberculosis. Such search is fairly successful with regard to patients certified as tuberculous during the year under review, but it naturally becomes increasingly difficult with regard to cases certified in earlier years, and, of course, cannot be applied to persons who remove from the Borough. Last year the search resulted in the discovery of 24 deaths of persons who had been certified to be definitely tuberculous and 2 of those who were suspected to be so, the cases traced going as far back as 1910 (one case). In 1912 25 such deaths were discovered.

In the statement on page 63 the principal particulars of these deaths are set out. Patients certified as having pulmonary tuberculosis are grouped under two headings, (a) those in whom the original diagnosis was not varied during their lifetime, and (b) those in whom the original diagnosis, for one reason or another, was so reviewed. In the former group it will be found that there was one death in which pulmonary tuberculosis was mentioned as the secondary cause of death. That case was not "notified" until after death. Among the deaths of patients "notified" for other forms of tuberculosis there was one from nasal diphtheria plus acute miliary tuberculosis, the latter disease being again "notified" after death.

TABLE 38.
Tuberculosis.
Occupations—New Cases and Deaths.

		Pulm	ionary.		Other Forms.				
	New	Cases.	De	aths.	Nev	Cases.	De	eaths.	
OCCUPATIONS. Indoor.		-							
Domestic Duties—	M.	F,	М.	F.	M.	F.	M.	F.	
**		90		0.0					
	_	7.0	-	36		7	-	-	
Do. and other occupation	7	9 54	0	1	-	10	-	-	
Servants			3	9	-	13	-	_	
Charwomen	-	7	-	4	-	-	-	-	
Laundry Workers	01	3	-	2	-	-	-	-	
Clerks	21	6	5	1	3	-	1	-	
Shop Assistants, Keepers	14	14	1	4	2	-	-	-	
Dressmakers, Tailors	6	14	_	5	1	-	-	_	
Bootmakers	3	-	2	-	-		-	-	
Skilled Artizans	21	-	7	-	2	-	-		
Waitresses, Barmen, &c	9	1	-		-			-	
Dutdoor.			1000						
Building Trades	7	-	5	-	-			_	
Painters	11	-	2	_	1	-	-	_	
Labourers	13	-	4	-	1	-	-	-	
Road Traffic	26	-	13	-		-	_	_	
Railway ,,	10	-	4		1	_		_	
Postmen	2		1	_	-		-		
Gardeners	1	-	2		1	-	-	_	
Street Merchants	4	_	1	-	-		_	-	
Food Trades.					-				
Bakers	4	-	1			_			
Butchers, Fishmongers	3	_	4			_	_		
Dairymen	3	-	_	-	1	-	1	_	
fiscellaneous.									
School Life	86	83	1	3	50	36	2	3	
Unskilled Workers	11	1	6	_	4	_	2	-	
Professional ,,	3	-	1	-	_	_			
Other ,,	25	9	9	1	3	4			
Infants	12	6	4	1	16	17	2	6	
							-	0	
No occupation or occupation not stated	27	38	7	7	2	7	-	-	
	329								

TABLE 39.
TUBERCULOSIS: DEATHS.
Ward Distribution.

Ward.	Year.	Ages	0—	1—	5—	15—	25—	65—	All Ages.	In Institu- tions.
Queen's Park.	1913 1912 1911	Variety Site.  Pulmonary Meningeal Abdominal Other All forms	M. F 1 1 1	M. F.  1 1 2 1 3 1 1 2	M. F. 1 2 1 3 1 2 1 2	M. F. 2	M. F.  11 4 1 11 5 4 2 16 9	M. F. 2 1 2 1 1 1	M. F.  17 6 2 3 1 1 19 11 9 7 20 14	M. F.  10 1 2 12 1 4 2 11 5
Harrow Road.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms ,,	î î  1 1 î	  1 5	2 2 1 1 2 1 1 1	2 4  2 4 4 2 3 4	11 8 1 2 13 9 15 9 17 10	2 1   2 1 1 1 1	15 13 4  3 18 17 21 13 28 17	7 8 2 9 10 12 5 11 6
Maida Vale.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms	i	1  1 1 1 3 1 2 2	   1 1 2	1 1  1 1 2 1	11 3 11 3 11 3 9 5 11 5	2 2  2 2 1	14 6 1 1 1 15 8 13 9 14 11	8 3  8 3 5 4 9 4
Westbourne.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms	   1 1 2	1 1 3 1	1 1 1 1 1 1	3 1  1 3 2  .1 5	10 11  10 11 12 8 17 11	1 1	14 14 1 1 14 16 14 13 22 19	8 6 1  8 8 11 5 8 9
Church.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms	1 2  3 2 3 2 2	1 1 1 1 3 1 5 2 5 2	1 1  1 1 1 1 2 2	1 2 1 1 3 2 1 2 4	15 16 1 16 16 15 15 13 12	1 1	19 20 4 1 1 1 1 25 22 25 23 26 21	11 10 3 1  1 1 15 12 20 13 22 9
Lancaster Gate, West.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms				1	3 3 3 3 2 1		3 4 3 4 2 1	1  1 1 
Lancaster Gate, East.	1918 1912 1911	Pulmonary Meningeal Abdominal Other All forms					3  1 3 1 1 1 2 2		3  1 3 1 1 2 2 2	2  1 2 1 1
Hyde Park.	1913 1912 1911	Pulmonary Meningeal Abdominal Other All forms ",		 1 1 1 1		   3 1	3 5 1 4 5 8 1 6 2	   1 1	3 5 1 5 5 9 1 10 6	1  1 2 5 1 7 3

Sex.	Age at Death.	Year Notified.	Date of Death, 1913.	Died at	Cause of Death.	Notes.
			No	OTIFIED AS PU	LMONARY TUBERCULOSIS. (a)	
F.	14	1912	Feb. 2	S Geo Hoen	Appendix abscess : Empyema	
M.	56	1913	Sept. 28	S. My. Hosp.	Perforated duodenal ulcer	
M.		1913	Nov. 18	Park Hosp.	Acute broncho-pneumonia	
F.	10 70	1911	Mar. 20	Padd. Infy.	Acute bronchitis	
F.	75	1912	May 3		Heart disease	Admitted Information 100
*	10	1012	may o	"	rieart disease	Admitted Infirmary 1908
F.	63	1913	June 6	Home	Fatty degeneration of heart: Consolidation of lung:	1910, 1913. Inquest: Post-mortem.
F.	53	1913	Mar. 6	Padd Info	Chronic alcoholism	Notification often dest
4.	00	1919	Mai. O	Padd. Infy.	Myelitis: Paraplegia 5½ years:	
M.	47	1911	Feb. 12		Pulmonary tuberculosis	only.
F.	21			C M. TT.	Heart disease : Bronchitis	
F.		1913	Aug. 15	S. My. Hosp.	Valvular disease of heart	
	25	1911	Feb. 15	Home	Asthma: Cardiac failure	
F.	56	1913	Sept. 27	33	Sarcoma of pelvis	
F.	71	1912	July 10	23	Senile decay	
M.	38	1913	Sept. 7	11	Heart disease	and the second
M.	46	1913	Aug. 29	"	Suicide: Cut throat	Wife died of pulmonar tuberculosis.
М.	8	1913	June 21	Padd. Infy.	Enteric fever	Certified twice as pulmonar tuberculosis,
F.	28	1912	Feb. 26	S. My. Hosp.	Lobar pneumonia	
M.	36	1910	Nov. 1	Home	Chronic bronchial asthma:	Certified five times as pu
					Heart disease	monary tuberculosis.
			No	OTIFIED AS PU	LMONARY TUBERCULOSIS. (b)	
F.	46	1912	Dec. 23	Home	Valvular disease of heart:	Diagnosis reviewed in 1912
M.	25	7011	0., 00		Cerebral hæmorrhage	D: 1 1 101
DI.	20	1911	Oct. 26	"	Emphysema: Acute bronchitis	Diagnosis reviewed in 191 on admission to Pac
F.	46	1913	Mar. 15	Padd. Infy.	Valvular disease of heart: Parturition	dington Infirmary,
				Under Obs	ERVATION AS "SUSPECTS."	
F.	30	Since 1913	Dec. 28		Chronic nephritis	
F.	21	1913	Sept. 5	Home	Fatty degeneration of heart : Cerebral tumour	Inquest: Post-mortem.
			No	TIFIED AS OTE	HER FORMS OF TUBERCULOSIS.	
M.	1	1913 (Bowels)	Dec. 24	Home	Pneumonia	Death ensued one mont after notification.
F.	1 .	1913 (Cervical glands)	Aug. 17	"	Whooping cough	Death ensued six month after notification.
F.	1	1913	July 3	,,	Measles: Tuberculous men-	Death ensued two days after
F.	4	(Meninges) 1913 (Acute miliary)	Nov. 22	Padd. Infy.	ingitis Acute miliary tuberculosis: Nasal diphtheria	notification. Inmate of Infirmary thre days: Notified afte death.

The Register of Cases of Tuberculosis was first established in an informal way in 1904, but it is only since 1909 that large numbers of cases have been entered annually. The duration of tuberculosis is a subject which will be dealt with later, but it may be stated here that among the

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cases ending fatally last year one was with a reputed duration of over 30 years. On an average the disease runs a course of some three years, a period of sufficient length for the operation of many factors other than death resulting in the removal of names from the Register. Of the cases reported during the past year 126 names were removed owing to the patients leaving their original addresses. Many of those patients left the Borough, and the medical officers of health of the districts to which the patients went were advised of the removals. In other instances the new addresses were not known. A few of the latter cases are subsequently traced and restored to the Register. Recovery—perhaps more correctly, the arrest of the disease—was reported in 13 instances, and in 13 other cases the diagnosis was subsequently reviewed. The appended scheme shows the growth and changes in the Register since its establishment. Of the 42 cases entered during 1904-6 only one is known to the Department as still alive. In the course of the 11 years 3,263 names have been entered, but all the persons represented by those names have not been certified as definitely tuberculous. At the close of last year the Register contained 2,779 names, 1,777 representing "definite" cases of tuberculosis and 1,002 "suspect"

	Total Cases		K	nown	to have	died f	rom all	causes	during	the ye	ar		Reported,"	Diagnosis Varied.	Removed.	Register.	Register nd of 1913
	reported.		1904.	1905.	1906.	1907.	1208.	1909.	1910.	1911.	1912,	1913.	H 2	A	×	N. T.	On at en
1903		2	-	2	-	-	-	-		-	-	_		7000		-	-
1904	20		5	1	1	1	1		_	-			-		10	-	1
1905	18			10	3	1	-	1	_	-	-	-	-	-	3		
1906	57				17	5	7	1	1	1	1	-	1	2	14	-	.5
1907	84					14	12	6	-	1	1	70000	3	8	30	_	9
1908	173						25	11	7	4	5	1	12	31	48	3	32
1909	629							65	25	12	8	2	18	-9	177	3	316
1910	610								42	34	15	5	13	2	95	3	407
1911	671									69	25	18	9	3	66	2	483
	1,017										76	45	7	14	112	2	765
	1,015											105	13	13	126	3	761

#### CANCER.

The number of deaths entered under this heading, after attaining a maximum of 185 in 1908, decreased to 156 in the next year. Since then the numbers have increased each year to 167 in 1911, 175 in 1912, and 185 last year. The mortality records in the Department relating to the Borough cover a period of twenty-three years, and the appended figures show how the deaths from the malignant new growths included under the designation of "Cancer" have increased both absolutely and relatively to the numbers of deaths from all causes. The population of that part of "Chelsea Detached" which was added to the old Parish of Paddington when the Borough was formed with its present boundaries is "younger" in its age-constitution than the old Parish which forms the major part of the Borough. For that reason the figures for each of those two sections of the Borough are shown separately.

			" CA.	NCER."				
		1891-5.	1896-1900.	1901-5.	1906-10.	1911.	1912.	1913.
		Dea	ths recorded	from All	Causes.			
Borough		11,620	11,400	10,102	9,512	1,926	1,771	1,979
Queen's Park Ward		1,387	1,495	1,234	1,064	221	185	229
Old Parish		10,233	9,905	8,868	8,448	1,705	1,586	1,750
		D	eaths recorde	ed from C	ancer.			
Borough		597	704	746	848	167	175	185
Queen's Park Ward		54	78	88	82	16	15	18
Old Parish		543	626	658	766	151	160	167
		Ratio of I	Deaths from	Cancer to	Total Dea	ths.		
BOROUGH		5.1	6.1	7.3	8.9	8.6	9.9	9.3
Queen's Park Ward	***	3.8	5.2	7.1	7.7	7.0	8.0	7.8
Old Parish		5.3	6.3	7.4	9.0	8.8	10.0	9.5

<sup>\*</sup>Owing to pressure of other work the visitation of cases of tuberculosis was far from complete last year, and the numbers of persons on the Register at the end of the year cannot be accepted as evidence of the number of tuberculous persons living in the Borough. In the early months of this year a very large number of names were removed as the patients had left the addresses at which they were last known and could not be traced.

CANCER. 65

It will be seen that the deaths from cancer in the whole Borough constituted 5·1 per cent. of all the deaths recorded during the five years 1891-5, and that the proportion has risen uninterruptedly to 9·2 in the three years 1911-13. In Queen's Park Ward (formerly part of "Chelsea Detached") the proportion has risen from 3·8 per cent. in 1891-5 to 7·7 in 1906-10, but has not increased beyond that figure.\* In the old Parish the proportion, which was 5·3 in 1891-5, increased to 9·4 in 1911-13. In this part of the Borough the proportion reached a maximum of 10 per cent. in 1912. From the statement given on page 67 it is apparent that the greater part of the increase of 11 per cent. in the total mortality (persons) from Cancer observed during the years 1909-12 has been caused by the heavier mortality among males—increase of 27 per cent.

Table 40 presents a distribution of the deaths recorded during the past year, distinguishing the variety of new growth, with sub-divisions (1) as to site of the disease and (2) as to ages of the deceased. The absence of records of deaths at ages 0-25 is very unusual. Last year the principal sites of the growths were the Digestive and Urinary Systems in men, and in women the Generative and Digestive.

The mortality recorded in the Borough last year was at the rate of 1.28 per 1,000 persons, as compared with a rate of 1.23 in 1912 and an average of 1.18 for the five years 1908-12. The recorded mortality rates for the Wards are set out below. In five of the Wards last year's rates were below those of 1912, but the three southern Wards (Lancaster Gate, East and West, and Hyde Park) were the only Wards where the 1913 rate was less than the average.

CANCER: MORTALITY.

Corrected.

BOROUGH.

		Queen's	Harrow	Maida			Lancast	er Gate,	Hyde
		Park.	Road.	Vale.	Westbourne.	Church.	West.	East.	Park.
1913		1.11	1.20	1.70	1.69	1.19	0.63	0.85	0.78
1912		0.94	1.56	1.33	1.28	1.32	1.30	0.12	1.10
1908-12		1.09	1.29	1.47	1.14	1.17	1.06	0.89	0.99

In the circumjacent districts (Table 24) the mortality rate recorded last year in Westminster (1.41) was higher than that observed in the Borough. The Kensington rate was the solitary exception to the general increase above the average (1908-12). As a rule the recorded rate in Paddington has been one of the highest of all such rates for the Metropolitan Districts.

Under the term "cancer" are grouped several forms of malignant new growths, the majority of which do not occur until late adult life or old age, and, further, are more common among females than males. The corrections which ought to be applied have already been considered. (See page 29.) For the reasons there set out two series of standardised rates are submitted in Tables 25 and 26. With all its defects Table 26 appears to be preferable to Table 25 for present use, inasmuch as it permits a continuous comparison to be made between the rates of the circumjacent districts and those of the Wards of the Borough. The highest standardised rate obtained last year in the districts included in the table was that of Westminster (1:30), that of St. Marylebone (1.15) being the next, with that of the Borough (1.10) third. In each of the three years 1911-13 those three districts have been at the top of the scale. The standardised rates for years prior to 1911 based on the standard mortality rates here used have not yet been calculated. Turning to the Wards of the Borough, a striking contrast will be observed between the rates for the three southern Wards and those for the five northern. The maximum rate in 1913 was recorded in Maida Vale Ward (1.58) and the lowest (0.50) in Lancaster Gate, West, Ward. In each of the three years the maximum rate has been in Maida Vale Ward, but the minimum has been on two occasions in Lancaster Gate, East.

<sup>\*</sup> The proportion during the three years 1911-13 was also 7.7 per cent.

### TABLE 40.

CANCER: MALIGNANT DISEASE, Borough,

					L	orou	gn.										
	Site of Disease.		rci- ma.	Can	icer.		the- ma.	Scin	rhus.	Sarc	oma.	Ma na Dise		Other Forms.		ALL FORMS.	
		M.	F.	M.	F.	М.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
	NERVOUS SYSTEM. (a) Brain ORGANS OF SPECIAL SENSE		-	_	-	1	_	-	-	-	-	1	1	-	-	2	1
	RESPIRATORY SYSTEM.  (b) Lungs		1	_	_	_	_	_	_	-	_	_	-	_	_	-	1
IV.	CIRCULATORY SYSTEM																
V.	DIGESTIVE SYSTEM.  (a) Mouth.  (i.) Tongue  (ii.) Glands, &c	W.	1	=	_	1	_	=		=		=	=	_	_	5 5	1
	(b) Throat. (i.) Pharynx (ii.) Œsophagus	0	=	1	<u>_</u>	_	_	_	_	-	=	=	_	_	_	1 7	1
	(c) Intestines, (i,) Stomach (ii.) Intestine (iii.) Rectum	4	12 8 7	1 -	3 1 2				=	=	=	3 -	1 1 —			13 4 7	16 10 9
	(d) Organs.	1	9 2 - 1	===	$\frac{3}{1}$					=				1111	1111	1 -	12 2 1 1
VI.	LYMPHATIC SYSTEM.  (a) Head and Neck.  (ii.) Cervical Glands  (b) Thorax.	-	_	_	_	_	_	_	_	1	_	-	_	-	-	1	-
	(i.) Mediastinal Glands	-	-	-	-	-	-	-	_	1	-	2	_	-	-	3	-
VII.	URINARY SYSTEM. (a) Kidney (b) Bladder (c) Prostate	1	3	1 1 1	=					-		<u>-</u>	=	-		1 2 3	
VIII.	GENERATIVE SYSTEM.  (a) Ovary  (b) Uterus  (c) External Genitals  (d) Breast	-	3 17 2 13	1111	1 4 -6				_ _ _ 2				1 - 1				5 21 2 22
IX.	OSSEOUS SYSTEM.  (a) Head and Neck  (b) Thorax  (c) Abdomen  (d) Extremities	=	<u>-</u>	=	1 _			=	=	3	1 1 2 2	- 1 -	==		=	1 4 -	2 1 3 2
X.	(ii.) Lower  CUTANEOUS SYSTEM (a) Head and Neck (c) Abdomen	-	_	_	_	_ _ 1	_		_	=			_	_	1(a)	- 1	1
XI.	INSUFFICIENTLY DESCRIBED		1	-	_	_	_	_	_	-	_	_	2	_	_	-	3
	Totals	44	81	5	23	3	-	-	2	5	6	8	7	-	1	65	120
Ages at Death.	0—	- - 1 3 18	- - 1 7 19 20 19 15	- - - 1 2 2						- - 1 1 2 - 1	- - - 2 2 1	- - 1 - 2 2 3	- - 1 1 1 - 2 2	1111111111		- - 2 6 20 16 15 6	- - 2 11 27 26 26 26 28

CANCER. 67

In the course of the calculations of the standardising factors the standard number of deaths—i.e., the number of deaths which were to be expected if the standard sex-age mortality rates had prevailed—was obtained for each Ward. A comparison of those numbers with the numbers actually recorded has been thought to be of some interest. As a general rule the recorded numbers are higher than the standard. In the case of Westbourne Ward the observed excess is somewhat remarkable, as the standard numbers have been obtained by the use of the census population, and that population is artificially "old" in that Ward by reason of the inclusion therein of the aged inmates of the Workhouse and Infirmary. In the three southern Wards the position is reversed, as the average age of the populations of those wards is lowered by the inclusion therein of relatively large proportions of servants of young adult ages. The whole subject of high mortality from cancer in the Borough is well worth close study, and now that the Department has data for more than twenty years, it is hoped that time may be found for taking the subject into consideration.

				CANCER.					
		Queen's Park.	Harrów Road.	Maida Vale.	West- bourne.	Church.	Lancaster West.	Gate, East.	Hyde Park.
Standard numbers Numbers recorded	1913 1912 1911	 6 11 10 11	10 9 16 12	8 13 16 13	10 17 8 10	9 7 16 13	3 1 7 3	3 4 1 2	4 3 5 6
Standard numbers Numbers recorded	1913 1912 1911	 9 7 5 5	17 24 26 24	Fem 15 <b>24</b> 12 18	19 24 22 16	14 23 17 17	7 8 5 5	6 3 -4	9 7 9 8

In the meantime the figures shown below indicate the extent to which *cancer* as a certified cause of death has increased since 1901. As already stated when writing on tuberculosis, the changes in the enumerated population of the Borough have been so slight as to make the calculation of mortality rates scarcely necessary for the present purpose. The number of deaths (persons) recorded annually was 149 during the four years 1901-4, increased to 168 in the following four years, then fell to 166, and was 185 last year. The index numbers show that the growth was 12 per cent. in the second period, 11 per cent. in the third, and 24 per cent. last year. Allowances must be made in comparing the record of one year with the averages for series of years, but there can be no room for doubt that there has been a substantial increase in the annual number of deaths due to this cause. The index numbers for the separate sexes suggest (even with all reservations) that the increase has been greater in the case of males than in that of females.

CANCER.

Average Annual Numbers of Deaths recorded.

			Males.	Females.	Persons.
300	***	***	54	95	149
***					168
		***	69	96	166
***	***	***	65	120	185
				Index Numbers	
***			100	100	100
		***	120	108	112
****			127	101	111
***			120	126	124
				54 65 69 65 100 120 127	54 95 65 103 69 96 65 120 Index Numbers 100 100 120 108 127 101

Institutional Treatment.—Of the 185 deaths recorded last year, 85 occurred in institutions of various descriptions, equal to 43.8 per cent of the total. The deaths in Poor Law institutions numbered 38, in hospitals 37 (including 18 in Middlesex Hospital), the remainder in nursing homes, "homes of rest," &c. There has been a considerable increase during the past thirteen years in the proportion of deaths in institutions, as appears from the figures given below. The

percentage of institutional deaths has increased by 20 per cent. in the case of persons, and by over 50 per cent. in the case of males. The proportion has not altered materially in the case of females.

# CANCER. Institutional Treatment.

		P	er cent. record			
			Males.	Females.	Persons.	Index Number.
1901-4			43.7	32.6	36-6	100
1905-8	***	***	53-0	33.3	40.9	112
		***	44.9	34.5	38.8	106
1909-1912	***	***	58.4	35.8	43.8	120
1913	***	111	50.4	00 0	20 0	200

### OTHER DISEASES.

Epidemic Influenza.—Thirty-three deaths were entered during the year under this cause, as compared with 23 in 1912. Last year's record was the highest since 1909, when 72 deaths were recorded. The mortality rate last year was 0.23 per 1,000 (Table 41), or 0.07 higher than in 1912, but to the same extent below the average for 1908-12. The highest rate last year in any Ward was that of Westbourne (0.41—0.15 above the average), and the lowest that of Church (0.08—0.18 below the average).

Respiratory Diseases.—The deaths from bronchitis and the pneumonias numbered 337, 13 more than in 1912. Last year's record was the highest since 1909, when 372 deaths were recorded. The mortality from these causes was 2.31, or 0.08 in excess of the average. The maximum mortality was recorded in Church Ward (1913, 4.00—average, 1908-12, 3.31) and the minimum in Lancaster Gate, West (1913, 0.51—average, 1.09).

Alcoholism.—Thirteen deaths (7 of males and 6 of females) were certified to have been due to alcoholism (acute or chronic) last year, as compared with 9 (males, 3; females, 6) in 1912 and 12 (males, 5; females, 7) in 1911. The mortality was 0.09 last year, or 0.02 in excess of the average. The highest mortality (0.31—0.27 in excess of the average) was recorded in Hyde Park Ward, while in three Wards no death was attributed to this cause.

TABLE 41.
OTHER DISEASES.

				Queen's	Harrow	Maida	West-	C1	Lancaster Gate,		Hyde
Disease.		Year.	Borough.	Park.	Koad.	Vale.	bourne.	Church.	West.	East.	Park.
Epidemic Influenza	***	1913 1912 1908-12	0·23 0·16 0·30	0:24 0:19 0:25	0·11 0·22 0·32	0·31 0·14 0·32	0·41 0·17 0·26	0·08 0·12 0·26	0·21 0·22 0·30	0·12 	0:31 0:16 0:37
Respiratory Diseases	***	1913 1912 1908-12	2:31 2:28 2:23	2·91 2·25 2·53	2.76 2.85 2.32	1·79 1·75 1·81	1.88 2.05 2.34	4·00 3·54 3·31	0·51 1·05 1·09	1:34 1:37 0:99	1.00 1.33 1.66
Alcoholism		1913 1912 1908-12	0.09 0.06 0.07	_ 	0·03 0·15 0·05	0·14 0·05 0·11	0·04 	0·16 0·04 0·10	0·11 0·07	0·25 0·15	0.04
Cirrhosis of the Liver		1913 1912 1908-12	0·13 0·10	0·25 0·10	0·03 0·04 <i>0·11</i>	0·23 0·24 0·12	0.08 0.08 0.12	0·20 0·12 0·08	0·11 0·06	0·25 0·10	0:31
Suicides		1913 1912 1908-12	0·14 0·09 0·11	0-06 0:13	0·03 	0·14 0·05 0·09	0·08 0·04 0·11	0·27 0·12 0·10	0·41 0·22 0·17	0·12 0·10	0.07 0.33 0.18

INQUESTS. 69

Cirrhosis of the Liver.—Nineteen deaths (9 of males and 10 of females) were ascribed to various forms of cirrhosis, as compared with a like number (8 males, 11 females) in 1912 and 15 (8 males, 7 females) in 1911. The mortality (0·13) was 0·03 above the average, the highest rate (0·31) being recorded in Hyde Park Ward.

The principal form of cirrhosis of the liver is that due to alcohol, to which form 15 deaths were due last year, 5 of males and 10 of females. In 1912 there were 16 deaths, equally divided between the sexes, and in 1911, 13 (7 of males and 6 of females).

Suicides.—There were 20 deaths from suicide during the year, 13 of males and 7 of females. The mortality was 0·14 last year, as compared with 0·09 in 1912 and an average of 0·11. The highest rate recorded last year was observed in Church Ward, but the highest average (0·18) is that of Hyde Park Ward.

## INQUESTS.

Two hundred and forty-four (244) inquests were held locally during the past year, as compared with 215 in 1912. Last year's total is the highest since the formation of the Borough in 1901. Among the 244 deaths inquired into there were 77 of non-residents. Outside the Borough 27 deaths of residents formed the subjects of inquests, 12 within the Metropolis and 15 in other parts of England and Wales. The corrected total of inquests on deaths of residents was 194 (122 as to deaths of males and 72 of females), as compared with 152 (86 on males and 66 on females) in 1912. The 194 deaths were equal to 98 of all deaths of residents, the percentage in 1912 having been 86, and during the period 1908-12, 84. Increases have to be noted in the case of males in all forms of "findings" except "Misadventure." (See Table 42, page 70.) In the case of females increases were recorded last year under all headings.

A summary of the principal forms of violence, &c., brought to light by the inquiries is appended. Traffic accidents (not found by the juries as due to "accidental causes" in every case) were the causes of the largest number of deaths (21), motor traffic (of all forms) accounting for 13, railways for 4, horse traffic for 3, and tramways for 1. There were only 3 deaths ascribed to suffocation of infants in bed with the parents, but the deaths of 8 other infants were inquired into.

Deaths through Misadventure (12).

4 of the deaths entered as due to diseases; 8 due to violence (surgical narcosis, 3; falls, 3; traffic, 2).

Accidental Deaths (50).

Accidents, trifling and contributory only, 8 (deaths entered to primary diseases). Want of care and attention at birth, 1.

Deaths due solely to accidents, 41.

Agencies :-

Traffic, 17 (14 males, 3 females); overlaid in bed (infants), 3; poisoning, 1. "Falls," 16 (8 males, 8 females); burns, 3; horse-kick, 1.

" Open" (8) (5 of infants).

Lack of attention at birth, 2; traffic, 1; status lymphaticus, 1. Suffocation (various forms), 3; injury at birth, 1.

Murder (4).

New-born infants, 2; adult women, 2.

Suicide (20).

By poison, 8 (coal-gas, 3; cyanide of potassium, 2; hydrochloric acid, oxalic acid, narcotic poisoning, 1 each).

By firearms, 3; by cut throat, 2; by drowning, 2; by jumping from window (train), 2. By hanging, under motor 'bus, scissors, 1 each.

Neglect (11).

All deaths entered to diseases, alcohol being returned as the primary cause in 6 instances. The deaths included one of an intant (æt. 8 months) from diarrheea.

TABLE 42. INOUESTS.

			19	13.	19	12.	1908	-12.
Findings of the	Juries.		M.	F.	М.	F.	М.	P
Natural Causes			59	50	39	28	38	3
Misadventure			5	7	4	4	6	
Accidents			34	16	26	21	27	2
Murder	***		-	4	1	2	0	
Suicide	***	***	13	7	7	6	10	
" Neglect "	***		5	4 7 6 2	6	2	3	
"Open"			6	2	3	3	2	
Totals	***		122	72	86	66	86°	7

<sup>\*</sup> Including 2 deaths by execution in 1909.

## DEATHS IN INSTITUTIONS.

The deaths taking place in the local institutions have notably increased during the last ten years. In 1913 there were 890\* deaths, being 92 more than in 1912. During the five years 1903-07 the average annual number was 775 (see Table VII., Appendix), and during the five years 1908-12, 920. Particulars of the causes of death in the different institutions will be found in Table VIII. of the Appendix. The total of 890 deaths included 384 of non-residents of the Borough. In outlying institutions there were 252 deaths of residents of the Borough, an increase of 41 above the number recorded in 1912 (211), the average annual number during the five years 1908-12 having been 189. (See Table VII., Appendix.) Attention may be directed to the increases in the numbers recorded last year, above the averages in the hospitals of the Metropolitan Asylums Board (largely due to the allocation of much of the accommodation to diseases other than the acute infectious fevers), in the General Hospitals, and in Lunatic Asylums.

The total number of residents dying in institutions of all classes (except private nursing homes) was 789 last year, as compared with 677 in 1912 and an annual average of 653 during the years 1908–12. Last year's total was equivalent to 39.9 per cent. of the total number of deaths recorded, the corresponding figure for 1912 having been 38.2, and the average for the 'years 1908–12, 34.9.† According to the figures given in Table VII., Appendix, the proportion of deaths of residents in institutions has increased by over 10 per cent. in the course of 11 years 1903–13, from 29.4 in the first year to 39.9 in the last. The proportions of institutional deaths has increased in all the Wards. Last year (see below) just over one-half of the deaths belonging to Church Ward took place in institutions, that being the highest proportion recorded, the lowest (23.6) being recorded in Lancaster Gate, West, Ward. In comparison with the averages for 1908–12 the greatest increase was observed in Lancaster Gate, East (percentage, 1913, 27.1—average, 190).

PERCENTAGES OF DEATHS IN INSTITUTIONS OF ALL CLASSES.

	(	Dueen's	Harrow	Maida	West-		Lancaste	r Gate,	Hyde
		Park.	Road.	Vale.	bourne.	Church.	West	East.	Park.
1913		44.5	35.6	36.1	38.5	50.9	23.6	27.1	30.4
1912		38-9	33.1	34.7	37.6	52.2	28.0	10.8	33.5
1908-12		36.6	32.5	30.6	34.5	47.6	21.0	19.0	29.5

<sup>\*</sup> There were in addition 47 deaths in the nursing homes in the Borough last year, as compared with 25 in 1912. The deaths of non-residents in such homes were 34 last year and 15 in 1912.

<sup>+</sup> The deaths of males in institutions during the year numbered 421, or 44.8 per cent. of all deaths of males, and of females, 368, equal to 35.3 per cent. of all deaths of females. In 1912 the percentages were—for males 41.7, and for females 34.7.

When an analysis is made of the proportions of deaths in each class of institution (see below), it is found that the greatest increase above the average has taken place in the deaths in the hospitals of the Metropolitan Asylums Board. The use of those hospitals has been so much extended in recent years, and more particularly in the year under review, that the great increase observed loses much of its significance. The increase in the proportion observed in the case of lunatic asylums is more significant, small though it be, as it has been almost continuous, a fact to which attention has been called in previous reports and of which evidence is furnished by Table VIII., Appendix.

Percentages of Deaths in Institutions of Different Classes.

		Rat	e-supp	orted In	stituti	ons.		Volunt	ary Institutions
		Poor Law.		etropolit lums Bo		Lunatic Asylums,		(exclu	iding Nursing Homes).
1913		 22.2		2.8	***	2.8	***		12.0
1912	***	 22.1		1.6	***	2.5		***	11.7
1908-12		 20.2		1.5		2.6			11.0

# INSTITUTIONAL TREATMENT OF TUBERCULOSIS.

In previous reports this question has been examined solely with a view to test the effect, if any, of the segregation of the tuberculous (the consumptives) on the mortality, it being alleged that such segregation has played an important part in producing the acknowledged reduction in the mortality. The examination hitherto carried out has been confined to analyses of the duration of institutional treatment of the fatal cases recorded each year. On this occasion data are available as to institutional treatment in a wider sense—such data being drawn mainly from the operations of the National Insurance Act, 1911 (Sanatorium Benefit). Incidentally it may be observed that the operation of that Act has added materially to the work of the Department. It is anticipated that the tuberculosis work of the Department will be greatly increased, both in amount and importance, when the proposed schemes for the treatment of the tuberculous population become effective.

Careful and complete records have been kept in the Department of all applications for Sanatorium Benefit made by residents of the Borough. Unfortunately there is good reason to believe that hitherto a certain number of applications have been received and dealt with by the Insurance Committee without the Department knowing anything about such applications. It is hoped that in the future better arrangements will be made so as to keep the Department fully informed of all applications, not merely for statistical purposes but to enable the Department to cooperate more efficiently with the Insurance Committee and other agencies dealing with the disease.

"Sanatorium Benefit" is granted in four forms :-

- (i.) "Domiciliary Treatment"—treatment by the practitioners on the panel either at the practitioners' surgeries or in the patients' homes;
- (ii.) "Dispensary Treatment"—at "approved" dispensaries or occasionally at the patients' homes by the medical officers of such dispensaries;
- (iii.) "Hospital Treatment" in the wards of such hospitals as may have agreed with the Insurance Committee to receive insured persons; and
- (iv.) "Sanatorium Treatment" at "approved" sanatoria with which the Insurance Committee

All institutions receiving patients on behalf of the Insurance Committee require to be "approved" by the Local Government Board.

The first known application for the Benefit from a resident of the Borough was made in October, 1912, the Benefit having become operative in the previous July, that is, six months earlier than the other medical provisions of the Act. Before the end of the year 31 applications were put in, and during 1913 149 applications were made. Of the 180 persons (130 males and 50 females) 119 received the Benefit. Appended is a tabular statement howing the results of the 180 applications.

#### NATIONAL INSURANCE ACT, 1911.

Application for Sanatorium Benefit-1912 and 1913.

Total applications put in				411			***	180
by men	***		***	***	130			
by women	***	***		***	50			
Applicants found ineligible		***			111	***		17
Applications abandoned		***	***		411	***	***	21
(5 of the applicant	s secu	red ad	mission	to priv	rate sana	atoria.)		
Applications remaining incor						***	***	18
by reason (			om the	Boroug	gh 11			
owing to d	eath o	f appli	cant		7			
Applications granted	***	444			***			119
Form of benefit granted-								
Domiciliary treatment	t	7	Adn	nission	to hospi	tal	7	
Dispensary ,,		4		,, !	sanatorii	ım	101	

Notes.—Five other patients were granted domiciliary treatment, but were subsequently admitted to hospital and/or sanatorium. These have been included under the institutions.

Of the patients granted sanatorium admission, two declined to go in, and one refused to stay after twenty-four hours. One patient to whom "hospital treatment" was granted was for some unknown reason never admitted.

Having regard to the preponderance of females among the notified tuberculous, to which attention has already been directed, the number of females applying for the Benefit (50 out of a total of 180, equal to 27.7 per cent.) was very small, and the proportion of women among those admitted to sanatoria (25 out of 101, or 247 per cent.) was smaller still. The institutions to which the patients were sent are shown below. The Downs and Winchmore Hill are the sanatoria provided by the Metropolitan Asylums Board under agreement with the Insurance Committee.

Institutions to which patients were sent :-

Hosi	PITALS				SA	NATORIA		
Brompton		***	***	8	Downs			42
Victoria Park		***		4	Mount Vernon		***	19
City of London				1	Winchmore Hill .		***	15
University Colle	ge	***		4	Extra-Metropolitan			11
Metropolitan				1				

Judged by the practice of sanatoria generally the length of treatment in institutions was unusually short. The distribution according to length of stay in the institutions is as given below. The average stay for the 69 patients discharged up to the end of last year was  $2\frac{1}{2}$  months.

Duration of treatment of 98 patients admitted to sanatoria:-

	d under tre		 f		***	***	***	***	1
	10-					***			1
	1-		***			+++	***	***	1
200	2-	***	41.0		***		***	***	2
Months.	3	***	***	***	***	***	***	***	1
IOI	4-	***	***		***	***	***	111	
2	5—				***	***		***	
	6-	***	***	***	***		***	****	
	7-				***	***	***	***	
Un	der treatme	nt at en	d of y	ear			***	***	1

Attention should be called to the comparatively large number of deaths amongst the 180 persons applying for the Benefit. In seven instances the applicants died before any grant was made (2 of those deaths occurring in the early days of the current year); 13 patients died at the institutions to which they were admitted, and 5 subsequent to their discharge. The total number of deaths was therefore 25 (equal to a fatality of 13.8 per cent.). The fatality in institutions was equal to 12.3 per cent. on 105 admissions (to hospitals and sanatoria).

In addition to the 11 who left the Borough before their applications were finally dealt with, 23 other applicants, nearly all of whom had been admitted to sanatoria, were known to have left their original addresses before the end of 1913. Most of the patients have been lost sight of, as their new addresses are not known. With regard to some of these patients inquiries have been made to the Insurance Committee for the new addresses, but without result.

Seventeen of the 180 applicants were found to present no signs of tuberculosis when examined by the medical referees. Three other cases were marked off as "errors" before the end of 1913.

At the beginning of this year special enquiries were made about the patients who were discharged before the end of 1913, numbering 68 in all. The reports received were classified under four headings as regards health conditions, viz., (a) Health good: fit for work; (b) Health fair: can do light work only; (c) Health indifferent: can do no work; and (d) Health progressively failing. Such division can be regarded as of the roughest description only, but it will give an approximate idea of some of the results of institutional treatment. Of the 68 persons here dealt with, 1 was found to have died, 1 could not be seen being always out (at work), and 21 had removed and could not be traced. Of the remaining 45, 21 were placed in group (a), 9 in group (b), 4 in group (c), and 11 in group (d). The further history of these patients will be recorded in future reports so long as they can be traced.

Schemes are in preparation by the County, City and Borough Councils for providing treatment for the whole of the tuberculous population of the Metropolis, other than insured persons. In examining the records of the patients dying from pulmonary tuberculosis during the past year, it has been found that in no fewer than 107 instances, representing 79.2 per cent. of all deaths from this form of tuberculosis, the interval between the first notification of the disease and death was less than one year. In 17 instances the interval was from one to two years, and in 11, over two. On analysing the 107 instances more closely it was found that in 4 death preceded the notification, in 22 notification and death occurred during the same month, and in another 26 death took place during the month succeeding that of notification. In 40 instances the interval between notification and death was from 0-3 months, in 17, 3-6, and in 12 from 6-9, and the like number from 9-12. These figures should be compared with those relating to the duration of the disease given on page 76. The conclusion which is obviously deducible from the figures just given is that the proposed schemes are not likely to meet with the hoped-for success unless the disease be diagnosed at much earlier stages of its progress. As the profession can only deal with cases coming before them, the success of the schemes will rest with the public at large, who require to be educated to an appreciation of the importance of seeking advice without delay.

In connection with this subject it will be of interest to quote some figures with reference to the work of the Paddington Dispensary for the Prevention of Consumption since the inception of "Sanatorium Benefit."\*

During the eighteen months covered by the return 1,428 persons were examined by the Medical Staff, that total including 274 insured persons. The patients treated during the same period numbered 2,164, including 586 insured persons, there being on the Register of the Dispensary at the end of March, 1914, 449 patients (resident in the Borough) who were definitely tuberculous, including 91 insured persons and 243 who were "under observation" as suspected to have the disease, of whom 49 were insured.

In their circular letters on the formulation of schemes for treatment, the Local Government Board laid considerable emphasis on the need of dispensaries being able to refer cases of difficult or doubtful diagnosis to the staffs of the large hospitals. During the period under

<sup>\*</sup> The figures have been extracted from a return prepared for the information of the Local Government Board relating to the period 15th July, 1912, to 31st March, 1914. The return includes a number of patients living outside Paddington. Such patients have been excluded from the figures here quoted.

review the Dispensary so referred 75 patients (20 being insured persons) as well as 267 other patients for special treatment (including 35 insured persons), and, lastly, 375 patients for attention to their teeth.

From the Annual Report of the Dispensary for the year 1913 it appears that 725 patients attended from Paddington during that year, of whom 161 were found to be definitely suffering with pulmonary tuberculosis, and 247 others were suspected to have the disease. There were in addition 15 other patients with other forms of tuberculosis. In analysing the cases according to the sex and ages of the patients a number of non-resident patients have been included, making the total of the definitely consumptive 174, 77 of them being males and 97 females. The patients at ages under 15 years numbered 85, 44 (or 517 per cent.) being males. At ages over 15 years there were 89 cases, including 33 males, equal to 37.0 per cent. of all cases at those ages. The difference between the two proportions is illustrative of the difficulty experienced in convincing adult males of the urgent necessity of attending to their condition. The present occasion is not one for any lengthy summary of the Report, and it must suffice to state that in addition to treatment the Dispensary, through its Case Committee, seeks to help its patients in every possible way, such as providing country holidays, finding work, etc. The Dispensary maintains two schools for tuberculous children: one at Kensal House for 90 children, which is staffed educationally by the County Council, and the other at Poplar Square for 25 children, which is staffed by the Dispensary. The Dispensary provides a number of shelters in which patients can undergo out-door treatment without leaving their homes.

There remains for consideration the original question of the alleged influence of the segregation of the tuberculous on the rate of mortality from the disease. In the following paragraphs the examination of this question conducted in previous reports is carried a stage further.

Of the 156 deaths recorded last year as due primarily to pulmonary tuberculosis (comprising 154 of chronic phthisis and 2 of acute), 79 occurred at the patients' homes (41 of males and 38 of females) and 77 in institutions (males, 47; females, 30). The 77 deaths were equal to 49·3 per cent. of all deaths from this cause, the proportion observed in 1912 having been 53·8 per cent. Below will be found a statement of the institutions (grouped in classes) in which the patients died during the year, with a comparison of the proportions of such deaths to recorded deaths during the past four years. A decrease in the proportion dying in Poor Law institutions has to

PULMONARY TUBERCULOSIS.
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		N	umbers	of Dea	ths.	Percentages of Total Deaths					
		1913.	1912.	1911.	1910.	1913.	1912.	1911.	1910.		
Poor Law Institutions	***	48	46	56	35	 30.7	39-3	34.3	27.5		
" Homes of Rest "		7	5	6	8	 4.4	4.3	3.6	6.2		
General Hospitals		ő	4	6	7	 3.2	3.4	3.6	5.5		
Special Hospitals		3	3	5	3	 1.9	2.5	3.0	2.3		
Lunatic Asylums		4	5	7	3	 2.5	4.3	4.2	2.3		
Approved Sanatoria		9				 5.7					

be recorded from the figures for 1912 and 1911. The new entry for approved sanatoria is the result of the work under the National Insurance Act. It is rather remarkable that nearly 6 per cent. of the deaths should have taken place in such institutions, as sanatoria (as usually understood) are not places where many deaths occur. The proportions of deaths in institutions observed among the residents of the Wards are shown below. The very high proportion (66.6 per cent.) observed in Lancaster Gate, East, Ward signifies nothing, as it represents one death out of a total of three recorded in that Ward. The comparison of the three years shows that the proportions are subject to erratic fluctuations from year to year.

#### PULMONARY TUBERCULOSIS.

#### Percentages of Deaths in Institutions.

		Queen's		Harrow	,	Maida						Lanca	aster	Gate,	Hyde
		Park.		Road.		Vale.	W	estbour	ne.	Church.		West.		East.	Park.
1913	222	47.8		53 5		55.0		50.0		53.8	***	14.3		66.6	 12.5
1912	***	27.2	+ + + +	46.4		46.6		68.4	***	67.7	***	33.3		_	 62.7
1911		44.4		37.1		50.0		60-0		69-6		_		50.0	 54.5

That there has been a fairly steady increase in the proportion of persons dying in institutions is conclusively shown from the annexed statement, which covers the thirteen years for which data are available. The percentage of deaths in institutions averaged 41.2

#### PULMONARY TUBERCULOSIS.

#### Percentages of Deaths in Institutions.

		Obse	erved Proport		Index Numbers:				
		Males.	Females.	Persons.			Males.	Females.	Persons.
1901-3		41.3	41-0	41.2			100	100	100
1904-6		49.4	35.7	43.8	***		119	87	106
1907-9		49.6	39.1	45.7	***	***	120	95	110
1910-12	***	54.6	41.5	49.1	***	***	132	101	119
1913		53.4	42.6	48.7	***		128	103	118

per cent. (combined sexes—persons) during the three years 1901-3, and rose in each successive triennial period to 49·1 per cent. during 1910-12, but decreased to 48·7 last year. The index numbers show that the proportions observed last year were equal to increases of 28 per cent. (males), 3 per cent. (females), and 18 per cent. (persons) above the average proportions observed during 1901-3. When the recorded mortality is examined it is found that there has not been a reduction commensurate with the increase in proportion of institutional deaths. In the statement given below the actual deaths have been taken as the basis of comparison, because the changes which the population of all ages has undergone have been so slight that such numbers are practically as good a test as the

## DEATHS FROM PULMONARY TUBERCULOSIS.

		An	nual Numbe	rs:			Index Numbers:					
		Males.	Females.	Persons.			Males.	Females.	Persons.			
1901-3		87	65	152	***	***	100	100	100			
1904-6	***	90	63	153		***	103	97	100			
1907-9	***	99	57	156	***	***	113	88	102			
1910-12		79	57	136			90	80	89			
1913	***	88	68	156			101	105	102			

mortality rates. The average annual number of deaths (persons) was 152 during the three years 1901-3, and after falling to 136 during 1910-12, rose to 156 last year.\* The annual average for males, which was 87 in the first period, fell to 79 in the fourth, while the record for last year was 88. In the case of females the averages fell in each period from 65 in the first to 57 in the fourth, but the record rose to 68 last year. Comparing the index numbers for deaths with those given above for proportions of deaths in institutions, it will be seen that while there has been a progressive increase in the index numbers for institutional deaths, there has not been a corresponding decrease in those for deaths. The movements shown in the two sets of index numbers for females again are not contrary the one to the other, but, allowing for the irregular fluctuations, more in the direction of parallelism.

<sup>\*</sup> It should be remembered that a comparison between an average for a three-year period and the number recorded in a single year has to be accepted with some reservation.

The inquiry has on this occasion been extended to include the institutional history of all fatal cases terminating in death during the year, irrespective of where the deaths occurred. More or less complete information was obtained with reference to 92 deaths.

Seventy-five of the patients were treated at one institution only, 16 at two, and 1 at three (sanatorium, infirmary, and home of rest). The distribution of the cases other than the last is given below.

#### PULMONARY TUBERCULOSIS.

#### Scheme of Institutional Treatment.

	Sa	natorium.		Hospital.		Infirmary.	He	ome of Rest.
Sanatorium	111	10	***	4		4		3
Hospital		-		13		2		2
Infirmary		-	***	-	***	48		1
Home of Rest		_		-		-	***	4

\* 75 cases treated at one institution only.

16 ,, at two institutions.

1 case treated at sanatorium, infirmary, and home of rest.

The 4 cases treated at lunatic asylums where the disease was first diagnosed are not included here.

Although in such an insidious disease as pulmonary tuberculosis some doubt must always attach to statements as to the date of onset, the figures here given as to the duration of the disease must be accepted as the only available data. In this analysis the histories of 156 cases dying during the past year have been drawn upon. The error which attaches to the figures is believed to be one of defect; that is to say, that the durations are believed to be understated. For the present purpose such error is negligible, as it in no way vitiates the conclusion—indeed, it probably strengthens it.

Pulmonary Tuberculosis.

Duration of the Disease.

Data from 156 Fatal Cases.

Duration unknown in 37 Cases.

Duration.			Duration.
Under 6 months		10 cases	8-9 years
6-12 ,,	***	- 23	9-10 ,,
1- year	***	21	10-11 ,,
2- years		27	12-13 " One case
3- "		9	15-16 ,, each.
4- ,,	***	11	17-18 "
5- ,,	***	7	31-32 "
6-7 ,,	***	4	

In 37 instances the duration of the disease could not be stated, and in 7 it exceeded 7 years, with a maximum of 31 years in one case. In 33 cases the duration was given as less than a year. The average duration for the 119 cases with known durations was 3·1 years.

The next tabulation was prepared to show the length of in-patient treatment received by patients with given durations of the disease. The summary of that analysis is here set out. The analysis includes 87 of the 92 patients who received such treatment, and it shows not only the durations of in-patient treatment but also the number of times the patients were admitted, the average, and the maximum and minimum periods of treatment.

# PULMONARY TUBERCULOSIS.

Institutional Treatment.

	37	-50	Duration of treatment (in months).								
Duration of Disease. (years)		of Case Treated			Total.				Maximun	Minimum.	
Not known		18	***	(1)	84!	***	43	***	50		2 days
0-1		6		(1)	61	***	1	***	11/2		4
1-1		10	***	(1)	151	***	11/2	***	21		4 days
1-2	***	12		${(1) \choose (2)}$	$\binom{12}{20\frac{1}{2}}32\frac{1}{2}$		23	***	10		1
2-3		22	• • • • • • • • • • • • • • • • • • • •	$\begin{cases} (1) \\ (2) \\ (3) \end{cases}$	$     \begin{array}{c}       31\frac{3}{4} \\       42\frac{1}{2} \\       14    \end{array}     \left.\right\} 88\frac{1}{4}   $		4		113		2 days
3-4		4		(1) (7)	$\begin{pmatrix} 7 \\ 7\frac{3}{4} \end{pmatrix} 14\frac{3}{4}$	***	31		73	***	1/2
4-5		6		$\begin{cases} (1) \\ (2) \\ (3) \end{cases}$	$35\frac{1}{2}$ $48$ $12$		8	***	21		1
5-6	***	5		(1)	74		15		60		1/2
6-7		2		((1) (4)	$\frac{2}{21\frac{3}{4}}$ $\left\{22\frac{3}{4}\right\}$		113				
10-11	***	1		(1)	11						
17-18	***	1	***	(1)	3						

Notes.—The figures in parentheses show the number of times the patients were admitted to institutions. In 5 instances the histories were too incomplete for analysis.

The 4 cases treated in lunatic asylums are not included in this analysis.

The total duration of in-patient treatment received by the 87 patients amounted to 391½ months, which gives an average of 4½ months per patient. That figure should be compared with the average duration of the disease (3·1) years given above. Such comparison does not appear to afford any confirmation of the suggestion that the segregation of the tuberculous has had any real part in the lowering of the mortality from pulmonary tuberculosis.

## MORTALITY IN CHILDHOOD.

By "childhood" is here meant the age-group 0-5 years. The mortality rates observed among males and females during the past year are compared with those for 1912 and the averages for 1908-12 in Table 23 (page 27). The rate among males was 42:33 per 1,000 estimated living during 1913, as compared with an average of 43:55 during 1908-12. The maximum rate (66:52 per 1,000) was recorded last year in Church Ward, and the minimum (21:62) in Lancaster Gate, West. Last year's maximum shows a considerable advance over that for the five years 1908-12 (59:64, also observed in Church Ward), last year's minimum (21:69 in Lancaster Gate, West) being also higher than that of the quinquennium (13:95, recorded in Lancaster Gate, East). On the whole the rates recorded last year among males were below the averages. In comparison with the previous year, lower rates were recorded last year in the Borough and in the Wards, except Westbourne, Church, and Lancaster Gate, East.

The mortality rates among females recorded last year show a general increase over those of 1912 and the averages. The rate for the Borough (37.02) was 2 per 1,000 in excess of the average. Last year's maximum Ward rate was that of Church Ward 53.70, and the minimum (zero) that of Lancaster Gate, West. The maximum average rate (51.58) was also recorded in Church Ward and the minimum (17.73) in Lancaster Gate, West. In comparison with 1912 all the Ward rates show increases, except those of the two Lancaster Gates.

The rate of mortality changes so rapidly during the first five years of life that the subject requires to be examined with more minuteness. It will be dealt with in two sections, the first dealing with the mortality in the first year of life, and the second with that of the four following years.

# MORTALITY AT AGES UNDER ONE YEAR.

# Infantile Mortality.

Owing to the changes which have been introduced within recent years in the methods of correcting the returns of births and deaths, it is necessary, with a view to the preservation of the continuity of the records, to submit three rates of infantile mortality, viz.:—

Crude rates, based on the numbers of births and deaths registered locally without any corrections for births or deaths of non-residents within the Borough, or for the like belonging to the Borough but occurring in outlying areas;

Nett rates, derived from the births corrected by the exclusion of children born to non-resident parents, and the deaths corrected by the exclusion of those of non-residents, and the inclusion of those of residents of the Borough taking place in outlying Metropolitan districts; and

Corrected rates, calculated from births and deaths completely corrected for transfers (births and deaths) both outwards and inwards.

Last year 342 deaths at ages under one year were registered within the Borough, including 66 of non-resident children. In 1912 the corresponding numbers were 326 and 57 respectively. The crude rate of infantile mortality was 120 per 1,000 births for the whole year, ranging from a minimum of 83 in the second quarter to a maximum of 155 in the first. In comparison with 1912 (see below), the rates observed last year in the first and third quarters show increases, but in comparison with the quinquennial average (1908-12), the only rate which is materially higher is that of the third quarter.

INFANTILE MORTALITY RATES.

				Crude.			
	Ous	rters	1.	2.	3.	4.	Year.
1913	 		155	83	107	140	120
	 		124	110	79	158	117
1908-12	***	***	129	104	124	139	123

The nett mortality was 109 per 1,000 births for the whole year, an increase of 2 per 1,000 above the rate recorded in 1912, but 7 below the average. (See below.) In comparison with the previous year the rates recorded last year in the first and third quarters show increases, but if compared with the averages, the first quarter's rate (1913) is the only one which is higher.

#### INFANTILE MORTALITY RATES.

				Nett.			
	Ou	arters	1.	2,	3.	4.	Year.
1913	 		130	67	109	128	109
1912	 		117	93	82	141	107
7008-10			191	96	113	128	116

The corrected rate for the year was 101 per 1,000 births, as compared with 99 in 1912 and an average of 107. (Table 43.) The rate for males (115) was lower than the corresponding rates observed in 1912 and in the five years 1908-12. Among females the rate was 86 last year, showing a slight increase above that recorded in 1912, but 9 per 1,000 less than the average. The actual number of deaths at ages under one year are given in Table II., Appendix, and the causes of death (at each month of life, distinguishing the sexes) in Table X.

The rate of mortality for the whole County, deduced from data given in the Quarterly Reports of the Registrar-General, was 104 per 1,000 births last year, or 14 per 1,000 higher than the rate observed in 1912 (90), but 4 less than the average (108). Below are the corresponding rates for the districts circumjacent to the Borough. The maximum rate (188) occurred in Kensington, and the minimum (77) in Hampstead. It will be seen that in Kensington, Westminster, and Hampstead the rates observed last year exceeded their respective averages. In the Report for the Fourth Quarter of the year a table was included (Table XXII.) giving the fully corrected rates recorded during the past year in the Metropolitan Cities and Boroughs. Those of the circumjacent Boroughs are given on the opposite page. The highest rate recorded in any Borough was that of Shoreditch (155 per 1,000) and the lowest that of Hampstead (73).

# Infantile Mortality Per 1,000 births.

Deduced from the Quarterly Reports of the Registrar-General.

	London.	Paddington.	Kensington.	Westminster.	St. Marylebone.	Hampstead.	Willesden.
1913	 104	107	188	106	90	77	83
1912	 90	106	98	93	93	64	84
1908-12	 108	112	119	102	101	73	97
			FULLY	CORRECTED.*			
1913	 105	100	112	96	91	73	?

TABLE 43.

# Infantile Mortality Rates. Per 1,000 births. (Fully corrected.)

				Males			Female	5.	Persons.			
			1913.	1912,	1908-12.	1913.	1912.	1908-12,	1913.	1912.	1908-12	
Borough			115	118	118	86	78	95	101	99	107	
Queen's Park	***		108	112	104	117	72	84	113	98	94	
Harrow Road		***	77	104	108	58	55	75	67	80	92	
Maida Vale	***		85	120	108	65	74	84	76	98	96	
Westbourne		***	136	83	117	111	102	108	146	92	113	
Church			164	166	154	105	96	126	137	134	140	
Lancaster Gate,	West		100	121	75		32	61	48	78	68	
	East		154	_	42	32	94	78	88	47	57	
Hyde Park	***	***	67	131	103	106	71	93	88	94	98	

The mortality (persons) recorded in the Wards ranged from a minimum of 48 (in Lancaster Gate, West) to a maximum of 146 (in Westbourne). Progressive decreases have to be noted in the mortality rates recorded in Harrow Road, Lancaster Gate, West, and Hyde Park Wards. The maximum mortality among males was that of Church Ward (164) and the minimum that of Hyde Park (67), while among females the maximum was 117 (Queen's Park) and the minimum zero (Lancaster Gate, West).

An examination of Table X., Appendix, shows that the prevalence of diarrhœa and of the respiratory diseases was the main cause of the slight increase in the mortality rate for the Borough as a whole. The deaths last year from the diarrhœal diseases numbered 66, as against 38 in 1912 and an annual average of 63 during the five years 1908-12. The principal respiratory diseases (bronchitis and the pneumonias) caused 69 deaths in 1913, 56 in 1912, and an average of 54 per annum during 1908-12. The greater part of the increase in numbers fell upon the males.† This is also made clear from the mortality rates given on page 80. It will be seen that in the case of males the increased mortality, when comparison is made with 1912, took place at ages of one month and upwards, the reduction in the rate at ages under one month being sufficiently large to cause a fall in the rate of 0-3 months. In comparison with the quinquennial average the only age-groups with higher rates last year were those of 6-9 and 9-12 months. In the case of females the rates for all the age-groups, except the last (9-12 months).

\* From Table XXII, appended to Report for Fourth Ouarter of 1913.

† The numbers are :			1913.		1912.		1908-12.
Males-Diarrhocal Di	seas	es	40	***	21	227	3.9
Respiratory	41	***	46	***	40		29
Females-Diarrhocal	39	***	26	***	17	***	31
Respiratory	11		23	***	16	***	25

were higher last year than in 1912, but except at ages 3-6 months (nearly 39 per cent. increase), none of the increases were large. In comparison with the averages, the group 3-6 months was the only one with an increased rate (21 per cent. increase).

### CORRECTED MORTALITY RATES.

				Males			Females.	
			1913.	1912.	1908-12	1913.	1912.	1908-12.
Under 1 month			33.11	45.66	42.36	 29.74	29.49	30.56
Aged 1-3 months	***	***	27.92	23.48	23.74	 16.22	13.03	21.26
Under three months		***	61.03	69.14	66:11	 45.97	42.52	51.82
Aged 3-6 "			19.48	18.26	21.18	 20.96	15.08	17.27
60	***		19:48	17.61	16.68	 9.46	8.23	12.62
,, 9-12 ,,		***	14.93	13.04	13.47	 10.14	12.34	13.95

As already intimated, there were considerable increases in the mortality among males from the "Diarrhœal Diseases" and "Other Causes" (which latter include the respiratory diseases). The former group of diseases gave rise to a mortality 25 per cent. higher than the average, although the latter includes the year 1911 when diarrhœa was exceptionally prevalent. The lower rates from "Common Infectious Diseases" and "Developmental Diseases" may be described as very satisfactory. To set off against such reductions there were increases in the mortality among females from those two groups of causes, which are the only two of the female rates with increases. The increase in mortality from "Developmental Diseases" is somewhat remarkable, as females are usually less liable to death from such causes than are males.

#### CORRECTED MORTALITY RATES.

		Males.				Females.	
I. "Common Infectious Diseases"	1913. 6·49	1912. 9·13	1908-12, 8:34		1913. 10·14	1912. 5·48	1908-12. 7:30
II. "Diarrhœal Diseases"	25-97	13.69	20.53		15.55	11.65	20.59
III. "Tuberculous Diseases"	1.94	3.26	3.20		2.02	3.42	2.65
IV. "Developmental Diseases"	33.11	47.61	46.21		35.15	31.55	33.88
V. "Other Causes"	38.96	35.22	28.24		19.60	21.26	23.24
All other Causes	8.44	9.13	9.62	***	4.05	5.48	6.64

Hopeless Births.—This term has been introduced to designate births which are registered at the same time as, or subsequently to, the deaths of the children. Last year 80 such instances were noted in the local returns, as compared with 88 in 1912 and 101 in 1911. Last year's total included three deaths (one male and two females) of non-resident children. In Table 44 will be found an analysis of the causes of death in the instances noted last year, together with a comparison of the various totals for the two years 1912 and 1913. It will be noticed that the number of these births in females was the same in the two years, the reduction (8) being exclusively among males, and, further, was due to the reduction in the number of deaths due to the "Developmental Diseases" (upper section of the Table). Nearly one-half of the 80 cases were noted in the first quarter of the year.

Seven of the deaths were recorded in institutions, viz., 3 each at the Workhouse and Infirmary, and 1 at St. Mary's Hospital. Seven of the children were illegitimate, and 8 of the 80 were the products of twin births, including 3 complete twins and 2 who were one of twins. Inquests were held with reference to 7 of the deaths.

The 4 deaths from "Congenital Defects" comprised 2 from congenital malformation of the heart, and 1 each of the spine and digestive organs. The deaths during the first twenty-four hours of life were distributed as here set out.

DEATHS DURING FIRST DAY OF LIFE .- 1913.

Interval after Birth.

			(Hours.)	
		Under 1.	0-12.	12-24.
Males	 - 211	3	- 13	3
Females		1	9	3

MORTALITY IN CHILDHOOD.

TABLE 44.
HOPELESS BIRTHS.

							Da	ıys.									Wee	eks.			Mon	nths.		To	TALS.	
	0- M.	F.	-	F.	2- M.		3 M.	F.		- F.		- F.		- F.	1 M.		2 M.	- F.		F.	1- M.	-2 F.		13. F.	19 M.	12. F
Congenital Defects	 9 3 2	5 2 2 - 2 -	2	2 -1 - -	=		_ 1 _	1	-	1	-	-			1	3	1	4 1 1 -	1	111111	1 1 - 1	2	19 1 5 - 4	20 3 4 - 3	20 5 3 2 4 3	19 5 2 2 2
espiratory Diseases	 14	11 - 1	2 - - 1	3   -   -	1		1	1	1	1 - - -	1	1		2	4 - 1 1	3 -	1 - 3 -	6 1 -	1 1 1 -	11111	3 1 2 -	2 1 2 —	29 2 3 5 5	30 1 3 2	37 2 7 1 5	30
4040	 16 13	12 15	3 6	3 5	1 3	1 3	1	1	1 3	1 2	1	1	-	2	6 9	3 5	4	<b>7</b> 2	3 8	-1	8 3	<b>5</b> 2	44	36	52	36

The numbers of these "hopeless births" recorded annually furnish a strong argument for shortening the period allowed for registering births, which is at present six weeks. At the same time it has to be recognised that a certain number of this class of births will almost inevitably be registered, no matter how brief the time prescribed for registration. If five days were prescribed, as has already been suggested, the number of "hopeless births" which would have been noted last year would have been 42.

The deaths due to the "Developmental Diseases" (59 last year, 67 in 1912) may be taken as an indication of the share of these births due to ante-natal causes, and the remainder (21 in 1913 and in 1912) as due, in part at least, to post-natal causes. The table as a whole points to the real urgency of more attention being given to the important subject of the care of the unborn child, which resolves itself into the observance by the pregnant mother of the elementary rules of hygiene which are specially applicable to her condition.

Premature Birth.—The deaths attributed to this cause numbered 62 (32 of males and 30 of females), as compared with 58 in 1912 and an average (1908-12) of 54 (32 males and 22 of females). Included in the total for last year were the deaths of four pairs of twins and a ninth child, one of twins. The proportion of deaths of illegitimate children (13 per cent.) was unduly high. Fifteen of the deaths took place in institutions, including 5 in the Paddington Infirmary and Workhouse, 5 in lying-in hospitals, 3 in general hospitals, and 2 in children's. In 21 instances the duration of pregnancy was stated, being 6-7 months in 4, 7-8 in 12 (8 of the infants being males), and 8-9 months in 5. It is to be desired that the duration of pregnancy should be stated, as accurately as possible, in every instance.

Diarrhwa.—The deaths from the "Diarrhœal Diseases" at all ages numbered 82 last year, as compared with 54 in 1912, the mortality being at the rate of 0.56 per 1,000 persons in 1913 and 0.38 in 1912. The average for the five years 1908-12 was 0.49 per 1,000, that period including the year 1911, when the rate was 1.05. The mortality rates in the Wards (see below) ranged last year from 1.19 as a maximum (in Church) to a minima of zero in the two Lancaster Gates. In comparison with the previous year, higher rates were recorded last year in all Wards except the Lancaster Gates, while in comparison with the quinquennial averages last year's rates were lower in the two named Wards and in Queen's Park and Hyde Park. The increases to be noted in Church and Westbourne Wards were considerable.

"DIARRINGA."

Mortality at all Ages.

		Queen's Park.	Harrow Road.	Maida Vale.	West- bourne.	Church.	Lancaster West.	Gate, East.	Hyde Park.
1913	***	0.43	0.51	0.41	0.80	1.19	-		0.15
1912		0.31	0.22	0.28	0.38	1.00	0.11	0.12	0.08
1908-12		0.45	0.46	0.39	0.61	0.96	0.11	0.12	0.18

The deaths recorded last year comprised 73 at ages under two years (47 of males, and 26 of females) and 8 at higher ages, viz., 2 (both females) at ages 2-5 years, 1 (male) at ages 55-60, and 5 (male, 1; females, 4) at ages over 65 years. From a public health point of view the deaths at ages under two years are of most interest, and those only will be referred to now.

The rate of mortality which can be most easily calculated for deaths at ages under two years is that obtained by the use of the corrected number of births, but it has to be recognised that such a rate is a purely artificial one. The Registrar-General has, however, adopted that rate for his Reports. The 73 deaths were equivalent to mortality of 24·18 per 1 000 births, the corresponding rate for 1912 having been 18·05. Below are given the corresponding rates obtained from the numbers of deaths given in the Quarterly Reports of the Registrar-General, and it will be noticed that the rate for the Borough given there is 23·21, or 0·97 less than that arrived at by the Department. All the rates for 1913 are higher than those for 1912, notably so in the case of Hampstead, and, with the exception of that of Willesden, above the averages.

TABLE 45.

DIARRHEA.

Distribution of Known Attacks and Deaths.

			Dates of	f Onset.				Dat	es of De	eath.	
Week ending		1913.			All Case	s.	19	13.	A	ll Death	s.
	Recover-	Dying.	Deaths.	1913.	1912.	1911.	Cases Dying.	Deaths.	1913.	1912.	1911
June 7 14 21	6 4 4	_ _ _	=	6 5 5	1 6 6	2 7 7			_ 1 1	_ _ _	- 1 2
28 uly 5 12 19	11 8 5 9	1 1 - 2		12 9 6 11	5 3 6 4	5 7 12 16	- 1 1	_ _ 1	_ 2 1	2 1 2	1 - -
August 2 9 16	11 6 16 16	1 1 - 2	1 1 —	13 8 16 18	10 14 13 4	20 32 63 64	<u>-</u>	1 1 1	1 2 1	7 3 3	2 6 12 16
23 30 September 6 13 20	14 16 6 12 8	2 2 1 1 2	2 3 2 1 2	18 21 9 14 12	3 4 5 3 5	58 25 28 16 13	1 1 - 3	1 4 3 1 3	1 5 4 1 6	1 1 4 - 3	17 15 6 12 8
October 4 11 18	11 1 10 5	2 2 —	1 2 - 3	14 5 10 8	5 9 6 4	8 3 4 5	1 1 2 -	3 1 3 3	4 2 5 3	1 1 1	5 9 2 3
25 November 1 8 15 22 29	8 6 2 3 5	1 1 1 1 -	$\frac{-}{1}$	9 7 4 4 6	4 4 3 2 1	5 2 1 2	2 3 4 1	1 1 1	3 4 2 1	2 1 2 2 1	2 1 3 -
December 6 13 20	3 4 1 5	1 1 -	===	3 5 2 5	Inq	uiry sed		$\frac{1}{-\frac{1}{2}}$	1 - 4		uiry sed
Before June 1 After December 20	2			2			-1	=	1		
No date recorded	6	4	12	22	24	51	-	-	_		
Тотаця <b>1913</b> 1912 1911	222 115 330	33† 14 57	34 25 69	289	154	456	25 14 57	34 25 69	59	39‡	126

<sup>\*</sup> By "Dying" is meant "fatal cases known during life," and by "Deaths" those "known on registration of death only."

<sup>†</sup> Including 8 deaths from causes other than diarrhoea. Hence difference in the corresponding column of second half of the table.

<sup>‡</sup> Excluding 5 deaths from diarrhoea in institutions, the disease not having been contracted in the Borough.

"DIARRHEAL DISEASES."

Mortality at ages under 2 years.

Rates per 1,000 births.

1913	London. 27.50	Paddington. 23.21	Kensington. 23.82	Westminster. 23:34	St. Marylebone. 16:58	Hampstead. 13.57	Willesden. 12:38	
1912	12.29	15.50	12:01	17.82	11.57	0.81	4.59	
1908-12	21.13	21.36	22.64	15.35	16:36	5.72	18.08	

The quarterly distribution of the deaths at ages under 2 years recorded last year was —1st quarter, 7 deaths (males 4, females 3); 2nd quarter, 6 (males 4, females 2); 3rd quarter, 30 (males 20, females 10); 4th quarter, 30 (males 19, females 11). This distribution shows that the deaths in the fourth quarter equalled those in the third, an unusual occurrence. The extent to which such distribution varied from past experience is shown in the appended figures, which also show that the mortality from diarrhœal diseases was practically confined to the four northern Wards.

"DIARRHŒAL DISEASES."

Deaths recorded at ages under 2 years.

					0				
	Borough.	Queen's Park.	Harrow Road.	Maida Vale.	West- bourne.	Church.	Lancaster West.	Gate, East.	Hyde Park.
				Third Q	uarter.				
1913	30	2	3	2	7	15	_	_	1
1912	22	-	-	2	5	15	-	-	-
1908-1	2 39	4	7	5	8	14	0	0	1
				Fourth Q	uarter.				
1913	30	3	6	5	6	10	_	_	-
1912	9	3	_	_	1	5	-	_	-
1908-1	2 18	2	3	2	3	8	0	-	0

As a rule, the numbers of deaths of males and females are approximately equal, but last year those of males considerably exceeded those of females. For each death of a female from diarrhoea in the first quarter of last year there was 1·3 deaths of males, the average for the five years 1908-12 being 0·8. The corresponding proportions were: for second quarter, 2 (average 1·4); third, 2 (average 1); and fourth, 1·7 (average 1·1). For the whole year the deaths of males were, to those of females, as 1·8 to 1·0.

Since 1911 the deaths from the diarrhoeal diseases have been entered under the headings of "diarrhoea" and "enteritis," following the distinction made by the Registrar-General. In 1911 48:4 per cent. of the deaths recorded in the third quarter of the year came under the former heading and 51:5 per cent. under the latter. In 1912 the proportions were 54:5 and 45:4 per cent. respectively, and in 1913, 15:6 and 84:3 per cent., showing a considerable change in the practice of naming the disease—a change which implies the substitution of the pathological cause, an enteritis, for a symptom, diarrhoea, in the certificate of cause of death.

A third feature to which attention may well be directed is the increase in the proportion of deaths occurring in institutions. In the third quarter of 1911 21.6 per cent. of all diarrhœa deaths occurred in institutions, the proportion rising to 68.1 per cent. in 1912, and falling to 53.1 (17 out of 30 deaths) last year.

The "Diarrhoea Register" was opened on Monday, June 2nd, and closed on December 27th, the term of the inquiry being extended on account of the continuance of cases after the usual limit, which from previous experience is somewhere about the beginning of November. The co-operation of the hospitals and Poor Law Medical Officers was accorded as in previous years, and the School for Mothers made arrangements to supply the special preparations of milk which have been useful on former occasions.

The cases known through the inquiries made at the hospitals and the reports received from the Poor Law Medical Officers numbered 243, all in children under two years of age. In addition, 72 cases in persons over that age were discovered. An examination of the records kept

at the Infirmary, made in the early months of this year, showed that 12 other cases in children under two years old had been treated there during the time the "Diarrhœa Register" was open, but the Department had no knowledge of the cases at the time of their occurrence. Putting the numbers together, a total of 255 cases in children aged 0-2 years and 72 in persons aged two years and upwards were known during the lives of the patients. Among the former there were 33 deaths, while 34 other deaths (at ages 0-2 years) took place without the Department being aware of the patients' illness. The dates of onset of all cases and deaths are shown week by week in Table 45. The totals for the three years shown at the bottom of the table are not comparable owing to the longer duration of the inquiry last year. If the cases (and deaths) occurring subsequent to the week ending November 22nd be eliminated from last year's figures, and the attacks of unknown dates in all three years, the total numbers of cases become 250 in 1913, 150 in 1912, and 405 in 1911, and the deaths 53, 44, and 126.

The fatality among cases known during life was 12.9 per cent. last year, as compared with 10.8 in 1912 and 14.7 in 1911. Such statement, however, gives an incomplete view of the differences in the fatalities of the three years. Considering the cases "recovering" and "dying" (with known dates of onset) during the four months July to October, in two periods, it will be found (see below) that the fatality (persons) during July and August of last year was at the rate of 10.0 per cent. and that during September and October, 13.6 per cent. In previous years there was no corresponding increase in the fatality in the second period, and the September-October fatality during last year was higher than that recorded in 1911—the year when the diarrhœa epidemic was particularly severe.

		" DIAR	RHŒA."		
	Fatality	Rates. 1913.	Known	Cases. 1912.	1911.
July ) August }	 	10.0	***	5.4	 13.8
September ? October	 	13.6		56	 11.1

As in recent years, fly counts were obtained at selected spots in the Borough, from which the average numbers of flies per "cemetery" exposed were determined in each week. The results are given in Table 46, with the corresponding figures for 1911 and 1912, together with certain important meteorological data. The more important parts of that table are shown in graphic form in the chart facing page 86, and, as a contrast, the corresponding chart for 1912 has been reproduced.

Last year's chart\* presents the following differences from that of 1912:-

(i.) The absence of any "peak" in the curve of earth temperature, which failed to rise to the level attained in 1912, but continued at a lower level for a somewhat more extended period and fell away more slowly. In 1912 the falling curve crossed the line of 55° during the first ten days of October. Last year that point was not reached until the corresponding period of November.

(ii.) The rainfall was more evenly distributed throughout the period of observation, but was generally

less in amount in corresponding periods.

(iii.) The "fly curve" attained a first maximum at about the usual period (during the first ten days of August), then fell away some ten points, and in the last days of September rose to a second maximum (25 points approximately above the earlier). The second "peak" indicates that the flies at that date were about 50 per cent. more numerous than in August.

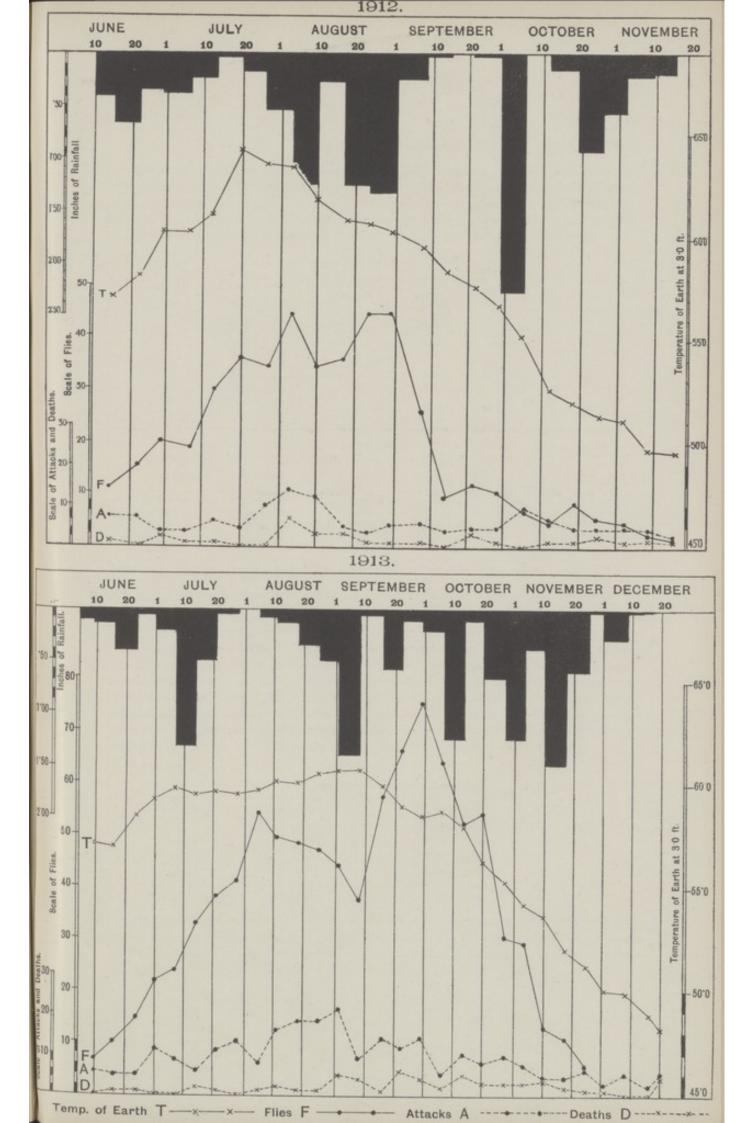
(iv.) The "attack curve" was at no time high, but continued throughout November, 1913, at a higher

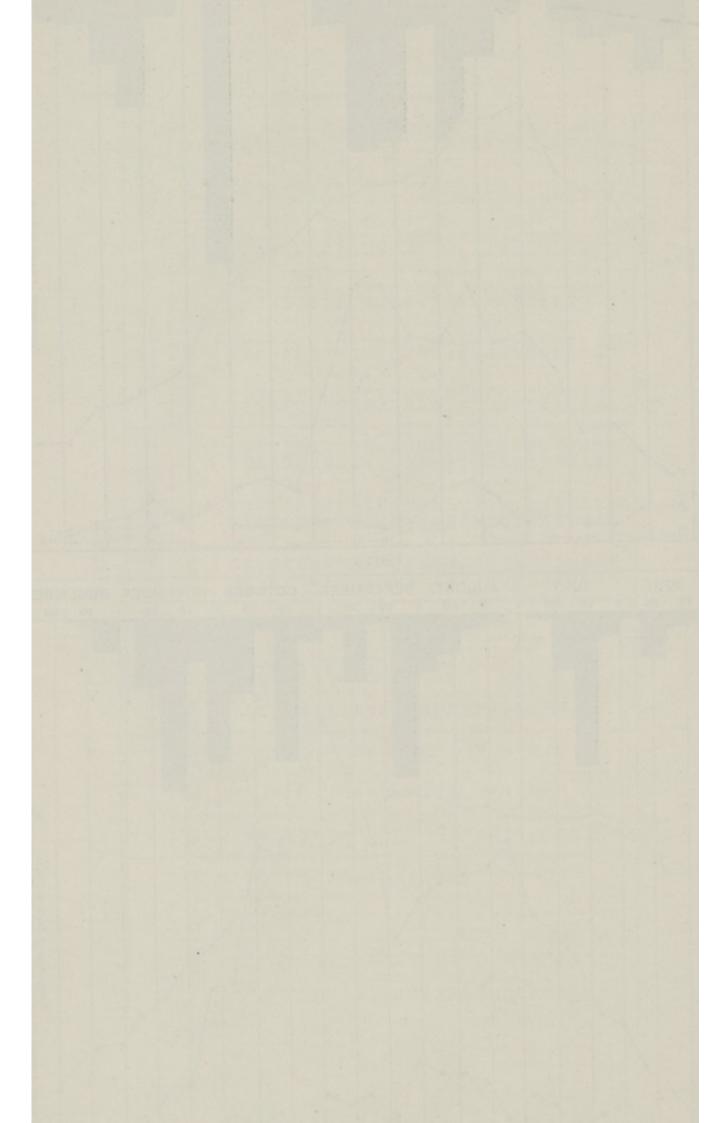
level than in 1912.

(v.) The interval between the curves of attacks and deaths was greater in 1913 than in 1912, during the true diarrhea season. Such change might be due either to a greater proportion of the true total number of attacks becoming known or to a lower fatality. Both factors are believed to have been operative.

<sup>\*</sup> It is to be regretted that it was found necessary to compress the 1913 chart horizontally to allow reproduction here. The result is a loss of correspondence of the vertical rules indicating the dates of the months.

Inquiry.		Cases.			Deaths.			Flies. verage Cemeter		. Eart Weel	th Tempera kly Mean a	ture. t 3 ft.		Temperat leekly Mea		Т	otal Rainf Inches.	all.
Inc	1913.	1912.	1911.	1913.	1912.	1911.	1913.	1912.	1911.	1913.	1912.	1911.	1913.	1912.	1911,	1913.	1912.	1911
				-		-				0	0	0	0	0	0	-		
1	6	1	2		-	-	7	6	7000	57.18	56-17	58.73	50.0	54.2	62.3	0-12	0.99	0.00
2	5	6	7	1	1	1	10	11	19	57:08	56.73	58.76	56.9	58.1	57.0	0.14	0.39	0.66
3	5	6	7	1	-	2	15	15	28	58.47	58.11	58.98	62.3	61.7	59.2	0.41	0.65	0.94
4	12	5	5		2	2	22	20	26	59-29	59.95	58.72	48.7	60.2	57.5	0.06	0.30	0:50
5	9	3	7	-	1	1	24	18	38	59.82	59.73	59.80	59.9	58-7	65.6	0.21	0.36	_
6	6	6	12	2	1	-	33	30	54	59.40	60.75	62.16	57.2	67.0	65.2	1.33	0.20	-
7	11	4	16	1		-	38	36	74	59.61	63.65	63.31	60.0	65.8	69.5	0.52	0.04	
8	- 13	10	20	-	-	2	41	34	103	59.45	63.22	65.17	57.7	64.8	71.0	0.05	0.16	0.2
9	8	14	32	1	7	6	54	44	86	59-73	63.09	66.11	59.5	57.8	68.0	0.00	0.54	0:0
10	16	13	63	2	3	12	49	34	121	60.24	61.57	66.43	57.1	57.6	72.5	0.09	1.26	0:0
11	18	4	64	1	3	16	48	36	153	60.10	60.48	67:06	60.7	56.2	69.4	0.14	0.23	0.5
12	18	3	58	1	1	17	47	44	141	60.58	60.22	66.39	60.9	57.2	63.9	0.36	1.27	0.2
13	21	4	25	5	1	15	44	44	194	60.62	59.74	65.36	62.8	56.9	65.3	0.51	1.33	0.4
14	9	5	28	4	1	6	37	24	148	60.63	59.08	64.63	59.1	54.8	66.9	1.43	0.21	0.0
15	14	3	16	1	-	12	57	9	104	59.96	58.01	64.19	58.0	52.4	60.3	-0.06	0.02	0.4
16	12	5	13	6	3	8	66	12	77	59-03	57:38	61.74	54.9	53.6	54.3	0.60	0.00	0.4
17	14	5	8	4	1	5	75	10	44	58.46	56.20	59.94	60.2	51.5	55.0	0.13	0.02	0.4
18	5	9	3	2		9	64	6	45	58.75	55.11	57.63	58.5	48.8	48.2	0.22	2.30	0.2
19	10	6	4	5.	1	2	52	4	25	57.84	52.62	55.99	52.9	46.0	51.9	1.28	0.00	0.2
20	8	4	5	3	1	3	54	8	15	56.30	51.93	55.92	52.8	49.8	54.5	0.12	0.13	0.3
21	9	4	5	3	2	2	30	5	10	55:31	51.55	55.42	49.3	45.4	48.5	0.69	0.88	1.9
22	7	4	2	3	1	1	29	4		54.25	51.17	52.78	54.1	49.1	48.4	1.27	0.55	0.6
23	4	3	1	4	2	3	13	2		53.53	49.54	51.75	48.3	47.2	44.5	0.40	0.18	1.1
24	4	2	2	2	1	-	11	1	1000	51.92	49.31	50.15	49.0	43.3	49.0	1.50	0.17	1.7
25	6	1	-	1	1	-	3			51.15	48.30	49.04	48.9	46.2	39.3	0.63	0.31	0.2
26	3			1					1	50.01	48.04	46-99	46.3	40.4	40.8	0.03	1.06	0.1
27	5			-					11	49.93	45.70	46.94	46.8	42.4	41.3	0.31	0.31	1.0
28	2			-						48.80	46.65	45.78	46.2	49.0	44.6	0.02	0.62	1.0
29	5			4						48.12	47.11	46.57	42.8	44.4	44.3	0.01	0.59	1.3





The sex-age distribution of attacks and deaths during the three years is shown in Table 47. At ages under one year the attacks among males outnumbered those among females in all three years, but last year the attacks in females aged 1-2 years were more numerous than the attacks among males at the same ages. The fatality among males, both at ages under one and at ages 1-2, were the highest recorded during the three years included in the table. (See below.)

			" DIAR	RHŒA."	
	1	Patality	Rates.	Known Cases.	
			1913.	1912.	1911.
			0-1	year.	
Males		***	26.4	11.8	22.8
Females	***	***	12.7	21.8	25
			1-2	years.	
Males		***	5.8		1.0
Females	***		_	3.7	5.4

-	m	*	**	E	- 4	in
-			- 2-2	 100	- 0	77

									Kno	wn	Ca	ses.													
			Re	cov	erin	g.				Dyir	ng.					То	tals.				1	Dea	ths.		
		1913 M.			12. F.			19 M.	13. F.	193 M.	12. F.	19 M.	11. F.	191 M.	13. F.	19 M.	12. F.	191 M.	11. F.				12. F.		
Ages in Months. 0—3 3—6 6—9 9—12	***	12 21	14 15	11 4 13 9	5	10 21 31 29	9 17 24 25	4	1	2 2 1	3	10 12 2 3	13	17 21 25 20	15 17	11 6 15 10	5 8 14 10	33		4 8 3 1	3 4	20 10 10	3	9 7 10 1	1
Under 1 year Aged 1—2 years	***	1 4 40		37 23		91 94	75 70	23		5		27		87 51		42 23		118 95	100 74			13		27 2	3.
Totals	***	112		140	55 15		145	-	7	5			29	138		-	64	-	174	19	-		10	-	40

An analysis of the attacks at ages under 9 months shows that of the total known attacks (92) 31 were in infants fed exclusively at the breast, 48 were entirely artificially fed (hand reared), and 13 had a mixed diet of breast and bottle food. The total fatality among these children was 21.6 per cent.; that among those fed at the breast only, 9.6 per cent.; among those fed artificially, 29.1; and among those on a mixed diet, 23.0. There were 26 deaths at ages under nine months of children whose illness was not known during life, 24 of those children being artificially fed, and the other two deaths were divided among the other forms of feeding.

"DIARRHŒA."
At Ages 0-9 months.

Method o Feeding.	f	Reco	vering.		Cases.	Tot	al.	Dea	ths.
		M.	F.	M.	F.	M.	F.	M.	F.
Breast		14	14	2	1	16	15	-	1
Artificial		19	15	11	3	30	18	15	9
Mixed	***	6	4	2	1	8	5		1
То	tals	39	33	15	5	54	38	15	11

Of the 59 deaths included in Table 45, 41 (69.4 per cent.) occurred in institutions, including 29 in the Infirmary and 5 at the Park (M.A.B.) Hospital. The 59 deaths included 14 (19.1 per cent. of the total) of illegitimate children, 6 being males and 8 females. Broncho-pneumonia was a frequent complication mentioned in the certificate of death.

HEALTH VISITING.—Up to the beginning of August the Department was unable to visit any of the new-born children and the work was in the hands of the School for Mothers. In August the Council retained the services of Miss Sullivan, the School's Visitor, on behalf of the Department, the School making new arrangements for its work.

Up to the end of July the School's Visitors "visited" 988 new-born infants, making altogether 4,050 calls. Of the children visited 832 (83.3 per cent.) were reported to be breast-fed, 90 (9.0 per cent.) artificially (cow's milk), and another 21 (2.1 per cent.) on patent foods, while 37 (3.8 per cent.) were having a mixed diet. The method of feeding of 18 (1.8 per cent.) was not recorded.

From the beginning of August to the end of the year 1,078 infants were visited, the calls made numbering 2,115. Breast-feeding was reported in 955 instances, artificial in 82, and mixed in 41. The proportions of infants receiving each form of diet were:—

Breast, 88.5 per cent. ... Artificial, 7.6 ... Mixed, 3.8

The live births notified during the year numbered 2,781 and the infants visited 2,066.

The date at which the first visits were paid varied from the 11th day after birth onwards. No analysis has been made of the ages of children found to be fed at the breast, but the subjoined statement of the ages of the other children will serve to indicate approximately the intervals which elapse between birth and the first visit.

# BIRTH VISITING. Ages of Children at First Visit. Methods of Feeding

					Artificial.		Mixed.
.2	(0-			***	-	***	-
-14	1-				8		2
Weeks.	12-				38	***	15
=	3-		***		12	***	9
16	(0-				58		26
Months.	1-				19		11
0	12-	***			2		2
M	(3-		***	***	3		2
			То	tals	82	***	41

Among the children visited after July, 35 were known to have died before the end of the year—that is, at ages 0–5 months. Of the 35 children dying, 22 were found to be breast-fed when visited, 10 artificially, and 3 were on a mixed (breast and bottle) diet. The 35 deaths were equivalent to a mortality of 32 per 1,000 children visited, that among the breast-fed being 23, that among the artificially fed, 122, and that among those on a mixed diet 73. In the whole population the infantile mortality at ages 0–5 months was equal to 66 per 1,000 births. The 35 deaths included 13 due to diarrhæa, 9 to respiratory diseases, 7 to premature birth, 3 to atrophy and debility, 2 to congenital syphilis, and 1 to tuberculous disease. Eleven of the deaths occurred in public institutions, including 9 in the Infirmary.

Two "Consultation Centres" for infants under one year old were maintained last year by the School for Mothers, which were attended by 582 infants with a total attendance of 3,377. In comparison with 1912, the children attending show an increase of 112, and the attendances of 472. Since July, 1913, a special centre has been open for children over one and under school age. The centre was open on 7 occasions, 33 children putting in 58 attendances. There can be no doubt about the value of this new centre, and it is hoped that it will develop into a popular and useful institution.

In reporting on her work, Miss Sullivan draws attention to the frequency of very young children sleeping with the parents—a fruitful cause of overlying. She found long tube bottles in use in five instances only, but, on the other hand, more than half the children had

"comforters" or "dummies," which are believed to be a cause of mouth deformation and bad teeth in later life. Her visits appear to have been generally welcomed, while she describes the Department's booklet on "Infant Rearing" as very popular.

FERTILITY RECORDS.-In the course of the visits made on new-born infants much information was collected with reference to the frequency of pregnancy, miscarriages, &c. Fertility records were thus obtained of 1,061 families, the majority being incomplete, as the mothers had not passed the climacteric. The 1,061 mothers had been pregnant 4,253 times, and had given birth to 3,944 living children, of whom 535 were dead at the time the last child (that of 1913) was born. The number of pregnancies of individual women varied from 1 (235 women) to 15 (2 women). In Table 48\* the data collected have been analysed+ to show the frequency of miscarriages, still-births, &c., associated with each successive order of pregnancy, the table being divided into two sections, of which the upper relates to families in which no children were reported as having died after birth and the lower to those families which admitted losing children who had been born alive. The former group included 510 women who had been pregnant 1,901 times. On 175 occasions pregnancy had terminated in miscarriage (132) or stillbirth (43), the remaining 1,726 pregnancies resulting in 1,736 living children, all of whom were reported to be alive at the time of the inquiry. The miscarriages formed 69 per cent. of the total number of pregnancies and the still-births 2-2. These women, up to the time of their deliveries in 1913, had families averaging 340 living children per 100 women.

In the families which had lost children, there were 316 mothers who had been pregnant 2,117 times, 126 (59 per cent.) of the pregnancies being reported to have been interrupted by miscarriage, and 52 to have resulted in still-born children. The still-births in this group formed 2.4 per cent. of the total pregnancies. The 1,939 pregnancies remaining over yielded 1,970 living children. In this group the families—again, in the majority of cases, incomplete—averaged 623 children per 100 women, sharply contrasting with the previous group. Of the 1,970 children born alive, 535 were reported to have been dead at the time of the inquiry, equal to a mortality of 271 per 1,000. The causes of death given by the mothers were too indefinite to make it worth while to attempt any classification.

In writing under "Notification of Births" it was stated that the percentage of still-births notified was 2.45 of all births. Opinions have been expressed in these reports and elsewhere to the effect that so low a percentage was evidence of the incompleteness of notification. Such opinions were based on Continental experience when the proportion recorded in many places is as high as 5 per cent., and in a few places reaches 7 per cent. It is singular that the analysis given in the preceding paragraphs shows a proportion (on the total of 4,018 pregnancies multiparæ) of still-births of 2.3 per cent. The agreement may be accidental, and it has to be remembered that the records here dealt with do not constitute a random sample of the whole population of the Borough. The infants visited are the offspring of parents who from poverty or other cause are deemed to be in need of advice and help.

Mortality in Special Areas.—Having regard to the prevalence of diarrhoea and to the high mortality from the respiratory diseases already noticed, it was expected that the infantile mortality in the "Special Areas," parts of the Borough occupied by the poorest inhabitants, would be higher last year than in 1912, and even than the average. The figures given in Table 49 show, however, that in "Hall Park," "North Wharf," and "Clarendon Street," all lying in Church Ward, last year's rates were less than those recorded in 1912, and that in "Clarendon Street" only was the 1913 rate in excess (by a single unit only) than the average for 1908-12. In the three other areas the 1913 rates exceeded those of 1912, and, in two of them, the averages.

<sup>\*</sup> Table 48 is a condensed statement of the original tabulation, which contains much information which cannot be dealt with here.

<sup>†</sup>The table deals only with the pregnancies subsequent to the first. Last year 238 children born to 235 primiparous women were included among the infants visited.

TABLE 48.
FERTILITY RECORDS
Multiparæ.

of Preg-	o, of thers,			Misc	arria	mes.					Seill b	irths.												Ch	ildren	1									
ancy.	No. Mothe			24100		Pen					Jeni-0	utus.								В	orn A	live.								D	ying :	after	Birth.		
		0	1	2	3	4	5	6	0	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7
2 3 4 5 6 7 8 9 10 11 12 14 otals	180 109 93 48 29 19 17 3 4 6 1	167 103 69 42 19 14 12 2 1 2 	13 6 15 1 4 3 3  1 	 9 5     3 1	6 2 1 1 1 1 1	:: :: :: :: :: ::		i	170 104 88 43 28 16 15 1 4 6 1 1		··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	:: :: :: :: :: :: ::	i :: :: :: :: :: :: :: :: :: :: :: :: ::		23 3 1 27	154 5 9  1 	3 100 20 7 6  	_	36 3 1 1 	2 18 5 1 1 1 	   10 3 1 1   1	_	1 3		· · · · · · · · · · · · · · · · · · ·				) 1	None					
2 3 4 5 6 7 8 9 10 11 12 13 14 15	27 17 40 38 37 43 33 20 21 17 12 2 7	27 14 37 36 32 34 24 13 15 6 7	3 2 2 5 6 5 2 1 3 1 1	··· 1 ·· 3 3 2 2 5 2 1 4 ··	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	· · · · · · · · · · · · · · · · · · ·		27 16 39 36 33 36 27 13 17 16 9 1 5	1 1 2 2 6 3 6 2 1 1 	··· ·· · · · · · · · · · · · · · · · ·					23 4 1	# 13 3	32 3 3 1 1 	32 4 3 1 3 1 	30 12 5 1 1 	25 6 2 1 1					· · · · · · · · · · · · · · · · · · ·			26 14 35 23 20 24 16 8 6 6 3	1 3 5 13 13 15 9 7 7 5 4 2			· · · · · · · · · · · · · · · · · · ·	    	
otals	316	248	31	23	8	5	1		276	28	12					28	20	40	48	52	35	33	17	20	12	8	1	2	182	85	26	15	5	1	

Note.—The italic figures indicate multiple births (twins).

TABLE 49. Infantile Mortality.
Special Areas.

	Special Area.		19	13.	Inf	antile Mortal	ity.*
	Special Area.		Births.	Deaths.	1913.	1912.	1908-12.
Ward.							
	"Hall Park"		124	12	96	113	106
V.	"North Wharf"	+++	98	13	132	142	159
	"Clarendon Street"		311	54	173	175	172
IV.	"Alfred Road"		142	15	105	99	124
III.	"Amberley Road"		77	10	129	99	127
I.	"Queen's Park"	***	243	28	115	102	89

TABLE 50. INFANTILE MORTALITY. Causes of Death and Mortality Rates.

		Dea	iths.	Infantile	Mortality.*
Cause of Death.		Combined Areas.	Rest of Borough.	Combined Areas.	Rest of Borough
NOT CERTIFIED		-	_	-	-
Measles		7	6	7.03	2.96
Diphtheria			1	-	0.49
Whooping Cough	***	6	5	6.03	2.47
Diarrhœa (all forms)		32	31	32.16	15.31
Premature Birth		19	43	19-09	21.24
Congenital Defects	***	6	5	6.30	2.47
Injury at Birth	***	_	2	_	0.98
Want of Breast Milk		-	2		0.98
Atrophy, Debility	***	1	4	1.00	1.97
Atelectasis	***	7	2	7.03	0.98
Debility at Birth		2	10	2.01	4.94
Tuberculous Diseases	***	2	4	2.01	1.97
Erysipelas			1		0.49
Syphilis		2	4	2.01	1.97
Rickets		-	1		0.49
Meningitis			2	_	0.98
Convulsions		2	5	2.01	2.47
Respiratory Diseases		37	32	37.18	15.81
Suffocation (Overlaid)		2	1	1.00	0.49
Other Causes		7	12	7.03	5.92
ALL CAUSES		132	173	132-66	85-47
Under 1 month		28	67	28.14	33.10
Aged 1—3 months		33	34	33.16	16.79
Under 3 months		61	101	61-30	49-89
Aged 3—6 ,,		36	25	36.18	12:35
6—9 "		16	28	16.08	13.74
9—12	10000	19	19	19-09	9.38

Ages at Death.

11

Rest of Ward... 107

In Westbourne Ward the elimination of the "Alfred Road" Area raised the rate for the "Rest of the Ward" last year, but in the other instances the rate for the "Rest of the Ward" was lowered. (See below.) In that Ward the rate for the "Rest" was higher than the 1912 rate and the average. In Maida Vale Ward the rate for the "Rest" was lower last year than in 1912 and the average.

				INF.	ANTILE	MORTAL	ATY.						
Wards.	I	Oueen'	s Park.	III	Mai	da Vale.	IV.	-West	bourne.	V.	Chu	rch.	
	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	
Vhole Ward						97							
Special Area(s)						127							

89 ... 132

89

112

109 ... 109

The total mortality for the combined "Areas" was 133 per 1,000 births, as compared with 85 in the "Rest of the Borough." The comparison of the mortality rates from the various selected causes of death given in Table 50 shows that measles, whooping cough, diarrhea, congenital defects, atelectasis, and the respiratory diseases were the factors giving rise to the higher mortality.

98

108 ... 63

71

At ages under one month (Table 50) the mortality in the "Areas" (28·14 per 1,000 births) was less than that recorded in the "Rest of the Borough" (33·19). At ages 1-3 months the mortality in the "Areas" was more than double than in the other parts of the Borough, and ages 3-6 months nearly three times. Looking at the age distribution of mortality in the areas, and the mortality from the developmental diseases (the result of ante-natal paternal causes rather than of environment), there is good reason for thinking that the high mortality in the "Areas" is not the result of inherited debility, but of parental ignorance and, to a less extent, of environment. Individually the children born in the "Areas" are as well, if not better, fitted to survive to adult life than are (on an average) the children born in other parts of the Borough.

## AT AGES ONE TO FIVE YEARS.

For the purpose of measuring the mortality at these ages the numbers of survivors at each age are taken out annually. Last year it was estimated—at the beginning of the year—that there were 10,404 children aged from 1–5 years in the Borough among whom 174 deaths were recorded during the succeeding twelve months. By the use of survivors and not estimated populations at these ages the numbers fluctuate irregularly from year to year, as the number of survivors in any given year will be materially affected by the rise and fall in the preceding years of the mortality from the various diseases. At the beginning of 1912 the number of survivors was 10,638, among whom there were 124 deaths during that year. Estimates of survivors for the Wards of the Borough have been made since 1906 only in the case of children aged 1–2, and from a year later in the case of each of the higher ages. Consequently at ages 4–5 years estimates are available from 1909 only, and hence averages for four years only are submitted at those ages.

The mortality in the whole group 1–5 years was 1672 per 1,000 survivors last year, and showed an increase of nearly 50 per cent. over the rate recorded in 1912 (11.64), and one of more than 25 per cent. above the four-year average (13.31). The mortality rates for each of the four age periods were higher than those observed in 1912 and also than the averages. (See below.) The increases were proportionately greater at the first two ages than at the others. The rate at ages 2–3 years showed the smallest increase above the 1912 rate, and that at ages 3–4 above the average.

#### MORTALITY RATES.

			Per 1,0	000 Estimate	d Survivi	ng Persons.		
	Ages	1-		2-		3-		4-5
1913		38.57		13.04	***	7.65		6.62
1912		23.55		12.84		6.57	***	4.25
1908-1	12	29.41		11.58	***	7.05		5.68 (1909-12)

When the rates for each sex are examined (see below), it will be found that those for males were, with the exception of the first age, lower than those recorded in 1912 and, except at ages 2-3, than the averages. In the first age group there was a considerable increase in comparison with 1912, but a smaller one in comparison with the average. In neither instance was the increase commensurate with that observed in females. At each age the rate for females showed large increases over the 1912 rate and the average. In fact, the increase noted in the rate for the whole group 1-5 years is attributed to the higher mortality among females.

# MORTALITY RATES Per 1,000 Estimated Surviving.

			1-		5	2_		}_	4.	-5
		M.	F.		M.	F.	M.	F.	M.	F.
1913		37.7	39.6		12.8	13.3	 5.4	99	 3.8	9.5
1912		24.1	22.9		15.9	9.8	 83	4.7	 5.6	2.8
									1909	-12.
1908-1	2	35.3	27.8	***	12.3	10.8	 7:0	7.0	 6.2	5.1

The mortality rates from certain selected causes of death are shown in Table 51. The increases noted at ages 1–2 in males were due to excessive mortality from measles, whooping cough, diarrhea and the respiratory diseases, those among females to measles, whooping cough, and the respiratory diseases. Increases in the mortality among males aged 2–3 have to be noted from whooping cough, scarlet fever, and the tuberculous diseases, and among females from measles, scarlet fever, whooping cough, and the diarrheal, tuberculous and respiratory diseases. At ages 3–4 the only disease with a higher mortality among males was diphtheria, while among females nearly every disease showed higher mortality. At ages 4–5 diphtheria and accidents were the only causes showing increased mortality among males, but among females higher rates were due to measles, whooping cough, diphtheria, congenital malformations, and "other causes." The conclusion which may be framed from this brief survey is that the increased mortality noted in the whole group 1–5 years was due to the prevalence of the zymotic and respiratory diseases and the specially high incidence on females.

In Table 52 the mortality rates recorded for each sex at each age in each Ward of the Borough are compared with the 1912 rates and the averages. The feature of the table which will first strike the eye is the contrast between the mortality occurring in the five northern Wards and that occurring in the three southern. Large increases will be noted in the northern Wards at ages 1-2, both among males and among females.

#### MORTALITY AMONG ILLEGITIMATE CHILDREN.

The deaths of 48 illegitimate children were recorded last year in the Borough, including 7 of non-resident children. In outlying districts 13 other deaths were recorded belonging to the Borough, the corrected total being 54 deaths as compared with 44 in 1912. Inquests were held with reference to 10 of the deaths.

The 54 deaths were equally divided between the two sexes, and only one of the children (a male) was above the age of 5 years. At ages under 1 year there were 39 deaths (18 of males and 21 of females), and at ages 1-5 years, 14 (8 of males and 6 of females). Four of the deaths (all of females) were allocated to Hyde Park Ward, the remainder to the five northern Wards. The maximum number allocated to any Ward was 18 (Church Ward, 12 of males and 6 of females). The deaths are distributed according to cause, sex, and age in the appended statement. More than half the deaths (26) were due to the diarrhocal and respiratory diseases.

TABLE 51.

MORTALITY AMONG YOUNG CHILDREN.

			1-	-					2	-					3-	-					4-	-5		
	. 1	fales.		F	emales.			Males.		1	Female	5.		Males.		1	emale:	i.		Male	ş.	1	emale:	S.
	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1909-12.	1913.	1912.	1909-12.
deasles	8·87 0·73	3.89	7·71 0 68		5:35	6·86 0·14	2·39 0·79									3·03 0·75		0·74 0 58		0.71	0·71 0·36	0.79	=	0.74
Vhooping Cough Diphtheria	5.17	1·55 0·77	3·84 0·43	7:44	3.06	1·92 0·43		0·75 —	0·71 0·41	3.13	0·75 —		1.54	_	0·28 0·90	2.28	1.58	1-90 0-87		_		1·58 1·58	0.70	0.74
Diarrhœa	0·73 4·43	3.11	3·16 0·29	0·74 1·48	3.06	3·04 0·73	-	=	0.15	0.78	=	0·15 0·15	=	=	_	0.75	_	0·14 0·28		0·71 —	0·18 —	_	=	=
Congenital Malformations	-	0.77	0.29	-	0.76	0.15	-	0.75	0.30	-	-	-	_	-	-	_	-	0.14	_	-	-	0.79	-	-
Debility	-	-	-	-	-	0.14	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-	-	-
uberculous Diseases	0.73	4.67	3.91	1.48	0.76	1.74	2.39	1.51	1.43	2.34	2.25	1.94	0.77	0.75	1.42	0.75	1.58	0.60	0.76	-	1 07	-	0.70	0-7
Syphilis Rickets Convulsions Dentition	0·73 - 0·73 -	0·77 —	 0·43 0·57 0·14	=		0·14 0·42 0·14	0.79	_ _ 0·75	- - - -	1111	=======================================	- 0·21			= = =	==		- 0·14 -			_ 			=
Respiratory Diseases Accident and	12-57	5.45		11.16			3.99				-		1.361161			0.75	0.79				0.89		1.40	0.9
Violence Other Causes	2.95	3:11	0.28	3.72		2.95		0.75			0.75	0-29			0.14		_	0.58		1.42	0.35	3.97	_	1.1

MORIALITY IN CHILDROOP.

TABLE 52.

MORTALITY AMONG YOUNG CHILDREN.

				1	-					2-	-					3-	-					4-	-5		
			Males.		I	emales			Males.		F	emales			Males.		F	emales			Males.		F	emales	
		1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1908-12.	1913.	1912.	1909-12.	1913.	1912.	1909-12.
Queen's Park		33.0	27.8	28-1	44.4	32.0	26.7	11.5	17.6	13.4	39.7	10.8	10:2	12.0	-	3.1	5.5	6.5	3.3	_	10.4	9.1		_	4.
Harrow Road		21.5	12.3	20-2	22.1	15.7	17-6	9.3	26.8	10.4	3.2	6.6	6.7	3.1	6-6	4.6	10.0	-	4.0	3.3	5.0	5.5	11.1	-	5
Maida Vale		34-0	28.7	39.0	31.9	_	17.9	5.9	5.9	10:0	5.3	5.1	6.5	5.9	5.9	7.7	5.2	11.6	14.2	5.9	_	-	11.8	5.5	2
Vestbourne		36.4	53.7	40.1	47.3	34.8	24.7	11.4	4.6	10.6	16.0	15.5	10.0	-	4.6	6.6	10.5	5.0	8.6	4-9	-	6.4	15.1	4.5	3
Church	***	65.3	23-6	50-6	71.2	31.5	47.6	17:3	24.3	20.4	13 0	12.7	21.5	7.1	13.1	13.5	12.9	5.7	8.3	6.7	10.4	8.0	11.3	6.8	8
ancaster Gate																									
West		-		11.6	_	43.5	14.6		_	-	_	-	7.4	_	-	_	-	_	_	_	-	8.6	_	-	-
East		62.5	-	22.0	-	38.4	14.8	25 0	_	6.4	-	37.1	7.4	_	33.3	6.7	-	-	6.1	-	58.4	14.6	_	-	7
Tyde Park		31.2	-	15.7	_	12-6	12.6	31.7	200	4.3	_	_	54	12.0	22.4	4.5	25.0	12.7	7.5	_	_	9.2	_	_	2

#### Causes of Death.

				(	)_		1	-		5	
				M.	F.		M.	F.		M.	F.
Measles		***	***	1	_		2	1		_	
Scarlet Fever				_				1		-	
Whooping Cough	***	***	***	-				1		_	-
Diphtheria				_		***	1	_		_	
Tuberculosis				1	_		1	1		_	
Syphilis				1	2		-	_		_	
Respiratory Disea		***		6	2		2	1	***		
Diarrhaa				6	8	***	Ĩ	_			
Premature Birth				2	5	***		_			
Congenital Defect				1	1	-			***		
Atrophy, Debility		ocaoco	***			***	-	-	131	-	
	***	***	***	-		***	-	1	***	-	170
Violence	***	***	***	-	1		-			1	
Other Causes	3	***			2		1	_		_	-
				-			-	-		_	_
All Caus	ses			18	21		8	6		1	

Inquests were held with reference to 10 deaths.

The infantile mortality among these children was at the rate of 234 per 1,000 children (ot both sexes), 14 per 1,000 higher than in 1912, but 16 per 1,000 less than the average. Last year the mortality among females was considerably greater than that among males (see below), and the rate for the former sex was more than 33 per cent. above the average. The mortality among these children compares very badly with that among legitimate children, 234 as against 89 last year. The latter figure is the lowest so far recorded in the Borough.

# MORTALITY RATES Per 1,000 Births (Corrected).

	Leg	itimate.		Illegitimate.							
	Males.	Females.	Persons.	Males.	Females.	Persons.					
1913	 104	72	89	267	310	234					
1912	 105	75	90	309	124	220					
1908-12	 109	87	98	265	235	250					

The occupations of the mothers are shown below. Domestic servants furnish the bulk of the illegitimate children dying at these young ages.

# OCCUPATIONS OF MOTHERS.

Servants	***		***		***			***	***		34
" Servant	"			11	Lady	y's-maid				2	
General S	Servant	***		8	2000000	sekeeper				1	
Housema	id, Parlo	ourmaid		8	Nur	semaid				1	
Cook, Sc	ulleryma	id		3							
Others		***			***	***		***			12
Laundry-	worker			2	Wait	ress, Ba	rmaid	***	***	2	
Charwon	an			2		ic Hall			***	1	
Dressmal	er, Need	llewoma	ın	2	Win	dow Cle	aner			1	
Teacher		***	***	2							
No Occupatio	n	***		***			***				1.
Occupation no	ot stated	***									7

# ADMINISTRATIVE WORK.

The only change made in the Staff of Inspectors during the year was the engagement by the Council (from August 1st) of the Visitor employed by the School for Mothers for "Birth Visiting."

Summaries (a) of the principal items of work carried out during the year by the District Inspectors will be found in Table 53, (b) relating to Food, Housing and Miscellaneous Matters in Table XIV., Appendix, and (c) of Classifications of Outworkers, Factory and other premises, and inspections made under the Factory Acts in Table XIII., Appendix.

PREVENTION OF INFECTIOUS DISEASE.—The visiting and supervision of cases of infectious disease was divided between the District Inspectors and the Women Inspectors, the former taking the principal (notified) diseases and the latter puerperal fever, tuberculosis, and the various non-notified infectious diseases.

The District Inspectors made 2,258 calls during the past year, as compared with 1,976 in 1912, 1,812 in 1911, and 2,098 in 1910. The increase noted last year in comparison with 1912 was due mainly to the prevalence of scarlet fever. Last year 777 patients were removed to hospital, a considerable increase over the number removed in 1912 (523). In 1911, 435 patients were isolated in hospital and in 1910, 406. The patients kept at home decreased from 53 in 1912 to 28 last year.

The Women Inspectors made 6,384 calls with reference to the diseases assigned to them, calls in connection with tubereulosis constituting nearly one half of the total. Last year's total was notably higher than that of 1912 (4,441), or even of those of 1911 (5,520) and 1910 (5,181), when it was thought that the number of calls required had reached high-water mark.

1913.	1912.	1911.	1910.		1913.	1912.	1911.	1910.
Measles 1,171				Chickenpox	582	557	545	461
Whooping Cough 637				Diarrhœa	. 837	433	1,369	410
Consumption 3.149				Puerperal Fever	8	23	8	22

The number of visits made by the Women Inspectors for all purposes showed a slight decrease last year, falling from 10,627 in 1912 to 10,592 in 1913. The latter figure, which does not include the visits in connection with new-born children, represents the work of the two Women Inspectors assisted (for three months only last year) by a student inspector. The decrease noted is due to the absence of such assistance during the greater part of last year rather than to any diminution in the number of visits required. It was found necessary to give up all visits in connection with ringworm last year. The steady increase in the work of this section of the Staff is shown by the appended figures:—

	Ouarte	rs 1.	2.	3.	4.
1913		2,070	2,858	2,649	3,015
1912		2,644	2,837	2,322	2,824
1911		2,028	1,863	2,133	1,308
1910		1,878	2,425	1,493	1,483

Last year 136 patients suffering with measles and whooping cough were admitted to the Hospitals of the Metropolitan Asylums Board, as compared with 107 in 1912 and 102 in 1911—the first year patients were admitted for either of these diseases. The admissions for measles numbered 100 (74 in 1912), for whooping cough 32 (the same as 1912), and for whooping cough and measles (combined), 4.

No warning letters were issued to midwives last year, 6 having been issued in 1912, and 4 in each of the years 1911 and 1910.

DISINFECTION.—Last year 3,100 rooms were sprayed, as compared with 2,274 in 1912, 2,857 in 1911, and 2,941 in 1910. Disinfection was effected privately in 28 instances, as compared with 25 in 1912, 10 in 1911, and 25 in 1910. Three hundred and forty-eight (348) rooms were disinfected after consumption (318 in 1912), 226 in 1911, and 171 in 1910.

The bedding, clothes, &c., dealt with by the contractors weighed close upon 61 tons (50 tons in 1912 and 1911), while the expenditure amounted to £1,226. Twenty-four complaints were

TABLE 53.

Report of the Work of the District Inspectors during the Year 1913.

	ď.		Inspec	tion o	of						S	anita	ry W	orks (	Comp	leted	in D	wellin	g Ho	uses.							R	To egula	te
	receive		Dwelling	Hou.	ises.				Drain	nage,	&c.				W	Vater	Supp	ly.		Re-		M	iscella	ineou	5.		Ke	eping nimal	of
Quarters.	No. of Complaints received	"House-to-House,"	On Complaint or after Illness.	Cellar Dwellings.	Re-inspection of all kinds.	Entire Reconstruction.	Drains Relaid, Trapped, or Ventilated.	Drains Repaired and made Sound.	Waste-pipes Disconnected.	Rainwater-pipes Disconnected.	W.C., New Provided, Repaired, &c.	Soil-pipes, New Provided.	Soil-pipes Repaired.	Soil-pipes Ventilated.	Services Separated.	Supplies Reinstated.	Cisterns, New Provided.	Cisterns, Cleansed, Repaired, &c.	New Provided.	Repaired, &c.	Drains Cleared, Flushed, &c.	Houses or Rooms Cleansed, Whitewashed, &c.	Cases of Overcrowding Abated.	Cellar Dwellings Closed.	Yards and Areas Paved and Drained.	Roofs Repaired.	Manure Receptacles Reconstructed, &c.	Accumulations Removed.	Improperly kept,
First	151	21	432	-	3,427	34	11	10	51	10	105	6	5	9	9	7	4	15	13	9	12	35	8	8	12	10	-		-
Second	127	38	536	-	3,078	32	17	23	57	26	74	21	3	12	12	5	-	17	18	3	10	47	3		12	13	-	-	
Third	138	-	425	-	2,899	31	6	13	47	9	68	19	1	8	18	2	-	14	39	5	4	30	-	-	7	7	-		-
ourth	124	_	423	-	3,461	30	14	28	29	12	104	26	7	3	10	4	-	10	14	3	7	20	1	-	6	5	-	7	
Year	540	59	1,816	_	12,865	127	48	73	184	57	351	72	16	32	49	18	4	56	84	20	33	132	12	8	87	35	-	7	_

received with reference to disinfection, relating chiefly to missing articles, which were subsequently returned.

No progress was made during the year in the direction of finding a site for the proposed disinfection station.

WATER SUPPLY.—During the year 44 notices of discontinuance of supply were received from the Metropolitan Water Board in pursuance of Section 48 of the Public Health (London) Act, 1891, as compared with 62 in 1912, 41 in 1911, and 74 in 1910. The causes for the discontinuance of supply during the past year were reported to have been:—

Premises vacated ... ... 17 (33) | Non-payment of rates ... ... 20 (26)
Defective water fittings ... ... 7 (1)

· The italic figures show the corresponding numbers in 1912.

The inhabited houses from which the supply was cut off numbered 21. In 5 instances the supply was restored without notice being served by the Department. One summons was issued, but the water supply was reinstated before the date fixed for the hearing.

MORTUARIES.—During the year 333 bodies were deposited at the Paddington Green Mortuary, being 50 more than in 1912.

Number of bodies deposited	***					333	(283)
Coroner's cases	***	***	111	***		253	(227)
Awaiting burial :							
Infectious		***		***			(3)
Non-infectious	***		***		***	78	(53)
P.M. examinations	***				***	120	(99)

The italic figures show the corresponding numbers in 1912.

Schools.—Last year 863 notices were sent to head teachers of schools in connection with the notified diseases (562 in 1912), and 3,091 with reference to other diseases, measles, whooping cough, and chicken-pox (2,116 in 1912). In addition, 637 letters were sent re "school sickness."

Table 54 shows the numbers of attacks of the infectious diseases of which cognizance is taken by the Department in the persons of scholars (P.A. cols.) and the frequencies of attacks (P.N.A. cols.) in the persons of non-scholar members of families of school children.

Scarlet Fever.—Last year 298 scholars were attacked with scarlet fever, as compared with 139 in 1912, the non-resident children included in those figures numbering 49 in 1913 and 23 in 1912. The attack rates last year were 13.6 per 1,000 in Provided Schools and 18.6 in Non-Provided, while the corresponding rates for 1912 were 6.8 and 8.0, eloquent evidence of the prevalence of the disease during the past year. In proportion to the numbers on the rolls the disease was most prevalent in St. Saviour's, Wilberforce, and St. Luke's Schools. It will be noticed that the numbers of attacks were considerably increased by cases in outside districts in Kilburn Lane and St. Augustine's Schools, the patients being principally residents of Willesden. The attacks in other members of scholars' families recorded last year were fewer last year than in 1912. In that year the ratios in Provided and Non-Provided Schools were 3.3 and 4.4 per 1,000 respectively, and the ratios of attacks in scholars 6.8 and 8.0. Last year with ratios of attacks in scholars of 13.6 and 18.6, the ratios of attacks in other members of the families were 3.8 and 6.2. Several of the schools gave rise to anxiety from time to time and formed the subject of frequent communications with the School Medical Officer of the County.

Special inspections were made of the children at Beethoven Street, Kilburn Lane (twice), and St. Stephen's Schools.

Forms "M.O. 117," reporting suspicious absences from school, were received from the School Medical Officer with reference to:—

Moberly School, during June, relating to four children; St. James', twice during July, relating to five children; Kilburn Lane, twice during September, relating to five children; and St. Saviour's, during October, relating to one child.

TABLE 54.

ed.	N	otified I	Diseases.			Non	-notified	Disease		
s Provided	Scarlet	Fever.	Dipht	heria.	Meas	des.	Chicke	npox.	Whoo	oping igh.
Places	P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.	P.A.	P.N.A.
Amberley Road 1,610 Beethoven Street 1,161 Campbell Street 972 Droop Street 1,100 Essendine Road *1,821 Harrow Road (Moberly) 1,586 Kilburn Lane 1,323 Royal Oak (Temporary) 270	12 20 (1) 14 (2) 7 21 (1) 28 (2) 30 (11) 2	4 (1) 5 (2) 5 (1) 3 (1) 10 (2) 4 (1) 7 (4)	13 13 4	4 2 7 6 (1) 4 (2) 2 (1)	17	25 40 27 (1)		23 8 24 27 14 7 1 5	33 34 1 15 63 22 24 (5)	52 22 1 23 30 27 (3 19 4
Totals 9,843 Ratios per 1,000	134 (17) 13·6	38 (12) 3·8	47 (2) 4·7	25 (4) 2·5	285 (31) 2849	289 (4) 29·3	239 (5) 24·2	109 11·0	194 (5) 19·7	178 (3 18 0
Bayswater Jewish 396	4 (3) 4 (2) 12 (26 (24) 15 1 1 12 (2) 	- (1) (1) (4) (2) - (6) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	5 3 7 (7) 11 3 (2) 1 3 (1) 1 3 2 4 3 (1) 7 9 (2) 9 (3)	2 (1) 2 1 1 (1) 2 1 1 1 (1) 2 (2)	43 11 (2) 13 (1) 1 ———————————————————————————————————	37 25 8 (4) 16 6 7 8 (3) 3 	42 2 (1) 13 3 	12 - 1 - 1 1 1 6 2 5 3 6	28 4 (2) 7 18 (3) — 6 — 8 3 (2) — 8 15 13 (4) 2 (1)	3 10 (3 - 1 3 9 - 13 6 6 6 6
TOTALS 8,791 Ratios per 1,000	164 (38) 18·6	55 (15) 6·2	72 (16) 8·1	29 (13) 3·2	230 (19) 26·1	189 (8) 21·4	187 (32) 21·2	7:0	144 (35) 16·3	80 (5
SPECIAL— B'avingtonRoad(M.D.) 85 Kensal Ho. (Tuberculosis) 90	2 1 (1)	2 (2)	1	=	_	3	-	-	=	1
SECONDARY— Saltram Crescent Paddington and Maida Vale High	3 (1)	2 (2)	1(1)	- 1	-	3 — 5 (3)		-		1
	-	1 (1)	1 (1)	1	-	5 (3)	-	-	-	-

"P.A."—Patient attending school - "Scholars." "P.N.A."—Patient not attending school—"Contacts."

Non-resident cases shown in parentheses are included in the figures preceding them.

\* Including 176 in Physically Defective Department.

A good many other children were specially referred by the School Medical Officer to the Medical Officer of Health from the schools mentioned and from others. None of the children were allowed to resume attendance until certified free from any indications of infectious disease. It is interesting to note that on several occasions the date of sickening (in certified cases of scarlet

fever) preceded by some days the date of last attendance at school, but that it has been impossible to trace any spread of the disease to that source. On the other hand, at one school at least, a patient recently discharged from hospital appeared to be the origin of a small group of cases.

Diphtheria.—The attacks of diphtheria in scholars of Provided Schools numbered 47 last year, as compared with 87 in 1912, the ratios per 1,000 scholars being 47 and 87 respectively. In Non-Provided Schools there were 72 attacks last year, an increase of nearly 50 per cent. above the number recorded in 1912 (50), the ratios being 81 in 1913 and 56 in 1912. The excessive proportion of non-resident scholars attacked (16 out of 72) in Non-Provided Schools is worthy of note.

Form "M.O. 203" was issued to-

Amberley Road (Infants) in January; Campbell Street (Boys) in November; St. James' (Mixed and Infants) in September and October.

Special inspections with "swabbings" were made at-

Amberley Road (Boys) in December; Campbell Street (Boys) in December; Droop Street (Infants) in September; St. James' (Mixed and Infants) in October (3 times); St. Mary Magdalene's (Girls) in December; and St. Stephen's (Infants) in September and November.

On each occasion children were excluded and not allowed to return until after further swabbing with negative results.

Measles.—The appended statement clearly shows the prevalence of measles during the past year. It will be noted that all children under 5 years of age were excluded from Wilberforce School in February, the order remaining effective for 36 days, and that all children on the "O.M." list (those not previously attacked with measles) were excluded from Amberley Road for 19 days during June. The exclusion of children from school for whooping cough is comparatively rare.

"UNPROTECTED" CHILDREN EXCLUDED: MEASLES.

St. Paul I lan. 17 7 days St. Luke I Feb	. 28	Duration of 10 days
St. Paul I lan. 17 7 days St. Luke I Feb	. 28	
St. John, Titchborne St. C ,, 20 4 ,, Beethoven Street B Mai		E
Essendine Road B , 17 11 , , D , ,	14	
" D Apr. 21 18 " " A "	17	2 "
B May 28 16 ,, , , F , ,	25	2 "
А "30 14 " " С Дря	. 10	9 "
Nov. 11 17 ., A may		
Droop Street E Jan. 20 4 " " " " " "		
Feb. 7 14 , St. Stephen A <sub>2</sub> and A <sub>3</sub> Ma		
, Apr. 16 16 , , , B <sub>1</sub> ,,	10	
A May 8 15 ,, , B <sub>2</sub> ,,	17	
" G 19 11 . Amberley Road E "	10	
" F 22 15 H Ma	14	9 "
Kilburn Lane F and F <sub>1</sub> Jan. 22 16 " " G "	23	
F Feb 4 10 L	26	
" " B 6 8 " K "	27	
E and F	29	15 ,,
" " B and I Jun	e 4	9 ,,
All	**	19 .,
Fab 6 8	. 3	15 ,,
11 11 11 11 11 11 11 11 11 11 11 11 11	r. 14	
Mar 17 9	17	
" May 29 15 Our Lady of Dolours D Ma	y 16	
A Tom	e 16	
St. Matthew Inch 9 4		
" " " B fan 91 7 " D	4.4	
" A Feb 17 11 Campbell Street C AD		
B Ma	y 16	
A Jun		18 "
9		
HOLY ITHILLY L		0 0
H 44 04 H 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17	27	17
" K May 7 16 " St. Michael, Star Street C "  M 14 9 " St. Savjour C Jun		
9 11 11 11 11 11 11	4. 44	, 11 ,,
St. Peter D Feb. 19 9		
" A " 28 14 "		
" D Mar. 11 8 "		
, July 3 15 ,,		
Wilherforce All < 5 Feb. 11 36 "		
P. Mar. 11 2	- 00	00 4
" C ", 18 17 " St. Augustine All < 5 Ma	y 22	2 22 days

Sore Throat.—Absence from school attributed to sore throat when not medically certified is looked upon with suspicion, the degree thereof depending on the season of the year and the prevalence of scarlet fever and diphtheria. In 1912, 377 attacks of sore throat were reported among children attending school, while last year the number fell to 326. The ratios of attacks among children attending the Provided Schools were 23.6 per 1,000 in 1913 and 33.8 in 1912, and among those attending the Non-Provided Schools 10.9 and 5.0. An analysis of the reported cases, according to departments, is given in the first section of Table 55. The numbers reported from the different schools fluctuated irregularly, but—in general terms—they followed a distribution corresponding to those of scarlet fever and diphtheria. (See Table 54.)

The seasonal distribution of the cases reported during the past three years is shown below:—

	Jan.	Feb.	Mch.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1913	 1	2	4	_	2	8	10	-	21	44	133	111
1912	 82	90	98	30	10	18	14	3	6	18	23	6
1911	 -	2	6	1	1	18	6	-	12	13	13	10

The concurrence of excessive prevalence of "sore throats" with that of scarlet fever and diphtheria (see chart facing page 104) is significant. Of the 309 children excluded during the four months September-December, 20 (6.4 per cent.) were ultimately certified to have an infectious illness, viz., in 9 instances scarlet fever and 11 others diphtheria.

Ringworm.—The exclusions last year numbered 205, as compared with 287 in 1912. The ratios of exclusions in Provided Schools were 11.5 in 1913 and 16.8 in 1912 per 1,000 scholars, and in the Non-Provided Schools, 10.3 in 1913 and 13.6 in 1912. The school distribution is given in Table 55. No action was taken during the past year by the Department with reference to reported cases, but the school nurses kept them under close supervision.

Scabies.—Fifty-five children were excluded in 1913, being 9 more than in 1912. The attacks reported from the Provided Schools were at the rate of 2·2 per 1,000 scholars and those in Non-Provided 3·7. In 1912 the corresponding ratios were 3·3 and 1·4 respectively. All reported cases were visited by the Women Inspectors, the parents pressed to obtain proper treatment, and bedding and personal clothing stoved whenever consent could be obtained.

Other Complaints.—The causes included under this head are very various and all comparatively trifling. The 151 children excluded last year shows a considerable increase from the total of 52 recorded in 1912. In the Provided Schools the ratio was 7.2 per 1,000 (1.6 in 1912) and in the Non-Provided 9.1 (4.1 in 1912). The increases here noted were probably the result of more complete reporting by the school teachers rather than increased morbidity.

Vermin.—In 1912, 319 children were reported dirty and verminous; last year the figure rose to 434. In the Provided Schools the ratio was 25·4 per 1,000 last year and 17·9 in 1912; in the Non-Provided, 21·1 and 16·0. The Department co-operates with the Education Officers by visiting the homes with a view to taking action as to dirty and verminous conditions existing therein. Use is made of the new by-laws relating to cleanliness of rooms and bedding and also of the "Verminous Provisions" of the London County Council (General Powers), Act 1904.

The Council has resolved to erect a cleansing (or disinfesting) station in connection with one of the branch public baths to be erected in the Borough. At the close of the year the actual site had not been decided, but there was every indication that a settlement would be arrived at in the near future.

INTERNOTIFICATION.—There is a complete system of interchange of information as to cases of infectious disease with the Medical Officers of Health of the areas circumjacent to the Borough. Separate records are not kept of the cases sent to those Officers. Last year the "inward" exchanges received related to 597 cases of various diseases, as compared with 610 in

			TABLE 55.			
	Places Provided.	" Sore Throat."	Ringworm.	Scabies.	Other Complaints.	Vermin.
	Pla	T. B. (Mx.) G. I.	T. B. (Mx.) G. 1.	T. B. (Mx.) G. I.	T. B. (Mx.) G. I.	T. B. (Mx.) G. I
Provided— Amberley Road	1,610	13 7 6 —	21 — 8 13	7 3 3 1	5 1 2 2	137 24 46 5
Beethoven Street	1,161 972 1,100 1,821 1,586 1,323 270	25 6 19 20 14 3 3 20 3 11 6 50 3 15 32 45 2 3 40 57 18 17 22	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		10 (8) 21 7 9 4 — 4 - 4 — 3 28 — 26 1 1 — 4
Totals	9,843	230 47 (6) 55 122	112 18 (7) 18 69	22 9 (—) 6 7	71 12 (2) 9 48	*248 32 (8) 88 10
Bayswater Jewish	396 523 410 1,171	3 — 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
St. John, Kilburn Lane St. John, Titchborne Street	332 190 474	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	== ==	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	== ==
St. Luke St. Mary, Paddington Green St. Mary and St. Michael (R.C.) St. Mary Magdalene St. Matthew St. Michael, Star Street	410	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
St. Paul St. Peter	200		8 6 2 6 6	8 8 -		3 2 8 7
St. Saviour St. Stephen Wilberforce	791	13 — 3 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Totals	8,791	96 4 (28) 22 42	91 17 (14) 17 43	33 3 (9) 13 8	80 7 (11) — 53	†186 64 (10) 84

1912, 354 in 1911, and 180 in 1910. The increases observed during the last two years are in part due to the improvement of the system. Below will be found a statement of the inward exchanges:—

Disease.		KENSINGTON.		WILLESDEN.		HAMPSTEAD.		MARYLEBONE.
Scarlet Fever	***	66 (45)		101 (61)	***	2(3)		14 (9)
Diphtheria	***	30 (15)	***	70 (46)	****	- (1)	***	2(5)
Enteric Fever		- (-)		-(-)		- (-)	***	1()
Measles		24 (26)	***	55 (148)	***	1 (-)		-(1)
Whooping Cough	***	6 (8)		48 (15)		-(-)		-(-)
Chickenpox	***	8 (8)	***	48 (45)		- (-)		-(1)
Other Sickness	***	- 19 (23)		75 (145)	***	- ()		— (2)
Vermin		16 (-)		11 (3)		-(-)		- (-)
		169 (125)		408 (463)		3 (4)		17 (18)

The figures in parentheses are the numbers for 1912.

BACTERIOLOGICAL WORK.—There was a very considerable increase in the numbers of specimens received during the past year, from 656 in 1912 to 1,005 in 1913. In 1910 the specimens numbered 200 and in 1911, 316.

BACTERIOLOGICAL WORK.

	D	iphthe	ria.	Enterio	Fever.	Tuber	culosis.	Ophth	almia.		o-spinal ngitis.	Ot	her.
	Pos.	Neg.	Hoffman.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg
Primary Repeats	117 18	501 82	4	13	16	39 2	185 14	=	6	2	5	1	=
Totals	135	583	4	13	16	41	199	-	6	2	5	1	-
1913 1912 1911 1910 1909		722 530 210 114 122		3 9	9 2 4 6 6	1	40 12 51 54 26		6		7 2 1 1 2	2	1 0 5

The outbreaks of diphtheria at the Infirmary and the Orphanage of Mercy were responsible for much of the increase in the number of specimens under that head, 340 "swabs" (66 positive and 274 negative) being received from the former institution and 43 (8 positive and 35 negative) from the latter. The systematic swabbing of all contacts is the only efficient method of stamping out the disease.

The Medical Officer of Health took 31 swabs (2 positive only) at the Town Hall, most of them from persons connected with the milk trade. Pressure of other work prevented any specimens of hairs being examined during the past year.

The total proportion of positive results was rather lower last year than in 1912, 19·1 per cent., as compared with 19·6. In 1911 the proportion was 32·2, and in 1910, 24·5. In the case of diphtheria only was the proportion higher than in 1912. (See below.)

Proportion (per cent.) of " Positive " Results.

	Diphtheria.	Enteric Fever.	Tuberculosis.
1913	18.6	44.8	17.0
1912	17.7	47.0	28.4
1911	28.5	25.0	31.3

OFFENSIVE REFUSE.—Trade Refuse.—The bulk of the trade refuse produced in the Borough is removed by the Council. Four complaints were received during the year with reference to fishmongers' premises, all relating to the storage of offal or fish boxes. The premises were kept under observation after the original complaints had been dealt with.

Manure.—The usual notices for the removal of manure on three days in each week were posted in all the mews in the early days of the summer. Complaints of accumulations at four mews received attention, it being sufficient to keep the premises under observation.

The manure nuisance in London is very nearly a vanishing quantity—a fact which from a public health point of view is a great benefit. On the other hand, the supply of manure for agricultural purposes is becoming very inadequate, and market gardening will suffer unless artificial manures can be produced at low cost to efficiently replace horse manure. During the past two years flies have been comparatively scarce in the Borough generally, but although recognising that the smaller amounts of manure produced in the Borough mean fewer breeding places, it cannot be stated with complete confidence that the freedom from flies is to be attributed to the manure factor entirely. It requires a summer of the type of 1911 to demonstrate the full effect—quâ fly nuisance—of the changed methods of traction.

House Refuse.—One collection of refuse each week is the rule in the Borough. The Medical Officer of Health has a discretionary power to recommend more frequent removal (without extra charge) should be consider it necessary. The increase in the number of flats and self-contained maisonettes, in both of which cooking by gas is more common than by fire, creates a demand for the removal of refuse at shorter intervals than the week. Proposals were submitted to the Public Health Committee for instituting two collections a week throughout the Borough, either during the whole year or during the months of June to September (both inclusive). It appeared from estimates prepared by the Borough Surveyor that a second collection would increase the present charges by some 50 per cent. In the end it was concluded that the discretionary power given to the Medical Officer of Health rendered a general second collection unnecessary at the present time.

Last year 106 complaints were received relating to the removal of house refuse, the complainants alleging either irregularity or infrequency of removal. In 1912 the complaints numbered 112, and in 1911, 144. A second collection in each week was recommended by the Medical Officer of Health at 69 houses last year, as compared with 59 in 1912 and 93 in 1911. A second collection is made each week during the months of July-September at all houses in the "Clarendon Street Area."

Trade Nuisances.—Only one complaint was received last year in connection with trade premises, that relating to the escape of feathers from a bedding factory. No action beyond interviewing the proprietor was necessary.

Rag and Bone Dealers.—There are 30 of these dealers in the Borough, 17 handling every description of goods, 6 rags and metals, 4 second-hand clothes, 2 cat's meat, and 1 rabbit and other skins. Seventy-five inspections were made of the premises where animal matters are dealt in. The principal trouble is to secure regular removal from the small retail shop to the wholesale premises. Special visits are made before Bank Holidays to secure clearances. Two complaints with reference to these premises were received during the year.

By-laws for regulating the trade in rags, bones, &c., have been made by the County Council and are awaiting confirmation by the Local Government Board.

DRAINAGE WORK.—Reconstruction of the drainage systems was carried out at 175 houses during the past year, as compared with 223 in 1912 and 227 in 1911. In 1908 the number of drains reconstructed was 605. The defective drains made watertight by patent process numbered 73, as compared with 98 in 1912 and 50 in 1911. In contrast with the decreasing

number of drains requiring to be either reconstructed or made watertight, an increased number of old drains were tested and found sound. The number of such drains was 100 last year, 66 in 1912, and 64 in 1911.

An appeal was taken to the Appeals Committee of the County Council against a decision of the Public Health Committee with reference to the proposed construction of a water-closet in a bath-room approached from a bedroom. There appears to be a growing fashion for such an arrangement and a short note of the case will, therefore, be of some interest.

It was proposed to fix in an existing bathroom approached directly from a bedroom, a wash-down pedestal closet with water waste preventer. By-law 1 under Section 39 (1) of the Public Health (London) Act, 1891, directs that a water-closet apartment shall be separated from a room intended for human habitation by a solid wall or partition, and further, that such closet apartment shall not be approached directly from any room intended for human habitation. The architect in charge of the work put forward a proposal for the construction of double doors between the bedroom and closet apartment (the bathroom), such doors to be separated by a space of approximately two feet in which there were to be two gratings, one at the ceiling level and the other at floor level. The Public Health Committee disapproved the proposals, being of opinion that they constituted a contravention of the by-law. The architect appealed, but the Appeals Committee upheld the view of the Public Health Committee.

The placing of a water-closet in such close proximity to a bedroom as was suggested in the above case—even with a ventilated lobby between the two rooms—appears to be a dangerous practice, as there are no means of securing that the doors of the lobby shall be kept closed. In the case mentioned above it would have been necessary for both doors to be open at the same time to permit of access from one room to the other. The fashion appears to be tainted with an element of laziness.

Deposit of Drainage Plans.—Although the number of drains reconstructed each year has lately decreased, there is no commensurate diminution in the number of plans deposited for work in connection with drains and sanitary fittings. Last year 344 plans were received, as compared with 352 in 1912 and 348 in 1911. The numbers here quoted refer to the plans received for work to be carried out under the supervision of the Department. The correspondence arising from the deposit of plans comprised 734 letters and forms last year, as compared with 705 in 1912 and 708 in 1911. No summonses were issued last year for breaches of the by-laws relating to the deposit of plans, but seven were taken out for work done without giving notice to the Council.

Sewer Connections.—A complete survey was made last year of the connections to the sewer from the houses in Oxford and Cambridge Terraces, and a very large proportion of them were found to be defective, some very badly so. The results of the survey were embodied in a Special Report submitted to the Public Health Committee in January of last year.

In the older parts of the Borough there must be a large number of defective sewer connections, partly because at the time of the erection of the houses the laying-in of drains was very imperfectly understood and in most cases done without any skilled supervision, and partly because the changes in the character of the vehicular traffic impose burdens on the roads, to be transmitted to the drains, for which they were not designed. Complaints of rats getting into houses from the sewers appear to be becoming more frequent, but numerical proof of that suspicion is not at the moment available. It may be stated with a fair measure of confidence, however, that in the near future the question of house connections—those parts of house drains which are under the public roadways—will require to receive close attention.

Last year seven new connections were put in by house owners without the issue of Orders under Section 85 of the Metropolis Management Act, 1855, by the Council. Fifty-five such Orders were issued during the year.

In connection with the Orders made by the Council under the Section just referred to, a point of law arose last year which is believed to be quite new:—

It has never been the practice of the Vestry or Council to allow anyone not expressly authorised by statute so to do, to open the footways or roadways in the Borough. When an Order under Section 85 was made it was expected that the party on whom the Order was served would deposit with the Council a sum of money sufficient to cover the estimated cost of the work required under the roadway. If no such steps were taken during the period prescribed by the Order, the Council proceeded at the end of the prescribed period to carry out the work ordered and then took steps to recover the cost. Such practice was followed, without misadventure, until the autumn of last year, when the defendant in a case taken at Marylebone Police Court for the recovery of the expenditure raised the point that he had had no opportunity of complying with the Order. He contended, in effect, that the Council had ordered him to do certain work, but had at the same time refused the necessary facilities for doing it. His contention was based on the known prohibition against ratepayers opening the roadways. The Magistrate upheld the defendant's contention and dismissed the case with costs against the Council.

The decision was not appealed against and consequently it has become necessary to make new arrangements for the carrying out of Orders under Section 85. At the close of the year the question had not been finally settled.

Combined Drainage.—No old systems were examined during the past year, but the combined drain, or sewer, serving Delamere Terrace, reported on during 1912, was reconstructed by the Council. Orders under Section 74 of the Metropolis Management Act, 1855, were made sanctioning the construction of combined drains at:—

108, 108a, and 110, Church Street.

5-11, Coburg Place.

15 and 16, Polygon Mews.

41, Hyde Park Square, and
4, Clarendon Mews.

411a and 413, Edgware Road.

1, 2 and 3, Salem Road.

Queen's Park Estate.—Complaints of rats were received from houses in Fifth Avenue, Galton Street, and Ilbert Street. In the first case defects were found on a section of the old main (combined drain) which had not been relaid at the time the other drains were done. The defects were made good and the complaint was not repeated. In the other cases no defects were found in the underground drains and no rats were seen subsequent to the destruction of those giving rise to the complaints.

The back-additions of 10 houses were underpinned last year and 42 other houses were provided with damp-proof courses in the front and back walls.

Inspections were made at 82 houses after the occurrence of infectious diseases, the drains being chemically tested at 25 without result.

Urinal, Queen's Arms, Kilburn.—Complaints have been received from time to time of nuisance from the outside urinal belonging to this public-house. The nuisance was found to be due to the large number of users frequenting the urinal who came from the places of entertainment which are opposite the public-house. It was found on previous occasions that there was some misuse of a dark corner at the side of the house, and to remedy that complaint a special bracket lamp was fixed to the house by the Council.

There appears to be a need of a public lavatory at this point, which is the north-eastern corner of the Borough. Efforts have been made to secure the co-operation of the neighbouring Councils to provide such accommodation, but, up to the present time, without success.

SMOKE PREVENTION.—Sixteen (16) premises were kept under special observation last year (see list), the total time given to this work amounting to 85\frac{3}{4} hours. Twenty premises were so watched in 1912, and 29 in 1911.

The total time during which "black smoke" was observed last year was 23 minutes, as compared with 32 minutes in 1912 and 22 minutes in 1911. Other shades of smoke were observed during  $50\frac{1}{6}$  hours, as compared with  $47\frac{1}{3}$ ,  $113\frac{5}{6}$ , and  $38\frac{1}{4}$ , in 1912, 1911, and 1910.

		1913.			
" Black Smoke	"	 ***	***		23 minutes
"Smoke"		 	***	***	50% hours.
No Smoke		 			35½ hours.

Eleven complaints of smoke, not necessarily "black smoke," were received during the year, with reference to factories (6), fried fish shops (3), plumbers (1), and traction engine (1).

SMOKE OBSERVATIONS.

Address.		Business.			Chimney Shaft of
3 & 4, Amberley Wharves	***	Steam Boilers			Steam Boiler
29, Beethoven Street		Laundry		***	11 11
- Bishop's Road Bridge	***	Refreshment Rooms		4.0	33 35
8, Bristol Gardens		Baking			Bakers' Ovens
17, Clifton Road	***	,,	***	***	,, ,,
189, Edgware Road		,,			17 11
- Goldney Place	***	String Printing		***	Steam Boiler
- Harrow Road Goods Yard		Hydraulic Works		***	,, Boilers
285, Harrow Road		Infirmary	***		
88, Herries Street		Laundry			" Boiler
296, Kilburn Lane			***	***	2) )1
5-8, North Wharf		Refuse Destroying			" Boilers
- Praed Street		Hotel, G.W.R		***	Kitchen Stove
- Queen's Road		General Stores			Steam Boilers
120, Shirland Road		Dairy			11 11
8, South Wharf		Builders' Merchant			Travelling Crane

CANALS, WHARVES.—These are systematically inspected at least once a week. During the past year no complaints were received with reference to either the canals or the businesses carried on at the wharves on the basin.

At the beginning of June last year complaint was received with reference to the use of the "Flora" Wharf, Harrow Road, for the loading of barges with offensive refuse and to the delay made in dispatching the loaded boats. In consequence of the representations made to the firm using the wharf, its use for refuse was abandoned.

The customary cleansing of the canal basin was carried out at Easter, when 388 tons of mud and refuse were removed, that amount being 112 tons less than the amount removed in 1912. New concrete was laid down over some 898 square yards of the canal bottom.

CANAL BOATS.—The annual report of the Examining Officer was laid before the Council in February last and subsequently forwarded to the Local Government Board. The inspection of boats numbered 205, and the breaches discovered, 63. At close of 1912 163 boats were on the Register, of which only 60 were known to be working in and out of the basin. During the past year 3 new boats were registered, and 2 re-registered owing to change of owners. The boats on the Register at the close of the year numbered 168, but only 55 can be traced. Up to the end of last year no motor boats had been placed on the Paddington Register, but such boats were working in and out of the basin.

There were 2 cases of erysipelas among the boat population last year, both patients (males, extant 4 and 40) being removed to the Paddington Infirmary. The deaths known to have occurred numbered 2, the deceased persons being females, one an infant of 9 months dying of bronchitis, and the other, a child of 2 years, dying of whooping cough. Of the 167 children found to be living on the boats, 112 were of school ages.

#### WORKSHOP SUPERVISION.

Registration.—At the close of 1912 there were 1,514 workshop premises on the Registers of the Department. Last year 293 premises were removed from and 200 added to the Registers, the effective entries at the close of the year numbering 1,421. The premises on the Registers included 128 factories, 32 of them being laundries, 942 workshops, 16 domestic workshops, 36 workplaces, and 299 premises in the occupation of "single workers," 256 of whom are on the Registers of Outworkers.

An analysis of the occupations carried on at the premises (of all descriptions), with the latest known numbers of persons working therein, will be found in Table 56, the numbers of outworkers being shown by the figures in parentheses.

Notices relating to 72 new workshops were received from the Home Office during the year, 64 of which were already on the Registers of the Department.

Women were employed in 855 workshops, including 229 where men and women were employed. The total number of female workers therein was 4,777, viz., 4,184 women and 593 young persons. Women were also employed at 155 outworkers' premises, including 25 where men and women were employed. The total number of female workers employed therein was 314, viz., 259 women and 55 young persons.

Home Work.—Employers of outworkers (home workers) forwarded 54 lists in February of last year and 64 in August, or a total of 118 lists, as compared with 117 in 1912, 125 in 1911, and 154 in 1910. The addresses included in those lists numbered 546, of which 359 were forwarded to other districts.

From other districts 372 addresses (in 61 lists) of home workers residing in the Borough were received, the number in 1912 having been 386 in 61 lists.

The numbers of lists received from other districts last year are shown below.

City of London		 17	(9)	Finsbury		***	***		3	(3)
Westminster	 	 8	(9)	Bethnal Gree	n		***		2	(2)
Hampstead	 	 6	(4)	Holborn					2	(2)
Kensington	 	 6	(7)	Shoreditch				****	2	(2)
Willesden	 	 6	(4)	Islington	***		***	****	1	(2)
St. Marylebone	 	 4	(4)	Romford					1	(0)
Chelsea	 	 3	(2)							

NOTE.—The italic figures in parentheses relate to 1912.

At the close of the year the Registers contained 294 effective entries, 256 being homes of single workers.

Inspections.—The inspections of all descriptions numbered 3,695 last year (3,076 in 1912), 360 being first inspections (298 in 1912).

Complaints.—The Home Office forwarded 13 complaints, four of which were withdrawn, leaving 9, being 6 less than in 1912, the matters complained of being:—

Defective water-closet apparatus	***			4	(4)
Dirty conditions of workrooms				2	(1)
Overcrowding of workrooms	***			1	(2)
Insufficient water-closet accommod	lation	***	***	1	(1)
Inadequate ventilation of workroom	n			1	(-)

Deficient Ventilation.—The numbers of workshops (new and old) reported to be insufficiently ventilated in 1906 and each succeeding year are 3, 4, 6, 0, 0, 0, 2, and 7.

Sanitary Conveniences.—These continue to be kept in a fairly satisfactory condition, but the number of defects (mostly trivial) reported indicates some carelessness in maintenance. It

TABLE 56.

FACTORIES, WORKSHOPS, AND WORKPLACES.

1913.

				Emp	loyees.	
Business.	No. of Premises.	No. of Rooms.	Women.	Young Persons. (Males and Females.)	Men.	Totals.
Clothing-						
Boot-making Corset-making Dressmaking Furriers Mantle-making Millinery Millinery and Dressmaking Outfitting and Plain Needle-	99 (39) 10 (1) 355 (33) 10 7 (2) 44 (1) 22 (2)	108 (39) 10 (1) 704 (40) 18 7 (2) 46 (1) 44 (2)	3 15 (1) 1,987 (70) 24 21 (3) 160 (1) 145 (2)	469 (35) 	240 (55) — 24 — — —	243 (55) 15 (1) 2,456 (105) 48 23 (5) 181 (1) 185 (2)
work Tailoring  , Ladies' Various	48 (34) 206 (102) 34 (10) 12 (8)	50 (34) 252 (122) 50 (10) 13 (8)	99 (38) 215 (43) 53 (10) 23 (8)	18 (3) —	475 (90) 136 6	105 (38) 708 (136) 189 (10) 29 (8)
Fancy Work-						
Embroidery and Art Needle- work	15 (12)	20 (12)	43 (30)	15 (15)	_	58 (45)
Cleansing— Dyers and Cleaners' Receiving Offices Laundries "—Receiving Offices	18 102 (8) 28	26 272 (8) 33	46 845 (8) 42	=	75	46 920 (8) 42
Other Businesses— Blind-making	6	14	25		47	72
Bookbinding and Printing Carpentry and Joinery Chaff-cutting Cycle and Motor Works Farriers and General Smiths Florists Jewellery and Clock-repairing Metal-working Saddlery Trunk-making and Repairing Umbrella-making Undertaking Upholstery Wig-making and Hair-work Various	25 14 12 69 24 16 12 21 9 11 7 (1) 11 (2) 58 (29) 19 97 (10)	46 34 18 120 29 22 16 36 10 12 7 (1) 18 (3) 90 (39) 26 120 (20)	62 - - 80 - - 7 (1) 1 (1) 88 (33) 30 170 (10)	18	356 290 30 663 76 15 35 170 28 32 3 120 136 59 656 (7)	436 290 30 663 76 105 35 170 28 32 10 (1) 121 (1) 224 (33) 89 856 (17)
	1,421 (294)	2,271 (342)	4,184 (259)	629 (55)	3,672 (152)	8,485 (466

should be noted that the figures given include defects found at the first inspections of workshops, &c., on their registration.

## WATER-CLOSET ACCOMMODATION.

		1902.	1903.	1	1908.	1909.	1910.	1911.	1912.	1913.
Insufficient .		 9	2		2	_	3	-	_	_
Not separately p	provided	 33	4		2	2	2	3	2	1
Badly placed .		 18	13		3	1	8	3	1	1
Unventilated .		 8	-		_	-	_	_	_	-
Defective .		 29	23		11	13	16	13	29	35

TABLE 57.

Inspections of Workshops, &c.

					1913.	1919	3.
Workshops —							
On register end of previous year	***			***	1,514	1,50	8
added during year				***	200	200	0
removed		***	***		293	19	4
On register end of year	***	***		***	1,421	1,51	4
Inspections					360	29	8
Re-inspections and miscellaneous calls			***	***	3,335	2,77	
Rooms measured					75	9	
Workrooms used as bedrooms		***	***	***	86	8	
Workrooms without Abstracts		***	444		84	5	1
Notices served, Totals					9	1	2
Written intimations					6		6
Under Sec. 4 ) Public Health	***				2		6
37 (London)						_	3
38 Act, 1891					1	-	
By-laws, under same Act					-	-	
Nuisances dealt with—					Discovered. Abated	Discovered.	Abated
Overcrowding					21 21	23	23
Dirty conditions					89 89	58	58
Deficient ventilation					7 7	2	2
Γemperature too low			***			_	-
Sanitary conveniences—							
Insufficient		***		444		-	
Not separately provided	***		***		1 1	2	2
Badly placed					1 1	1	1
Defective	***		***	***	35 35	29	29
Vapour, effluvia not removed—							
Gas fumes			***		22 22	10	10
Drains	***			111		-	-
Accumulations of refuse			***		6 6	5	5
Other nuisances or offences	***				5 5	2	2
		71	otals		187 187	132	132

Sickness.—Seventy-six (76) cases of infectious disease occurred on workshop premises, but only 10 in the families of workers. There were 8 cases on outworkers' premises, 4 occurring in outworkers' families. The figures for each disease are shown below :-

... 6 (-) Measles Scarlet fever ... 13 (2) Whooping cough Diphtheria (2) 16 Puerperal fever ... Chicken-pox ...

NOTE.—The figures in parentheses refer to outworkers' premises.

Bakehouses.—At the end of 1912 66 bakehouses were on the Register, 16 of which were "level" and 50 "underground." Last year 4 underground bakehouses went out of use and 2 were re-opened. At the end of the year there were 64 bakehouses on the Register, 16 "level" and 48 "underground," including 13 factory bakehouses (5 "level" and 8 "underground"). Forty (40) inspections were made during the year of the factory bakehouses, and 317 of the workshop.

HOUSING.

#### HOUSING OF THE WORKING CLASSES ACTS.

The following premises were specially inspected for the purposes of these Acts, viz. :-

Brook Mews North, No. 7.

Chippenham Mews, Nos. 22, 24, 26, 30, 31, 33, 50 and 54. Cirencester Street, Nos. 21, 23, 25, 27 and 33.

Desborough Street, Nos. 1 and 8. Gloucester Mews East, No. 68.

Shirland Mews, No. 3.

In one sense 161 other houses of which detailed inspections were made for various reasons during the year could be counted as inspected for the purposes of these Acts, but the houses named above were specially reported upon with a view to action (Closing Order, etc.) being taken. Except as to be now set out, the defects found in the above 18 houses were remediable, and were dealt with, under the Public Health (London) Act, 1891. Notices under Section 15 of the Act of 1909 were served with respect to :-

Cirencester Street, Nos. 21, 23, 25, 27 and 33, and Amberley Road, No. 23.

Closing Orders were made by the Council under Section 17 of the Act with respect to :-

Desborough Street, No. 1, on January 7th, Rodborough Mews, No. 11, on February 8th, and

Bishop's Mews, No. 16, on March 18th.

A Demolition Order was made with respect to the first house on July 29th and the premises were demolished by the owner. As regards the other two houses the necessary works of repair were carried out and the Closing Orders were determined on July 29th (Rodborough Mews) and February 3rd, 1914 (Bishop's Mews).

No. 17, Desborough Street, with respect to which a Demolition Order was made in 1912, and upheld by the Local Government Board on appeal, was demolished during the course of the year,\* as also were St. John's Mews, Ledbury Road, and Nos. 2 and 3 Carlton Mews, Maida Vale.

Cirencester Street Improvement Scheme.—The properties included in the Order of the Local Government Board approving this Scheme were acquired during the year without resort to compulsory powers of purchase, and the Council obtained possession at Christmas last. The premises were pulled down in the early months of the present year.

Underground Rooms.—The draft regulations prepared under Section 17 (7) of the Act of 1909 were received from the Local Government Board in January of last year, referred to the Public Health (General) Sub-Committee, and further discussed in conference with the Officers of the Local Government Board. A finally amended draft was received from the Board in October and adopted by the Public Health Committee. The regulations came before the Council in the course of that month, but the discussion thereof was adjourned for a period of three months.†

<sup>\*</sup> A writ for trespass and damages has been issued against the Council by the owner of the premises. † The regulations were adopted by the Council on February 26th of this year and confirmed by the Board on May 4th.

Underground rooms at the following premises were closed under the provisions of Section 96 of the Public Health (London) Act, 1891:--

Church Street, No. 116. Cirencester Street, No. 21. Harrow Road, No. 201. Howell Street, No. 1.

Kilburn Park Road, No. 47. Star Street, No. 50. Westbourne Terrace North, No. 43.

#### TENEMENT HOUSES.

Registration.—During the year 55 houses were added to and 27 removed from the Register, which at the close of the year comprised 1,376 premises.

Supervision.—During the year 2,206 inspections of registered houses were made for purposes other than the "annual cleansing," as compared with 2,977 in 1912, and 2,856 in 1911. The matters requiring official intervention are set out in Table 58.

Annual Cleansing.—In 1912 this work was done in a somewhat irregular, but on the whole not inefficient, manner in consequence of decisions at the Police Court which rendered the old By-Laws practically inoperative. The present series of By-Laws came into operation on May 11th, 1912, and the usual routine was resumed last year.

There were 1,365 houses on the Register on April 1st, 1913, and to assist the two Special (Lodging Houses) Inspectors, two of the District Inspectors were taken off their districts and instructed to give the whole time to this work during the months of April-July. The rooms "cleansed" last year numbered 1,959, as compared with 1,488 in 1912, and 1,936 in 1911. To effect that result 5,391 inspections were required, 77 cases (6 resulting in summonses) being referred to the Council's Solicitor.

Notices Issued.—The notices issued during the year for all purposes numbered 2,360, as compared with 1,892 in 1912, and 2,023 in 1911. The notices comprised 339 "written intimations" (869 in 1912), 83 "statutory notices" (78 in 1912), 1,608 by-law notices (663 in 1912), and 330 notices under the various General Powers Acts of the London Council Council, including 280 for verminous rooms (109 in 1912), 35 for the provision of additional water taps (48 in 1912), and 15 for the abolition of disused brick and wood dust-bins (40 in 1912).

Housing Conditions.—An enumeration of the inhabitants of the Registered Streets \* was made in the course of the inspections for the annual cleansing, the numbers of those under ten years of age being separately ascertained. The manner in which the inhabitants of these streets were housed—that is, the number of rooms occupied by each family—is shown in Table 59. That table embraces 5,452 families comprising 18,028 persons. They occupied in all 10,519 rooms, giving an average of 1.7 persons per room, as compared with averages of 1.8 per room noted in 1912 and 1911. In the appended summary of contents of Table 57 the averages for each class of tenement observed in 1911 are given to show the alterations which have taken place. It

## \* REGISTERED STREETS, 1918 :-

Albert Street.
Alfred Place.
Alfred Road.
Amberley Road.
Braden Street.
Braithwaite Place.
Brindley Street.
Campbell Street.
Carlton Mews.
Church Place.
Cirencester Street.
Clarendon Street.
Crompton Street.

Cuthbert Street.
Dartington Terrace.
Desborough Street.
Dudley Street.
Elcom Street.
Green Street.
Hall Place.
Hall Place West.
Hampden Street.
Hasborough Street.
Hermitage Street.
Hethpool Street.
Howell Street.

Kensal Road. Kent's Place. Modena Street. Netley Street. North Wharf Road. Oliver Mews. Orchard Street. Philip Terrace. Pressland Street. Ranelagh Road. Senior Street. Southam Street. South Wharf Road. Stalham Street.
Star Street.
Torquay Street.
Victoria Street.
Waverley Road.
Waverley Terrace.
Wellings Place.
Westbourne Terrace
North.
Woodchester Street.
Woodfield Place.

There are also 50 registered houses in 19 other streets (one or two in each street). These odd houses, not included in Table 59, were occupied by 596 persons, 447 over ten years of age and 149 under, living in 411 rooms.

A number of houses, comprising the whole of Emily Street and portions of Philip Terrace and Senior Street, were demolished during the year to make room for the new Elementary School to be built by the County Council.

TABLE 58.

Sanitary Defects Remedied in Tenement Houses.

							1912.	1913.
Drain defe	ective						10	10
-1-			197	***	111	***	18	12
*****	rapped			***	***	* ***	19	2
	entilated or	improp	orly contile	tad	***	***	3	1
Manhala e	course defeat				***	***	4	4
	over defect			***	***	***	13	5
	let imprope			***	***	***	-	2
Gully chol				***	***	***	17	17
entilatin	g pipe impr	operly c	onstructed	***	1.10	***	3	1
soilpipe d	efective		***	***	***	***	_	2
,, 11	nproperly c	onstruct	ed	***		***	1	_
,, u	nventilated	or impr	operly vent	tilated	***	***		1
Vater-clos	set choked			***	***	***	54	45
33	defective				***	*	76	72
11	insufficie	ently flus	hed				51	15
"	flushing	apparati	is defective			***	56	86
33	without	water su	pply				7	28
		***				***	52	
33	imprope	rly const	The state of the s		***	***		37
"			insufficient	***	***	***	1 00	2
"	without	4				***	36	15
25			V-14		***		22	24
, ,,	without	external	light or ve	ntilation	***	***	4	_
cainwater	pipe not di		ted from d	rain or so	ilpipe		2	-
32	defec		***	***	***	***	36	38
22	chok		***	***	***	***	9	2
Vastepipe	defective			***	***	1111	20	17
22	choked		***	***	***	***	9	7
	not provid	ed			***		6	i
Other drai	nage defect		***		***		10	8
Cistern de	*	***	***	***	***		12	8
" dir	tv	***					78	62
	hout prope		***	***			12	10
	ver defectiv				***	***	18	55V
Dustbin de	r		***	***	***	***		19
	ot provided		***	***	***	***	157	147
			***	***	***	***	18	12
	sufficient			***	2.5		2	8
,, d	isused and	not abou	ished	***	***	4+4	39	16
aving det	ective in ar	ea or yar	d	***	***	- 439	110	185
		sh-hous	e	***		***	91	41
		***		***	444	444	32	36
			***				24	16
cooms dir			***	***	*++		1,488	1,959
,, ver	minous					***	387	502
	tc., vermin					***	001	11
Vindow de					***			388
Copper			***	***		***		
tove	"	***	***	***	***	***		136
loof	**	***	***	***	4+3	***	104	164
	ion of refer	***	***	***	***	***	134	192
	ion of refus		***	***	***		12	34
mimais in	properly k	ept		***	***	***	11	5
vater supp	oly to prem	ises insu	incient	***	***	411	57	37
ther defe	cts or nuisa	inces	***		***	200	123	107

should be added that not all the tenements included in the summary are registered under the by-laws, most of the larger tenements being exempt by reason of the rents paid for them.

						Averaging								
I	Rooms to a		Numbers of		Inhabited by		Per 7	<b>Tene</b>	ment.			Ro	om.	
	Tenement.		Tenements.		(Persons).		1911.		1913.		1911.		1913.	
	1	***	2,233		4,396		2.1		1.9		2.1		1.9	
	2 .		2,074	***	7,829	***	4.0		3.8		2.0		1.9	
	3		744		3,632		4.8		4.9		1.6		1.6	
	4		241		1,265	***	5.2		5.2	***	1.5		1.3	
	5	***	81		471		54		5.8		1.1		1.2	
	6	***	41	***	198		5.3		4.8		0.9		0.8	
	7		20		121		6.4		6.0		0.9		0.9	
	8		14	***	95		5.9		6.8		0.7		0.9	
	9		2		13		8.3		6.5		0.9		0.7	
	10		1		4		5.0		4.0		0.5		0.4	
	11		1		4		_		4.0		_		0.3	

Overcrowding.—The upper limits (the figures to the right of the heavy rule of Table 59) might lead to a supposition that there was a good deal of overcrowding in the Registered Streets, but, as a matter of fact, overcrowding—as defined by the by-laws—was found in only

	01	P 10	10 P	1	:		00	-	1	1	1	1	1	1		
	12	24	9		1	1	6	00	1	1	Li	1	1	1	age.	
			+			1	-	-	1					1	9	
		P 10	10 P	1	1	00	10	20	0.8	1	1	1	1	1	of o	90
	=	0	H	1	1	00	E.	4 24	0	1	1	1		1	ars	era
			4	:	1	1	1	4	1 00	01	1	-	-	1	ye	av
	_	P 10	10 P	1	1	24	20	9	12-	00		- :	1	1	9	15s
	10	D <sub>4</sub>	-	1	-	5 30 20	4 20 20	-	-	-	1 10	16	1	1	H	tar
		10			14		84	10	9	00	1		1		opo	abi
			Б			2							1		3	H.
	0	2	10	1	13	101	47	26	61	9	1	6	1	1	Persons under 10 years of	0
		E	4	1	00	100	0	4	00	-	8	-	1	1 :	100	5
		10	2	1	69	10	47	12	-	1	00	:	1 :	1	A	-fj
	00	Д.	10	1	43	99		98	1-	- St	25	1	1	1	210	whi
		11.72	NS.			91	63 20 113	9	-	4	45				0	.5
		10	-	1 00	01	1 00	00	30	1 46	01	9		1		pun	0
43		-	2		24	121							1		5	E
nen	-	2	10	9	194	279	89 80 147	61	17	89	00	1	1	1	1300	yo.
nem		F	4	0.1	25	E	18	123	00	10	C-3	1		1 :	of	ht
Ter		10	D	88	115	100	88	60	9	00	-	1	1		IL S	100
each Tenement.	9	Д	10	27	5474 1200 222 497 1366 622 418 1145 945 152 397 515 62 194 240 14	472 198 119 436 278 71 279 218 55 236 204 23 107 100	189	21	18	0	53	1	:	1	Persons over 10 years of age, and $\binom{10}{P}$	cate tenements (to right or more than two per room)
eac	-			=	00	9.4	38 13	6	-	04	10	1			9	8 8
.5					15	11	1000						3	1	10	the
Occupants in		10	0	115 155	945	198	46	6	1:	-	1	1	1	1	NO NO	han
pan	10	Б	10	15	45	75	174	61	08	0	10	:	1	:	ns n	ter th
ccu				24	8		1000		9	04					irso	ate
0		-			7	133	44	14					2	1	1 4	dic
		10	D	279	622	417 111 184	15	11	10	1	1	1	1	1	(F)	ij
		Д	10	297	99	17	187	138	27	4	7	4	77	Al.	100	5
	-	-			118				00		-				ii.	ted
		-	4	4	497	88 182	80	21		1		1	-	-	ain	Ser
		10	P	290 144	222		0.4	-	54	1	1	1	:	1	Tenements containing	.5
		D.	10	628	8	316	118	17	19	C.					0	een
	60		-		12						:	1	1	1	ent	Q s
		F		908	174	1118	40	6	E-	-	-	:	1	:	- Dilli	ha
		10	04	20			:	1		1		:	:	:	en en	ile.
		a l	10	1613 59	77.5	149	8	7	14	9	:			:	F	II.
	64		-	16											Jo.	avy
		+	4	888	980	7.5	15	01	7	89	:	:	1	1	ber	The heavy rule has been inserted to indicate tenements (to right of rule) in which the inhabitants average more than two per room.
		10	0.		1	1	1		1		:	:	-	1	CEE	Che
		D4	10 P	88	64	11	1	:	:	:	:	:	:	:	T-number	-
	100	F		880	64	=	-	1	1	:	:		1	:	H	
ment	o Lene			8	0.5	60	-ejt	10	9	7	00	6	10	=		

TABLE 59.

NUMBERS OF TRNEMENTS AND INHABITANTS THEREIN IN REGISTERED STREETS.

146 of the 5,452 families during the inspections in connection with the annual cleansing,\* such figures being equivalent to a percentage of 2.6. In 1911 the proportion was 4.3 and in 1912, 3.0. The proportions of the total inhabitants enumerated overcrowded were 4.3 per cent. in 1913, 6.3 in 1912, and 4.1 in 1911. An unsatisfactory feature in the figures is the apparent increase in the proportion of children to the total population living in overcrowded conditions. In 1913, of the 761 persons overcrowded, 57.0 per cent. were children under the age of 10 years, the corresponding proportion noted in 1912 being 55.5, and in 1911, 54.9.

Of the 146 overcrowded tenements 63 consisted of one room, 62 of two rooms, 17 of three, 3 of four, and 1 of six. Approximately the tenements were situated in the basement in 37 instances, on the ground floor in 27, on the first in 38, and on the second in 44.

### OVERCROWDING IN TENEMENT HOUSES.

					Total.	As found or Registration.	Annual Cleansing.	made for Routine Purposes.
Tenements					183 (255)	4 ()	146 (216)	33 (39)
Rooms					234 (285)	4(-)	192 (242)	38 (43)
Occupants, to	otal	***	***		958 (1,340)	20 (-)	761 (1,142)	177 (198)
Under 10	years of	age			419 (606)	7 (-)	327 (508)	85 (98)
Aged 10	years and	upwards			539 (734)	13 (-)	434 (634)	92 (100)
Overcrowdin								
		angement	of occu	pants	46 (65)	1(-)	45 (65)	-(-)
	tary remo				30 (26)	-(-)	30 (26)	-(-)
Under no		***			93 (130)	3 ()	57 (92)	33 (38)
Cases held o	ver				14 (34)	-(-)	14 (33)	-(1)

NOTE.—Figures in parentheses relate to 1912, no houses being added to the Register in that year.

Vital Statistics.—The total morbidity rate recorded in the Registered Streets was 9.61 per 1,000 persons of all ages (Table 60), as compared with 6.06 in the Rest of the Borough. In 1912 the corresponding rates were 7.97 and 4.54 respectively. In 1911 the rates were—Registered Streets, 5.21, Rest of the Borough, 3.91, so that there has been a progressive increase in each case since 1911. The increase in the rate recorded last year in the Registered Streets over that observed in 1912 was equal to 20 per cent. of the latter rate, while in the Rest of the Borough the increase was equal to 33 per cent. In the Registered Streets increases in the rates due to scarlet and enteric fevers have to be noted, while in the Rest of the Borough there was in addition some increase in the rate due to diphtheria. The rise in the rate due to scarlet fever was equal to 68 per cent. of the 1912 rate in the Registered Streets and to 75 per cent. in the Rest of the Borough.

The total mortality rate in the Registered Streets was 25.51 per 1,000 and that in the Rest of the Borough 11.82, a sufficiently striking difference. Last year's rates in both instances show an increase of a little more than 8 per cent. above the rates for 1912. Attention may be called to the disparity of the rates from diarrhoeal diseases (2.46 in the Registered Streets; 0.26 in the Rest of the Borough), tuberculous diseases (2.36 in the Registered Streets; 1.11 in the Rest of the Borough), and the respiratory diseases—bronchitis and pneumonia—(5.08 in the Registered Streets; 1.90 in the Rest of the Borough). As a contrast it should be noted that the mortality from the tuberculous diseases in the Registered Streets show a decrease of 30 per cent. when the rates for 1912 and 1913 are compared, while those in the Rest of the Borough show an increase of 33 per cent.

<sup>\*</sup> The numbers obtained at the annual cleansing are to be preferred as a test of overcrowding, because the instances of overcrowding found at other times include repeated overcrowding by certain families who appear to be unable to recognise the fact that the sizes of their families demand more accommodation. There are some half-dozen families who are found time after time in different homes, but always overcrowded. There is no legal machinery for dealing with such cases except the usual routine of notices and prosecutions.

TABLE 60.

REGISTERED STREETS: MORBIDITY AND MORTALITY STATISTICS.

D					Registere	d Streets.	Rest of the	e Borough.
D	isease.				1912.	1913.	1912.	1913.
MORBIDITY*-								
Smallpox					_			
Diphtheria and Mer					2.51	2.40	1.63	1.95
Erysipelas					1.36	1:14	0.74	0.71
Scarlet Fever	444		***	***	3.02	5.08	1.75	3.07
Enteric (and Contin					0.05	0.52	0.11	0 12
Puerperal Fever	***				0.11	0.05	0.07	0.05
All D	iseases		***	***	7.97	9.61	4.54	6.06
MORTALITY*—								
Smallpox		***		***				
Measles					0.85	1.77	0.13	0.19
Scarlet Fever					_	0.05	0.02	0.04
Whooping Cough					0.11	0.78	0.15	0.17
Diphtheria					_	0.15	0.04	0 09
Enteric Fever					_	0.20	0.00	0.01
Diarrhoeal Diseases					1.53	2.46	0.21	0.26
Erysipelas			***		0.05	2 10	0.01	0.01
Puerperal Fever					_	0.05	0.03	0 01
Pulmonary Tubercu					2.16	1.99	0.63	0.93
Other Tuberculous				***	1.19	0.37	0.20	0 18
Alcoholism					0.11	0.15	0.05	0 01
Cancer			***		1.59	1.56	1.18	1.23
Premature Birth			***		0.85	0.67	0:34	0.38
Developmental Disc			+++		0.85	0.94	0.21	0 12
Bronchitis					3.13	2.46	1.07	1.07
Pneumonia		***		***	2.22	2-62	0.76	0.83
Cirrhosis of Liver					0.22	0.15	0.12	0 12
Accidents and Dise		Partur			0.05	0.05	0.04	0 04
Suicides	***				0.17	0.15	0.08	0.13
Other Causes	***			***	8.43	9.02	5.52	8.38
All C	Causes		***		23.59	25.51	10.87	11.82

TABLE 61.

		" Clarendon S	Street Area."		Rest of	Borough.
	1896-1900.	1907-11.	1912.	1913.	1912.	1913.
MORBIDITY*— Diphtheria Erysipelas Scarlet Fever Enteric Fever Puerperal Fever	. 2.08 . 5.21 . 0.96	1.60 1.63 7.79 0.75	2 44 1·62 1·79 0·16	5·51 2·11 5·67 0·48	1·71 0·78 1·91 0·10 0·08	1.86 0.71 3.16 0.16 0.07
MORTALITY*—ALL CAUSES— All ages	. 28.88	26·75 41·55 19·83	26·52 30·22 24·50	30 82 45 18 23 40	11.80	12.87
Institution Deaths	. 30.2	54.2	60.1	60.5	42.6	37.7

<sup>\*</sup> Rates per 1,000 persons.

118 Housing.

Clarendon Street Area.—In the last report the vital statistics, etc., of the Area were dealt with at some length, and comparisons between housing conditions found in 1901 and 1911 and between the average morbidity and mortality rates for 1896-1900 and 1907-11 were instituted. It does not appear, therefore, to be necessary to do more than call attention to some of the more important data for the past year.

At the time of the annual cleansing 5,683 inhabitants (including 1,978 children under 10) were enumerated in the area, constituting 1,469 tenements of families. The distribution, according to the number of rooms occupied, was:—

In	one r	oom	599	families,	CO	mprising	1,423	persons,	362	being under 10.
In	two	rooms	696	**		1)	3,266	"	1,304	"
In	three	11	158	11		**	908	,,,	286	"
In	four	22	12	33		11	76		22	
In	five	11	2	111		,,	16	,,	4	"

Forty-one tenements, containing in all 57 rooms, were found to be overcrowded, the inhabitants of the overcrowded tenements numbering 224 persons, of whom 108 were under 10 years of age. The proportion of tenements overcrowded was 2.7, and of inhabitants 3.9 per cent. In contrast with those proportions may be cited the fact that in 1901 10.7 per cent. of the tenements and 16.0 of the inhabitants of the area were found to be overcrowded.

The overcrowded tenements comprised 27 of one room, 13 of two rooms, and 1 of four. The tenements were situated—in basement 17, on ground floor 5, on first 7, and on second 11. The four-room tenement consisted of basement and ground floors.

Although there has been an improvement in the housing conditions, measured by the reduction in the amount of overcrowding, the rates of morbidity and mortality show no signs of decreasing. This disappointing fact is clearly shown by the figures given in Table 61, where the averages for the two quinquennia, 1896-1900 and 1907-11, are compared with the rates observed during 1912 and 1913, the rates for those years for the rest of the Borough being included for the purpose of contrast. It has to be remembered that the population of the area is a comparatively small one, now under 6,000, and that as a consequence a small addition to the number of cases (or deaths) in any year makes a much greater increase in the morbidity (or mortality) rate than in the case of the Rest of the Borough. Even with that reservation the increases in the morbidity rates are very disappointing. As regards morbidity, the most satisfactory feature is the absence of puerperal fever, no case of which has been reported since 1906.

As regards the mortality the one fact which will attract attention is the high and increasing proportion of deaths in institutions. Such high proportion is not due to the prevalence of infectious disease in the Area, as practically all cases of such diseases have been removed to hospital since the Area first attracted attention. It is almost entirely due to the poverty of the inhabitants, and furnishes a clue to the cause of the general high mortality. The increase recorded last year in the mortality at ages under 10 years was due to the prevalence of measles, whooping cough, and diarrhœa. (See below.)

Deaths from-			1909.		1910.	1911.		1912.		1913.
Measles	***		12	***	24	 19		5	***	16
Whooping Cough	***		8	***	_	 5	***	1	***	4
Diarrhœal Diseases			14		5	 21		16		19
Tuberculous Diseas	es—									
Pulmonary		***	12		10	 15		9		15
Other	***	***	9		6	 6		10		3
Bronchitis, Pneumo	nia	***	47		38	 27		41		47

Since 1905 the infantile mortality of the rate has been determined each year. During the nine years that rate has varied from a minimum of 123 per 1,000 births in 1910 to a maximum of 222 in 1909. Last year the rate was 173, as compared with 175 in 1912. Evidently there is much room for preventive work with regard to this particular subject.

#### COMMON LODGING HOUSES.

There are 7 of these houses in the Borough, the same as in 1912. The accommodation provided comprises 6 houses for men, with 195 beds, and 1 for women, with 37 beds. No cases of infectious illness were reported from any of the houses, the diagnosis of such diseases as enteric fever, erysipelas and tuberculosis, the infectious diseases most common among the frequenters of these houses, being almost invariably made after the patients have been admitted to the Infirmary. There was a very considerable increase in the number of deaths of inmates of these houses, the number rising from 9 in 1912 to 20 last year. The causes of death were certified to have been due to—

Respiratory diseases	***	5	Lead poisoning	 )
Pulmonary tuberculosis		4	Enteritis	 
Enteric fever	***	} 3 each	Cerebral hæmorrhage	 } 1 each
Cancer		Jo cacii	Heart disease	 
Epidemic influenza	***	} 1 each	Old age	 )

#### INHABITED HOUSE DUTY.

Last year four new applications for certificates for the abatement or remission of this duty were received. Two of the applications were not carried through. Four certificates (including three relating to applications mentioned in the 1912 report) were issued, covering 25 tenements or separate occupations. One application remained over for completion during the current year.

### FOOD SUPERVISION.

Slaughterhouses.—The number of slaughterhouses in the Borough remained unchanged They are situated as here set out :—

```
Bishop's Mews, No. 1.

Edgware Road, No. 275.

Portsdown Mews (at rear of No. 249, Maida Vale).

Upper Brook Mews, No. 6.

Southwick Mews, No. 15.

Chippenham Mews, No. 18.

Harrow Road, No. 125.
```

The slaughterhouses are systematically inspected by the Meat Inspector, and by the Medical Officer of Health at least once a year. No grounds for objection to the renewal of the licences were discovered.

The Inspector was present at the slaughterhouses while killing was taking place on 408 occasions (447 in 1912). The animals slaughtered comprised 37 bullocks and 3,482 sheep last year, as compared with 64 bullocks and 4,303 sheep in 1912. The number of animals slaughtered has been decreasing for some years, but may be expected to increase again owing to the smaller supplies available for importation.

The following parts (organs) were destroyed at the slaughterhouses.

Sheep. Livers, 10—parasitic 7, containing abscesses 3. Bullocks. Livers, 3—parasitic.

During 1912 and 1913 no tuberculous cattle were found in the slaughterhouses.

Food Purveyors.—There are 604 premises at which the trade in foodstuffs is carried on, the numbers of each class of trade being as here exhibited.

Butchers		81	Milkshops, Dairies	***	123
" Pork only		20	Refreshment houses		108
Fishmongers		31	Fried fish shops		26
Game, Poultry		11	Ice cream makers, vendors		122
Fruiterers, Greengrocers	***	69	Margarine dealers		13

There are, further, 7 places where fish curing is carried on, 8 where sausages and saveloys are made, and 2 factories for making artificial ice.

The costermongers' stalls in the Borough are kept under close supervision, and on Saturdays every stall is inspected at least twice. The Inspector reports that he made 1,043 inspections of food premises, other than costermongers' stalls during the year, distributed as set out below:—

Butchers' shops	 450	Milkshops		172
Greengrocers' shops	 9	Restaurants, &c		200
Fishmongers' shops	 20	Ice cream shops, barrows		124
Fried fish shops	 60	Fish curers' premises	***	8

Premises where food is stored or sold are liable to inspection under the Public Health (London) Act, 1891—for the discovery of unsound food, nuisances, etc.—and under the London County Council (General Powers) Act, 1908. The inspections referred to above were mainly for the discovery of unsound food.

Milk Supply.—There is only one cowshed in the Borough, certified for 10 cows but usually not containing more than four, situate at—

Star Street, No. 39.

The Food Inspector visits the premises at least once a quarter and the Medical Officer of Health once a year. The Officers of the County Council are mainly responsible for cowsheds and the cattle therein. Whenever visited by the Medical Officer of Health, the shed has been found clean and well kept, and the cattle in good health, so far as can by judged by observation without clinical examination.

Dairies and Milkshops.—At the close of 1912 there were 120 names on the Register of milk vendors. Last year four new entries were made and one name was removed. One application to be registered was refused, and five businesses were transferred to new proprietors. Proceedings were taken against seven persons for selling milk without being registered, one of them being prosecuted twice during the year. Three of the defendants had been removed from the Register in 1910 on the coming into force of the London County Council (General Powers) Act, 1908. The Register contained 123 names at the close of last year, the class of businesses being carried on in connection with the sale of milk being sufficiently indicated by the following statement.

Dairies, wholesale	5 (4)	Grocers' shops	***	1	(I)
Dairies, retail	86 (85)	Provisions Dealers	***	1	(1)
Refreshment houses	9 (9)	Bakers' shops		4	(4)
General of	lealers	17 (16).			

These premises are inspected at least once a year, more frequent inspections depending on the known character of the proprietors. A copy of the regulations relating to the sale of milk is left with each proprietor at the beginning of each year.

One case each of scarlet fever and erysipelas occurred during the year at premises where the sale of milk was carried on, and 7 cases of diphtheria, 6 of scarlet fever, and 1 of enteric fever in the homes of milk roundsmen living and working in the Borough, and 2 cases of scarlet fever and one of diphtheria in the homes of men working in other boroughs but living in Paddington. No contravention of the regulations relating to the occurrence of infectious disease was reported last year. The roundsmen were in all cases put off duty until they had been seen by the Medical Officer of Health, or the medical officer of the dairy, and certified as free from infection. When there has been any contact with diphtheria, swabs are taken from the throat and nose of the roundsman before he is allowed to return to work. There was no evidence of any spread of infection through any milk supply.

Ice Cream Making.—A register of makers and vendors of ice cream is kept under the provisions of Part VIII. of the London County Council (General Powers) Act, 1902. At the close of 1912, 110 names were on the Register, to which 10 names were added and from which 4 were removed during the past year. At the close of 1913 the Register contained 116 effective entries. The businesses with which the sale of ice cream is combined are indicated by the subjoined statement.

Sweetstuffs	50	Bakers	***	8
Newspapers and Tobacc	o 21	Confectioners	***	9
Restaurants	13	Greengrocers		8
General Dealers	10	Milk Shops		2

There are also 6 barrowmen resident in the Borough who have regular pitches, and 6 others not resident in Paddington. The latter are known to be residents of Kensington, St. Marylebone, and Willesden (2 each). All barrowmen are required to indicate on their barrows where they make the ice cream.

#### UNSOUND AND DISEASED FOOD.

In addition to the small quantity of flesh food dealt with at the time of killing and destroyed at the slaughterhouses, 1,401 lbs. of food-stuffs were condemned and destroyed last year, as compared with 10,109 lbs. in 1912. The high figure for 1912 was mainly due to the inclusion of a consignment of over 7,000 lbs. of potatoes destroyed at the request of the Great Western Railway Co. Last year's figures are remarkable for the quantities of fish destroyed. (See below.) Only one prosecution was taken, which was for the exposure for sale of maggoty and mouldy walnuts. The defendant, a costermonger, was ordered to pay 5s. costs.

#### FOOD-STUFFS DESTROYED, 1913.

Meat (Butchers' shops):—Beef, 42 lbs.; Pigs' livers, 14 lbs.; Geese, 56 lbs.; Rabbits, 60 lbs.

Fish:—Herrings, 200 lbs.; Kippers, 256 lbs.; Sea Bream, 80 lbs.; Mussels, 20 lbs.

Fruit:—Tomatoes, 242 lbs.; Pears, 224 lbs.; Walnuts, 111 lbs.; Oranges, 56 lbs.; Plums, 10 lbs.

#### SUMMARY.

Meat	***	***	***			232 lbs.
Fish	***		***	***		496 ,,
Fruit	***	***	***	***	***	643 ,,

Very little food-stuff was condemned while in transit, as the Railway Company asked for the destruction of 14 fowls only, weighing 30 lbs., as compared with a total of 10,109 lbs. in 1912.

## ANALYTICAL WORK.

Food Adulteration.—Last year 601 samples were submitted to the Public Analyst, the number found to be adulterated being 61, or 43 less than in 1912, when the total number of samples was 600. The proportion of samples found to be adulterated in each of the last six years is shown below.

Percentage of total Samples adulterated.

1908.	1909.	1910.	1911.	1912.	1908-12.	1913.
2.6	8-6	9.0	8.3	17.4	9.2	10.1

Table 62 contains a complete list of the food-stuffs samples during the year.

TABLE 62.

Samples taken under the Sale of Food and Drugs Acts, &c.

					Total.	Found Adulterated.	Percentage Adulterated.
		*					
Milk	***		***	***	259*	30	11.6
Butter	***				75	8	4.0
Vinegar	***				31	7	22.6
Coffee					26	1	3.8
ams					20	3	15.0
Sausages and	German	Sausage			20	8	40.0
Ketchup	***	***			16		-
Rice				***	15	_	_
Brawn	***		***	***	14	4	28.5
Cocoa					13		-
Mincemeat	***			***	12	_	
Margarine					11	_	-
Camphorated					10	2	20-0
Pearl Barley					10	_	_
Cornflour					10	_	_
Datmeal					10	_	_
- 3	***		4.00	***	9	_	_
	***	***	***	***	7		_
4	***	***	***		6		_
	andial	***	***	***	6	3	50.0
ime Juice C		***	***	***	4		
Hycerine	***	***	***	***	4		_
Vines	***		***	***	3	_	
Beer	***		***	***	2		
heese	***		***	***	1		
farmalade		***	***	***	- 1	_	
al Volatile	- C NT		***	***	1		
weet Spirits		***	***	***	1		
Eucalyptus O	il	***	***	***	1		
uniper Oil	***		***		1		
mmoniated	Tincture	e of Quin	ine	***	1	_	
Bread	***	***		***	1		
ressed Beef			***		1		
					601	61	10.1

<sup>\*</sup> Including 39 taken at Paddington (G.W.R.) Terminus in course of delivery: 19 adulterated.

Of the 259 samples of milk 39 were taken at the Paddington Terminus in the course of transit, under contract, at the request of the consignees. As in most instances private analyses had disclosed the unsatisfactory character of the milk being consigned, it is not surprising to find that 19 out of the 39 station samples were adulterated, equivalent to 48.7 per cent., as compared with 50 per cent. in 1912. It is somewhat curious how the proportion of station

samples proving to be adulterated varies from year to year, as will be seen from the statement given below.

## STATION SAMPLES. Percentage adulterated.

1908.	1909.	1910.	1911.	1912.	1908-12,	1913.
6.4	24.3	14.9	19.1	50	22.94	48.7

Samples are taken at irregular intervals on Sundays and Bank Holidays. Last year 59 samples were taken (all on Sundays), 4 of which (6·7 per cent.) being reported to be adulterated. In 1912 the proportion was 6·5 per cent. Excluding the samples taken at the Railway Terminus the proportion of adulterated samples of milk obtained in the Borough was 6·1 per cent. Of the 342 samples other than milk, 31 (equal to 9·0 per cent.) were found to be adulterated.

It will be seen that the proportions of adulterated samples were particularly high in certain commodities, e.g., vinegar, jams, sausages, brawn, etc. In the case of the vinegar, certificates of adulteration were returned when the amount of acetic acid present was less than 4 per cent., that being the proportion which the representatives of the trade have agreed ought to be present in genuine vinegar. As, however, there is no legal standard, no action was taken with reference to the samples in question. In the jams, adulteration consisted in the admixture of fruit pulp (usually apple pulp) other than that belonging to the fruit from which the jam was made. Proceedings against one vendor were unsuccessful, as he was able to produce a warranty, as also were proceedings against the giver of the warranty. Attention should be directed to the unsuccessful proceedings with respect to samples of camphorated oil and coffee. With regard to the former—a pharmacopæial preparation, but containing 18 and 23 per cent. less than the prescribed amount of camphor—the defence was a warranty. The sample of "coffee" was found to contain 66 per cent. (two-thirds) chicory. The defence was taken up by the wholesale firm, who contended that the mixture had been sold by them as "French coffee," and that following the case of Otter v. Edgeley (1893) any amount of chicory could be added.

Preservatives in Food.—Appended is a complete list of the food-stuffs, other than milk samples, which were found to contain preservatives, with the amount thereof present in each case.

Lime Ju	ice Core	dial				3 gr	ains of	Salicylic Acid	per pint.
	**			***		61	"	,,	**
	,,,					63	13	33	1)
Brawn						24	"	Boric Acid per	pound.
,,				***		61	,,	ñ	"
11	***					121	**	"	,,
2.5			***	***	***	8,4	**		"
Sausages				***		41	**	,,	"
13				***	***	163	"	,,	**
11						84	11	"	,,
11	***	***	***		***	410	**	"	,,
11	***	***	***	***		64	**	"	**
German	Sausage	***	***	***		72	11	,,	,,
. 29		***	***		***	84	11	,,,	,,
**				***		104	35	,,	"

It is almost useless to institute proceedings in such cases as these, as it would be necessary to proceed under Section 3 of the Act of 1875; that is to say, to satisfy the magistrate that the amount of preservative found was injurious to health. That is a task of some difficulty in any case, especially when the amount in any individual sample is relatively small. Expert evidence to the contrary can always be adduced. The fact of preservatives

being used in many kinds of foods cannot be adduced in evidence regarding any one sample, and yet that fact has a most important bearing on the question.

There is a strong suspicion that in certain cases preservatives are used because some of the ingredients have been kept just long enough at the time of manufacture, and that the preservatives are required to stop incipient decomposition and to mask the evidences (taste, smell, &c.) of such changes. The preservative will not neutralise the chemical poisons present in consequence of such incipient decomposition.

In other countries—notably the United States of America—preservatives are prohibited. It is time that the question was seriously taken up by the Government, and adequate restrictions imposed upon the drugging of the food supply.

Milk and Cream Regulations.—The Regulations of 1912 prohibit the addition of any preservative to milk, but allow the addition of certain preservatives to cream subject to compliance with the requirements as to declaration of such addition. All the samples of milk were examined with a view to the detection of preservatives, and in 3 samples benzoate of soda (probably in the form of Friars' Balsam) was found to be present. The routine prescribed by the Regulations was carried out and ultimately proceedings were taken against the vendor of the samples, who was fined £10 with costs. The penalty under the Regulations is an amount not exceeding £100. No samples of cream were taken during the year.

Facing of Rice and Pearl Barley.—In consequence of a communication received from the Borough Council of Kensington, a number of samples of both these commodities was obtained and submitted to examination. None of the samples of rice and only one of those of pearl barley showed evidence of the presence of facing matter (probably talc) in excess of the amount (0.5 per cent.) suggested in the report of Dr. Hamill to the Local Government Board.

Dried Haddock.—It may come as a surprise to learn that even the London-cured haddock cannot escape from the attention of sophisticators. A special dye—apparently derived indirectly from the gas-works—is on the market for securing a tempting golden hue to the smoked fish, and, it is suspected, for economising the cost of smoking.

Rag Flock Act.—Forty-eight samples were taken under this Act, 16 being described as from "re-makes" and 32 from new material. In the latter samples the maximum impurity found present was equivalent to 70 parts of chlorine per 100,000 parts of rag flock and the minimum  $8\frac{1}{3}$  parts. In the re-makes the maximum impurity was equivalent to 280 parts and the minimum  $12\frac{1}{2}$  parts. The decision given in the case of Jordan v. Gamble has practically rendered the Act useless as regards re-makes. The Act requires amendment, both as regards re-makes and as to the definition of the term "rag flock," to make it workable.

### OFFICE (CLERICAL) WORK.

The appended summary relating to the work of the Clerical Staff is submitted as evidence of the work of the Staff, and not as a complete record of its activities. Numerical statements cannot be submitted of the multifarious tasks of preparing reports, posting-up indices in various forms, and generally recording the work of the Department for future reference. The records and correspondence entailed by the Tuberculosis Regulations and the Insurance Act are already of considerable dimensions, and will be much increased by the impending schemes for the treatment of tuberculosis in the general population. The demand for daily, weekly and special returns to central authorities takes up much time which would otherwise be available for work of a more local character. Daily returns of the notified cases of infectious illness are sent to the Metro-

politan Asylums Board and weekly returns of full particulars of notifications of births and of cases of tuberculosis to the London County Council.

Letters received	5,763 (5,006)	Births entered in Register	3,082	(3,041)
" despatched	4,981 (4,638)	Complaints received	AND 4 MAY	(752)
Entries in Postage Book	14,175 (13,075)	Plans dealt with	343	(352)
Cases of infectious disease entered		New openings in Journals	576	(661)
in Register (including consump-	1.000 / 1.000	Disinfection Orders (duplicate)		(2,655)
tion)		Notices to abate nuisances	1,541	(1,020)
Notices sent re above and other diseases				

The figures in parentheses are the returns for 1912.

### LEGAL PROCEEDINGS.

A summary of the cases heard at the Police Court follows this. Happily only a very small proportion of the matters dealt with by the Department lead to summonses. The bulk of the nuisances and defects coming to the knowledge of the Department are remedied on informal notices—" written intimations" or verbal requests.

The fines imposed last year amounted to £43 15s. 9d. and the costs awarded £35 1s. 6d. With the exception of those under the Notification of Births Act, all fines are paid to the Council's account. The amounts under both heads during the past six years are shown below.

				FIN	ES ANI	o C	OSTS								
					" Heal	th "	Case	es.		u A	dulter	ratio	n " C	ases.	
					£	5.	d.				£	s.	d.		
	1913		***	***	43	17	9		***		34	19	6		
	1912				15	8	0				41	19	0		
	1911	***			19	5	6				50	9	0		
	1910	****	***	***	13	15	0				125	8	6		
	1909				52	6	6				86	6	6		
	1908				43	10	0				55	17	6		
	1907	***	***		69	19	0				31	16	6		
			A	VERA	SE PER	Co	NVI	CTION	٧.						
	1913		1919	2.	19	11.		19	909.		1	908.		1907.	
Fine	£1 10		£0 8	11	£0 1	3	0.	£1	3	9	£1		3		0
Costs	0 15	9	0 8	11	0 1	4	8	0	12	2	0	13	9	0 12	8

## LEGAL PROCEEDINGS, 1913.

	Public	Heal	th (London) Act, 1891.	Fines.	Costs.
			Section 4.	£ s. d.	£ s.
, Brindley Street			Washhouse paving defective	Order made.	1 3
16, Church Street			Roof leaky, walls and ceilings dirty	11	1 1
, Lanark Place	***	***	Drain defective, etc	West "lane	0 10
11, Oxford Terrace 19, Portsdown Road	***	***	Waste pipe, paving, &c., defective ; basement	Work done.	0 10
ioj i ortanomii roma			damp	Summons withdraw	
, Sutherland Place	***		Drain, water-closet, &c., defective	Order made.	0 6
10, Westbourne Grove	***	***	Premises without water supply	Supply reinstated. Summons withdraw	m.
			Section 47.		
oseph Nudds, 9, Rodbo	rough 1		Being in possession of unsound walnuts	-	0 5
			Section 96,		
116, Church Street	***		Failing to cause underground room to be	Room vacated.	0 2
			vacated (front basement) Do. (back basement)	4 7 6	
11			By-laws.		
6, Hall Place			Annual standard and acceled and	Order made.	0 2
6, Hall Place		***	annual cleansing not carried out	Work done.	0 2
		***	,,	19	0 2
4, Torquay Street	***	***	"	Summons withdraw	0 10 n.
, Victoria Street		***	,,	29	0 5
, Wellings Place	***		11	,,	0 5
, Gloucester Mews 3, Goldney Road		***	Sanitary works executed without notice	0 5 0 0 10 0	0 2
6, Inverness Terrace	***	***	n		0 2
7, Leinster Square	***	***		0 5 0 0 10 0	0 2
0, Conduit Mews	***	****	Sanitary works executed in an improper manner	0 10 0	0 2
2, Green Street			Sanitary works executed without notice and	0 10 0	0 2
			in an improper manner	1 0 0	1 1
46, Queen's Road 5, Brindley Street	***	***	Yard paving defective	1 0 0	0 2
70, Harrow Road			Work improperly executed	Police unable to eff	
O Tanasatas Cata				service of summo	-
0, Lancaster Cate 46, Queen's Road		***	,,	-	1 3
	Noti	ficatio	n of Births Act, 1907.		
5 Summonses issued ag	ainst r	parent	s—	£ s. d.	£ s.
		1 W	ithdrawn		0 10
4 Summonses issued ag	minst r		nvictions (total)	0 7 0	0.8
t Dummonses issued ag	amor-		ithdrawn		1 1
		2 Co	nvictions (total)	0 15 0	0 7
Но	using,	7 0101	Planning, &-c., Act, 1909.		
2 Tenants, 8 Deshorou	oh Str	eet .	. Failing to vacate premises after Notice of	Ordered to leave wit	hin a we
	0		Closing Order		
1 Tenant, "		"	. ,, ,, ,, ,, ,,,	Order made.	0 3
1 10 10,	3				0 0
		Rag	Flock Act, 1911.		
				£ s. d.	£ s.
C. M. Fox, Harrow Ro	ad		. Being in possession of flock containing 180	& S. U.	0 12
			parts of chlorine to 100,000 parts of the flock		
		Carne	heds and Milkshops Orders.		
n	BIVIAG		neus una arramação Ornera.		
D	airies,				
				Æ s. d.	£ s.
F. Boultwood, 2, Netley	Street	t	Selling milk without being registered	0 10 0	0 7
F. Boultwood, 2, Netley	Street	t k. Rd	,, ,,,		0 7 0 17
F. Boultwood, 2, Netley	Street	t k. Rd		0 10 0 0 10 0 0 5 0	0 7 0 17 0 17
F. Boultwood, 2, Netley Mrs. Cole, 129, Westbo Miss Farebrother, 108a	Street	t k. Rd	,, ,,,	0 10 0 0 10 0 0 5 0	0 7 0 17 0 17 0 17
F. Boultwood, 2, Netley Mrs. Cole, 129, Westbo Miss Farebrother, 108a Road	Street urne P , Rich	t k. Rd mond	" " ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	0 10 0 0 10 0 0 5 0 0 10 0 or 10 days in defau	0 7 0 17 0 17 0 17 lt.
F. Boultwood, 2, Netley Mrs. Cole, 129, Westbo Miss Farebrother, 108a Road "H. Gorvin, 5, Hall Place	Street urne P , Rich	t k. Rd mond	n	0 10 0 0 10 0 0 5 0	0 7 0 17 0 17 0 17
F. Boultwood, 2, Netley Mrs. Cole, 129, Westbo Miss Farebrother, 108A Road  H. Gorvin, 5, Hall Plac Ellen Joyce, 3, Brindley Clara Pain. 2, Brindley	Street	t k. Rd mond	" " "	0 10 0 0 10 0 0 5 0 0 10 0 or 10 days in defau 0 10 0	0 7 0 17 0 17 0 17 lt. 0 2
F. Boultwood, 2, Netley Mrs. Cole, 129, Westbo Miss Farebrother, 108  Road  H. Gorvin, 5, Hall Plac  Ellen Joyce, 3, Brindley	Street	t k. Rd mond	" " "	0 10 0 0 10 0 0 5 0 0 10 0 or 10 days in defau 0 10 0 0 1 9	0 7 0 17 0 17 0 17 lt. 0 2 0 7

# SUMMARY OF LEGAL PROCEEDINGS DURING 1913 Under Sale of Food and Drugs Acts, 1875-1907, &c.

										Fines. £ s. d.	Costs. £ s. d.
(1)	Milk	***	***		12%	added water	***			Warranty proved.	
- 1	**				20%	,,		***	***	Do.	Do.
3	***		***		81.9/			***		_	Do.
1	11			***	71%	17		***	***	_	Do.
(	39		***	***	10%	"		***		-	Do.
)	23		***	***	10%	**	***	***	***	-	Do.
7	21	***	***	101	12%	11	***	***	***	_	Do.
(	29		***	***	11%	31	***	***	***		Do.
	23		***	***	9%	17	***	***	***	3 0 0	0 15 6
	31	***		***	6%	"	***	***	***	Warranty proved.	Summons dismissed.
	39	***	***	***	6%	**	***	***	***	0	Do.
	33	***	***	111	30%		***	***	***	Summons withdra	
	19	***	***	****		fat abstracted	411	111	***	Do.	0 12 6
1	**	***	***	***	18%	,	***	***	***	Warranty proved.	dismissed.
	55	***	***	410	14%	27	***	***	***		Do.
	33	***	***	***	14%	33	***	***	***	_	Do.
1	11	***	***	***	11%	**	***	***	***		Do.
1	**	***	***	***	85%	11	***	***	***	_	Do.
	**	***	***	***	12%	31	***	***	***		Do.
1	11	***	***	111	19%	"	***	***	***	-	Do.
1	99.	***	***	***	13%	33	***	***	411	0.10.0	Do.
	**	***	***	***	5%	11	***	***	***	0 10 0	0 12 6
(2)	19		***	***	5%	17	***	***	***	Warranty proved	dismissed.
	99	***	***	***	14%	"	***	***	***	1 0 0	0 12 6
(8)		***	***		14%	**	***	***	***	Warranty proved.	dismissed.
5	99	***	***	***	8%	**	***	***	***		Do.
1	. 21	***	***	***	12%	33	***	***	***		Do.
5	19		***	***	10	of a grain of ber	nzoic acid p	per pint		10 0 0 Summons dis	1 17 6 missed.
(	**	***	***						***	Do.	
		berry J			20%	apple pulp		***	***	Warranty proved.	dismissed.
		99	***	***		" givir	ng false was	rranty	***		Do.
		11	***	***		**	***	***		0 5 0	0.12 6
		13	***	***	10%		***	***	***	0 10 0	0 12 6
(4)	Butte	r	***	***		foreign fat	***	***	***	2 0 0	0 17 6
	. 75	***	***	***	77%		***	***	100	0 1 0	0 17 6
	Cam	phorate	d Oil	***		deficient in can	aphor	***	***	Warranty proved.	dismissed.
	23000	. 11	***	****	18%	. 11			***	Summons withdra	wn. 4 4 0
			Cordial	***		grs. of salicylic		int	***	C	00. 03
	Coffe		***	***		chicory		***	***	A 20 A	ainst Council.
1	Marg	arine	***	***	Sold	in an unstampe	ed wrapper	***	***	0 5 0	0 17 6
1		19	***	***				***	***	0 10 0	0 2 0
1		**	***	***		from unlabelled		***	***	0 5 0	0 17 6
		11	***	***	Sold	in an unstampe	a wrapper	***	***	Summons withdra	wn. 0 2 0 0 12 6
		19	***	***		19		***	***	0 5 0	0 12 6
		17	***	***	05-11			and the	***		0 17 6
		19	***	***	Sold	from improperly	y marked b	ouik	***		0.11 0

## NOTES.

Samples purchased from one and the same vendor are bracketed together.

	anni	nes pui	chased from one and the same vendor are	- Dinch	recen collection			
					Fines		Costs	
	Previous proceeding	s:-			£ 5.	d.	£ 3.	Cl.
(1	) May 31st 1912	***	Milk containing 7% added water	***	Warranty	proved.	Summons	
(2	) March 5th 1909	****	Margarine sold as butter		8 0	0	0 17	6
*	Sept. 20th 1912	***	Milk containing 9% added water		Warranty	proved.	Summons dismissed.	
(8	Oct. 30th 1908		Butter containing 761% of foreign fat		1 0	0	0 12	6
10		***				0	0 12	6
	July 9th 1909	***	", ", 74% ", Margarine sold in an improper wrapper	***		0	0 12	6
	31 33	***		***		0		
	17 27		Milk containing 5% added water	***		0	0 12	6
	39 33	***	Butter containing 84% of foreign fat	***		0	0.12	6.
			Margarine sold in an improper wrapper		2 0	0	0 12	6
	July 16th 1909		magaine som man mile of a melt		_		0 2	0
	July 10th 1808	***	Managine not proposite labelled		8 0	0	0 12	6
	. " "	911	Margarine not properly labelled	***				
	August 25th 1911	***	Fresh cream containing 0.45% boric acid	***	Summons	of £1 1s.		
(4	Nov. 30th 1906		Margarine sold as butter	***	2 0	0	0 12	6
100	July 15th 1910		Name and address not on milk can		0 5	0	0 7	6
		***	Milk containing 4% of added water		0 10	0	0 12	6
	May 11th 1912	***		***		0	0 2	0
	19 .99	***	,, 6% ,,	***	0.10	0	0 2	O

## APPENDIX.

## TABLE I.

I..G.B.

				Births.		4-1-		De	aths at	All Ag	es.		De	aths und	er One Y	ear.
Year.	Estimated Popula- tion.	Registered Locally.	Tran	nsfers.	N	ett.	Registered . Locally.	Gross Mortality.	Tran	sfers.	N	ett.	Regis	tered.	Ne	tt.
		Reg	Out.	In.	Totals.	Rates.	, Regi	Mor	Out.	In.	Totals.	Mortal- ity.	Number.	Mortal- ity.	Totals.	Mortal- ity.
1903 1904 1905 1906 1907 1908 1909 1910 1911 1912	143,668 143,528 143,388 143,246 143,103 142,958 142,811 142,663 142,513 142,362	3,302 3,295 3,184 3,152 3,074 3,149 2,895 2,909 2,815 2,774	29 41 49 69 62 57 57 50	144 175 181 216 198 170 230 267	3,299 3,286 3,206 3,296 3,031 3,032 2,977 2,991	23·01 22·94 22·40 22·68 21·22 21·18 21·46 21·18	2,103 2,228 2,210 2,041 2,154 2,079 2,154 2,004 2,074 1,889	14·64 15·52 15·41 14·25 15·05 14·30 15·08 14·05 14·55 13·27	366 387 410 395 372 400 409 384 407 372	181 173 161 197 232 217 219 175 259 254	1,918 2,014 1,961 1,843 2,014 1,896 1,964 1,795 1,926 1,771	13·35 14·03 13·68 12·87 14·07 13·04 13·75 12·58 13·51 12·44	425 490 441 395 396 374 347 353 399 326	128 148 139 125 128 118 119 121 141 117	388 449 391 353 354 348 311 294 387 295	- 118 107 110 105 102 97 126 98
Averages 1903-07 1908-12 1903-12	143,385 142,660 143,015	3,201 2,908 3,055	 59 -	216 —	3,063	21·47	2,147 2,040 2,094	14·97 14·29 14·65	386 394 390	189 225 207	1,950 1,871 1,911	13·59 13·11 13·36	429 360 395	134 123 128	387 307 347	
1913	142,261	2,832	55	242	3,019	20 87	2,071	14:33	407	315	1,979	13.68	342	121	305	101

Area of Borough (stat. acres)  $\begin{cases} \text{Total} & \dots & 1,856 \text{-}1, \\ \text{Waterways} & \dots & 20 \text{-}0. \end{cases}$ 

TABLE II. WARDS.

					WARDS	•				
			Queen's	Harrow	Maida	West-		Lancast	er Gate,	Hyde
		BOROUGH.	Park.	Road.	Vale.	bourne.	Church.	West.	East.	Park.
				Pe	OPULATION	is.				
				^ `	or o merior					1000000
1908		142,958	16,417	27,242	20,228	23,550	25,400	8,950	7,988	13,188
1909 -		142,811	16,307	27,176	20,445	23,518	25,274	9,020	7,994	13,076
1910		142,663	16,196	27,109	20,665	23,485	25,146	9,092	8,002	12,969
1911		142,513	16,084	27,041	20,886	23,452	25,017	9,164	8,009	12,860
1912		142,362	15,970	26,972	21,111	23,418	24,888	9,237	8,016	12,750
Averages		142,660	16,194	27,107	20,700	23,484	25,144	9,093	8,002	12,966
1913		142,209	15,856	26,903	21,337	23,384	24,756	9,312	8,023	12,638
	+				BIRTHS.					
			1	0.00		E05	500	00	pr.	179
1908		3,296	455	858	427	505	739	68	65	19
1909		3,031	382	741	392	470	743	63	48	
1910		3,022	406	717	407	468	720	70	58	17
1911		2,977	383	726	405	458	726	50	69	16
1912		2,991	399	700	437	476	681	64	64	17
Averages		3,063	405	748	414	475	722	63	61	17
1913		3,019	355	752	422	451	761	62	57	159
				DEAT	HS: ALL	Ages.				
			225	001	. 010	040	494	64	53	. 14
1908	***	1,896	225	381	249	343	434		62	16
1909		1,964	202	377	272	324	491	73		
1910		1,795	198	391	246	293	440	54	54	119
1911		1,926	222	383	277	365	414	65	66	13
1912	***	1,771	185	365	239	290	419	75	64	13
Averages		1,870	206	379	257	323	440	66	60	13
1913		1,979	229	393	274	358	469	72	59	12
				DEATHS:	Under (	ONE YEAR.				
1908	***	348	41	79	43	55	102	2	4	2
1909		311	28	55	36	50	116	4	4	1
1910	***	294	37	70	34	49	87	2	3	1
1911		386	48	83	44	70	113	7	3	1
1912	***	295	37	56	43	44	91	5	3	1
Averages	***	327	38	69	40	54	102	4	3	1
1913		305	40	51	32	56	104	3	5	1

TABLE III.

DEATHS OF RESIDENTS OF THE BOROUGH, 1913.

SEX-AGE DISTRIBUTION FOR WHOLE BOROUGH.

									De	eaths	at A	ges						In I	ublic
Causes of Death.	Al	l Age	8.	0	_	1	_	5-	-	15	_	2	5 —	-4.2	5	65	-	Ins	nitu-
				1															
	P.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	34.	F.	M.	F.
Enteric Fever	6	5	1	***	***	***		2	***	***	***	1	***	2	1	100	***	5	1
Smallpox	***	25	34	6	7	16	26	3	1	121	***	***	***	***	244	***	***	12	16
Measles Scarlet Fever	59	8	4			3	8		1	***	***		***	***	***	111	***	8	4
Whooping Cough	87	13	24	4	7	9	16		î							444		7	10
Diphtheria, Membranous																			
Croup	14	6	8		1	4	5	1	2	***		1		***	+++	***	***	5	7
Croup	***	7.0	222	127	***	7.77	***	***	***	***	1	3	2	3	5	5	18	3	ï
Epidemic Influenza	33	12 2	21	1	***	***	***	***	***	1		1					10	2	
Other Epidemic Diseases	111		***		***	***	***	***	***				***						***
Other Septic Diseases	5	2	3	***			***		1	***	***	1	2	+++		1	***	1	2
Pulmonary Tuberculosis,							10000						00	00					20
A. Phthisis	156	88	68	1	***	3	1	1	2	8	9	39	32	28	18	8	6	47	29
Tub. Meningitis, A. Hy-	16	7	9	2	1	1	8	4	8		1		9			400	***	5	4
Other Forms of Tuber-	10	1	- 37	-		-		-	0	***	1	***			***	***	111	1	1 10
culosis	14	7	7		2	2	2	1			1	8	2	1	***	***	4.0	4	8
Syphilis	10	6	4	4	2	1	***	+++			***	***	1	***	1	1	***	4	2
Cancer	185	65	120		***	***			***	***	***	8	18	36	58	21	54	38	48
Rheumatic Fever	18	7	6	***	***	***	***	1	***	***	***	1 2	1	5	5	***	1	1 4	2
Inflammation and Soften-	10	1	0		***	***	***	***	***	***	***	-	***	1		***	-	1	
ing of Brain	7	2	5					100	***				1	***	2	2	2		4
Cerebro-spinal Fever	***		411	***			111	***	***	***	141		***			***		***	***
Simple Meningitis	5	4	1	2	***	2	1	+++	***	***	***	***	***	***	110	111	977	3	10
Cerebral Hæmorrhage	61	22	89	***	-	***	***	***	***	***	***	***	2	8	12	14	25	10	10
Apopiexy Convulsions	9	7	2	5	2	2	***	***	***	***	***	***	***	***				***	
Endocarditis	2		2				1		***	***			1	***		***			
Heart Disease	221	84	187	444	***	***	***	2	5	8	8	9	12	86	42	34	75	32	58
Bronchitis	182	74	108	13	8	4	8	***	***		1	1	***	16	15	40	81	28	37
Lobular (Broncho-) Pneu-	74	44	30	23	11	12	10			1		1	1	4	3:	8	5	17	10
monia Lobar (Croupous) Pneu-	12	3.8	- 00	20	11	1.0	10	***	***	1	***	1	1	-1	0			1	10
monia	24	13	11	1	2	1	2	1	***	***	***	7	1	3	8	***	3	5	8
Pneumonia	57	36	21	9	2	-6	6	200		1	1	- 3	2	12	5	5	5	10	8
Other Diseases of Respira-	0.00	40	10			4				-	-	0			0	7	11	0	2
tory Organs	87 10	18	19	***	1	1	1	***	***	1	1	3	1	6 2	6	1	11	3	1
Diseases of Stomach Diarrhœa and Enteritis	81	49	32	40	28	7	5	***	***	***	***	***		1	***	i	4	31	18
Appendicitis	20	15	5	***			2	6	1	1		8		4	***	1	2	14	8
Obstruction of Intestines	14	10	4	2	***	***	1	***	***	1	***	1	1	8	1	8	1	6	2
Cirrhosis of Liver	19	9	10		***	***	***		***	***		***	5	7	8	2	2	4	***
Nephritis and Bright's	70	44	32						1			8	4	17	15	19	12	28	17
Tumours (NM.), &c.,	76	44	02	***		+++	***	***	1	***	***	0	- 4	41	20	10	4.0	200	-
Female Genital Organs	8		8					***	+3.00		***		- X+4		2	***	1		2
Puerperal Fever	3	***	8		***	***	***	***	***	***	1	***	2		***	***	***	***	3
Accidents and Diseases of	-										0		-		4				2
Parturition	7	5	7 9	4	7	***	1	***	1	***	8	1	3	***	1	***	***	3	2
Congenital Defects Premature Birth	62	32	30	32	80	***		***		***	***	1	***	***	***	***	***	9	6
Developmental Diseases	33	17	16	17	16		***	***			***	***	***			***	***	2	1
Old Age	89	33	56		***	***	***	***			***	***	***	***		88	56	11	14
Suicide	20	13	7		***	***	***	***		1	***	8	1	5	6	4	***	2	1
Overlaid in Bed Other Accidents and	3	2	1	3	1	***	***	***	***	***	***	***	***	***	***	***	***		+++
Other Accidents and Violence	58	34	19	8	1	2		6	2	1	1	6	5	12	2	4	8	15	8
Homicide	4		4		2			***					1		1				1
Execution	***		***		***	***			***	***	***		***		***	***	***		
Ill-defined Causes	3	100	2				2					0.0	10	1	077	0.5	47		1
All other Causes	114	102	216	6	2	2	4	2	4	3	6	26	18	40	27	85	41	51	40
			-				-	-	-	-		-						-	
ALL CAUSES	1,979	939	1,040	177	128	79	95	80	25	22	29	132	115	252	280	247	418	421	368
						-										1000			1

TABLE IV.

DEATHS OF RESIDENTS OF THE BOROUGH, 1913.

NUMBERS (ALL AGES) IN EACH WARD.

Causes of Death,			en's		rrow		ida		est-	Chu	rch.	La	ncast	er Ga	te,		rde
Omnoto of Denin		Pa	rk.	Ro	ad.	Va	ile.	bou	rne.	Citt	I CH	W	wet.	Ea		Pau	rk.
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Patrola Para		-						-									
Enteric Fever Smallpox		2	414	***	***	***	***	2	***	1	***	***	***	***	***	***	1
Manelos	*** ***	3	5	. 5	3	8	4	4	9	9	18	***	***	1	***	***	***
Scarlet Fever		1	1	1			1			1	1	***				***	1
Whooping Cough	***	8	6	***	6		2	5	8	4	7			1			
Diphtheria		1	***	1	***	1	2		2	2	2		***	***		1	2
Croup		***	***		***	***	***	***	***	***	***	***	***	***		***	***
Epidemic Influenza		3	1	1	2	8	4	8	7	1	1		2	***	1	1	3
Erysipelas		***	***	***	***	***		***	***	1	***	***		***		1	***
Other Epidemic Diseases Other Septic Diseases	*** ***	***	***	***	***	***			***	***	***	***		***	***	***	***
Pulmonary Tuberculosis	***	17	6	15	18	14	6	2 14	14	19	20	3	4	3	1	8	5
Tub. Meningitis		2	3	1.0	4	1		1.4	1	4	1						
Other Forms of Tuberculos	is		2	3			2	***	1	2	1	200		***	1	2	
Syphilis		***	***	1	1		1	2	1	2		***	1	***	***	1	
Cancer		11	7	9	24	13	24	17	24	7	23	1	8	4	3	8	7
Rheumatic Fever			1	1	***		1			1	***					***	
Alcoholism	···	***	555		1	2	1	***	1	3	1	***		***	***	2	2
Inflammation and Softening			***	1	3	***	***	***	***	***	1	1	1	1.11		***	***
Cimals Maniastri	***	***	***	***	***	***	***	***	***	8	***	***	***	***	***	***	***
Canalanal House such a sec		2	4	7	12	4	5	4	8	2	4	1	2	1	8	1	1
Apoplexy		ĩ	1		1				2		2	î				1	
Convulsions					1	1		1		4				***		1	1
Acute Endocarditis			***		***		1		1				***				
Organic Disease of the Hea	rt	12	15	15	38	6	17	18	21	20	82	8	_4	8	8	7	7
Bronchitis	***	15	15	15	22	8	17	12	15	18	27	1	8	8	2	2	7
Lobular (Broncho-) Pneumo		5	4	8	9	5	1	4	2	19	12		***	1	1	2	1
Lobar (Croupous) Pneumon		1 2	1 4	3 11	4 4	2 4		1	***	5	5 4	1	***	***	1 2	141	***
Other Diseases of Respirator	ov Organs	2	2	3	5	4	2 2	6 3	5 6	5	4	ï	***	1		1	***
	y Organs	1	1			1	2	1	1	1	1		***	***	***	***	1
Diarrhoea and Enteritis		4	8	10	4	6	3	10	9	19	11	***	***	***		***	2
Appendicitis		4	***	4	-2	***	1	1	2	4		2	***				***
Obstruction of Intestines			2	2	***	1	***	2	1	8	1			***		2	
Cirrhosis of Liver	*** ***	***	***	1	2	2	8	1	1	2	3	***				8	1
Nephritis		4	4	10	5	7	4	4	6	10	7	2	4	3		4	2
Tumours (NM.), &c., Fem.		***	***	***	2	***	***	***	1	****	***	***		***	***	***	***
Puerperal Fever Accidents and Diseases of P	arturition		***	***	1 3	***	***	***	2 2	***	1	***		***	***	***	***
Congenital Defects		***	1	***	2	1	1	***	2	4	2	***	1	***	***	***	1
Premature Birth		8	6	6	6	4	8	8	7	9	5	***	***	***	ï	2	2
Developmental Diseases		2	1	8	4	8	3	1	2	8	4	2		2		î	2
Old Age		3	4	8	11	4	7	8	12	4	9	2	6	1	2	8	5
Suicide	*** ***	***	***	1	2	1	2	2		5	2	3	1	***	***	1	***
Overlaid in Bed		***			1	1			***	1				***			***
Other Accidents and Violer	ice	4	2	4	8	4	4	6	8	8	4	8	1	1	2	4	***
Homicide Execution		***	***	***	1		***	***	2	***	***	***	***	***	***	***	1
III defined Conses		***	***	***	***	***	1	***	***	***	1	***	***	***	***	1	***
All other Causes		11	8	24	18	28	16	21	18	21	19	2	5	2	9	10	9
111				-				-	1000	-		1	-	1	- 3		
ALL CAUSES		119	110	178	220	129	145	163	195	238	281	29	43	27	82	61	64
In Institutions	*** ***	66	36	66	74	58	41	71	67	129	110	6	11	8	8	17	21

## TABLE V.

# Transferred Deaths. 1913.

(Included in Table III.)

Causes of Death.	Al	l Age	es.	Und	er 1.	1-	5.	5-	15.	15-	-25.	25-	65.	65 upw		Ins	titu ns.
	P.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F
Diphtheria	1	1		***		1		***	***	***	***	***				1	
Epidemic Influenza	1	1										1					
	*	-			***	***	***	***	301	***	***	***	***	1010	111	***	
ulmonary Tuberculosis, A.	0	1	0					- 4					2			1	
Phthisis	3	T	2	1111	4.84	***		1	***	***	***	***		***	175	1	7.5
ancer	5	***	5		***	***	***	***	411	***		***	8	111	2	***	
Organic Disease of Heart	8	3	5	124	***	***	***	***	***	***	***	2	2	1	8	2	
Bronchitis	1	***	1	***	***	***	***	***	***	***	***	***	1.00	***	1		
Pneumonia	3	2	1			***			***	***		2	***	***	1	1	
Other Diseases of Respiratory																	
Owner	1		1						100				322		1	1000	
Variable Control of the Control of t	-	1	-					1								1	
	1	3	***	***	***	***	***	-	***	***	***	***	***	***	***		**
Cirrhosis of Liver	1	3		***	***	***	***	***	***	0.10	***	1	***		***	***	
Nephritis and Bright's Disease	5	8	2	***	***	***		***	***	***		1	1	2	1	1	
Old Age	2	- 4.6.5	2			330	110	315		0.0.0	***		3000	***	2	227	
Suicide	4	3	1		***		***		***	1		1	1	1		1	
Accident and Violence	6	5	1		***	***	***	2	***	1		2	1				
Homicide	1		1										1				
II-defined Causes	1	1	****		***							1					
All other Course	8	5	3									3	2	2	1	2	
all other Causes		4		4.4.4	***	***	1.11	***	***	***	***						
ALL CAUSES	52	27	25			1		4		2		14	18	6	12	10	

## TABLE VI.

## TRANSFERRED DEATHS.

1913.

(Included in Table IV.)

Causes of	Danth			Queen's	Harrow	Maida	West-	Church.	Lancast	er Gate,	Hyde
Causes of	Death.			Park.	Road.	Vale.	bourne.	Church.	West.	East.	Park.
Diphtheria						1					
Epidemic Influenza	***										1
Pulmonary Tubercul				1			***			2	
Cancer				***	1	2			2		
Organic Disease of l				2	1	2		1		1	1
Bronchitis					1						
Pneumonia					1		***	1		1	
Other Diseases of Re			onne	***	1	***	***	100	***		***
				1		***	***	***		***	***
Appendicitis Cirrhosis of Liver	***	***	***		***	***	***	***		***	1
	de Die	***	***	***	***	***	100		1	***	1
Nephritis and Brigh	US 17150	ase		***	***	1	1	2	1	***	***
Old Age	***	***	***	***	***	1	***	***	1	***	***
Suicide	***	***		***	1	***	1	***	2	110	211
Accident and Violen	ice	***	***	2	2	***	1	1	***	***	***
Homicide	***	***	***	***	1	***	***	***	***	***	***
Ill-defined Causes				***	***	***	***	***	***	***	1
All other Causes	***	***	***	***	***	3	3	1	***	1	***
ALL CAU	SES			6	9	10	6	6	6	5	4
Institutions				8	1	2	- 3	3	1	2	

TABLE VII.
DEATHS IN INSTITUTIONS.

		LOCAL	L INST	TITUTI	ons (	Unce	orrected	).	Our	LYIN	G IN	STIT	UTIO	NS.		
	Totals	Workhouse.	Infirmary.	St. Mary's Hospital.	Children's Hospital.	Lock Hospital.	Home of Compassion.	Women & Children's Hospital.	Totals.	Metropolitan Asylums Board.	General Hospitals,	Special Hospitals and Homes,	Lunatic Asylums.	Poor Law Institutions.	Corrected Totals.	Equal to per cent.
1908 1904 1905 1906 1907 1908 1909 1910 1911 1912	743 780 806 775 770 825 813 808 854 798	57 66 91 48 22 57 96 105 105	280 261 233 266 325 316 253 270 293 275	342 360 387 356 332 351 362 310 383 304	82 92 91 98 88 91 88 104 56 95	2 1 4 7 8 - 5 8 9 5	Closed Closed	Opened for In-patients Autumn, 1918.	161 154 146 172 205 187 193 160 196 211	26 77 28 15 87 80 25 16 45 29	49 43 48 45 60 59 49 66 51 90	30 31 31 38 36 43 42 26 29 34	45 46 49 43 59 42 57 41 59 46	11 7 5 11 23 13 20 11 12 12	564 582 578 597 655 662 628 632 665 677	29·40 29·89 29·47 32·39 32·52 34·91 31·97 35·20 34·52 38·23
Averages 1903-07 1908-12 1903-12	775 920 797	57 96 77	269 281 275	355 342 345	90 87 88	3 5 4	- ?		168 189 178	26 29 27	49 68 56	38 35 34	48 49 49	11 14 12	595 658 624	30·51 34·90 32·65
1913	890	139	306	339	99	6	Closed	1	252	56	93	34	56	13	789	39-9

TAPLE VIII.

DEATHS IN LOCAL PUBLIC INSTITUTIONS,
1913

			913.				
Causes of Death.	100	Vork- iouse.	Infirmary.	Lock Hospital.	Children's Hospital.	St. Mary's Hospital.	Nursing Homes
Enteric Fever		1	5		***	1	***
Measles		***	14.	***	211	***	***
Scarlet Fever			***	444	111	***	0.00
Whooping Cough		***	8	***	1	1	
			2	***	***	1	
			***	***		***	***
Epidemic Influenza		***	8	***	1	***	1
Erysipelas		***	2	***	***	1	***
0.0 C 1.02 FEE			1	***	2	2	***
Pulmonary Tuberculosis, Acute Phthisis.		1	49		8	12	1
			1		8	9	
to a second of the second of t		1	1		11	9	1
			8	6	1	***	444
24. E. C.		8	30		3	89	13
			1		1	1	1
	**	4	î			2	1
	**	1	1	***		1	
	4.8			***			***
	**	***	ï	***	6	8	***
	**	7.0	3	***		3	1
	**	10		***	***		
Contract of the Contract of th		200	40	***	ï	23	2
Heart Disease, all forms	0.0	28	48	***	8	15	1
		39	17	***		10	
Lobular (Broncho-) Pneumonia		1	15	***	14		***
	***	***	4	***	4	6	1
Pneumonia		2	5	***	1	8	1
Other Diseases of Respiratory Organs			5	***	1	8	2
Diseases of Stomach		400	***	***	111	2	***
40.4		***	32	***	13	6	***
			***	***	2	20	1
		1	1	***	1	18	2
			2	***	1	5	2
ar a sec a part a second		6	16	***	411	14	1
Tumours (NM.), &c., Fem. Gen. Orgs			***	***		2	1
		1			***	2	***
and the second s			1				***
			4		8	3	1
n ni ii		5	2	-	3	2	1
		1				1	***
	**	16	8			1	1
	***		100	***		8	***
		2	5		6	50	440
	**		1			1	
	**	***		***	1		
Herenius comment to the terms		11	24	***	13	64	12
	-	189	306	6	99	339	47
ALL CAUSES	**	100					
Non-residents .		8	9	5	75	253	34

TABLE IX. DEATHS OF RESIDENTS OUTSIDE THE BOROUGH, 1913.

Causes of De	ath.			Hospitals of Metro- politan Asylums Board.	General Hospitals.	Special Hospitals and Homes.	Lunatic Asylums.	Poor Law Institu- tions,	Elsewhere.
Enteric Fever							***		
				14			***	***	
Scarlet Fever				7	***	444	***	***	***
Whooping Cough		***		8	***	***	***	***	***
Diphtheria, Membranous	Croup .		***	9	***	1	***	***	***
Croup			***	***	***	***	***	***	***
			***	***	***		1	***	1
Milan Calle Mana			***	***		***	***	***	***
Other Septic Diseases . Pulmonary Tuberculosis,	Acuto	Dhah	***	4	6	12	4	i	8
Tub. Mening., A. Hydroce	nh			1	1	1			
Other Forms of Tuberculo			***	2	1	î	***	***	***
Cambilla			***	1		î		***	***
Cancer					27	5	2	2	6
Dhaumatia Passa				***					
Alcoholism			***			***	***	***	***
Inflammation and Softenin	ng of B	rain		141	***	***	2	***	***
Cerebro-spinal Fever .			***	100	***	***		***	***
Simple Meningitis				***	***	***	***	***	***
			***	***	2	222	3	2	***
77 731				1	***	***	***	***	***
Thomas A. S. S.			***	***	4	8	4	1 1	9
Bronchitis Lobular (Broncho-) Pneum			***	1	1	2	5		1
Lobar (Croupous) Pneumo			***	***	1	***		***	***
Daramania			***	ï	2	***	ï	***	2
Other Diseases of Respirat		roone	***			***		***	2
The second second		gano							1
TV 1 1 12 141				5	8	***			1
A				***	7				***
Obstruction of Intestines .					1	***	***		1
Cirrhosis of Liver						***	***	***	1
Nephritis and Bright's Disc	ease .			1	7	***	4	1	8
Tumours (NM.), &c.,	Fem.	Gen	ital						
Organs			***	****	2	***		***	***
			***	***	***	***	1	***	***
Accidents and Diseases of			***	***	1	***	***	***	***
			***	***	4	8	***	***	***
Daniel Discourse Late 1 Discourse			***	***	1	2	***	***	***
CITA		***	***	***			5	1	2
Putatida.		***	***		2				4
Other Accidents and Viole			***	***	2		***	1	10
TTominida			***	***	***		444	***	1
III J. Cond Course				***	1	***	***	***	1
All other Course				1	13	3	23	8	18
ALL CAUSES			***	56	93	34	56	13	68
Transferred Deaths*					4	5	5	1	87

<sup>\*</sup> Included in the figures given above.

DEATHS UNDER ONE YEAR.

Totals under One Year.

1913 1908-12 1913 1908-12

4 19

2

8 15 1

6

128

7

Females.

5 0 6

12 13

10

1

144

Males.

6

4

4 36

2

32 1 7

14

2 5

13 33 2

177

1 1

1 2 ... 1 ... ... 1 ... 2

1 1 1 ... 1 1 ...

32 30 6 4 6 9 7 1 51 44 26 12 17 12 7 6 13 14 10 11 12 4 10 3 8 7 7 10 11 4 5

1 1

TABLE X.

DEATHS UNDER ONE YEAR

0- 1- 2- 3- 0- 1- 2- 3- 4- 5- 6- 7- 8- 9- 10- 11- M. F. M. F

5 2 ...

Months.

Days.

0-

M. F.

Group.

Causes of Death.

Smallpox ... ... Chickenpox ... Measles ... ... Scarlet Fever ... Diphtheria and Croup Whooping Cough

Tuberculous Meningitis... Abdominal Tuberculosis. Other Forms do. ...

Diarrhœa Enteritis ...

Erysipelas Syphilis ... Rickets ... Meningitis Convulsions Gastritis ... Laryngitis Bronchitis

Pneumonia ... Suffocation (overlaid)

All Causes

Other Causes ...

Averages 1908-12

... 2

20 16

V.

Weeks.

3 3

4 2 1 ... ... ... ...

1 1 2

17 16 3

136

TABLE XI.

MEASLES .- BOROUGH.

Cases reported in each week since records were first kept in 1903.

Week of Year.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	1	21 124 41 87 61 91 73 76 37 46 34 23 10 4 2 2 1 10 4 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 12 2 12 6 6 6 9 11 18 9 40 38 61 44 43 34 30 73 57 114 83 131 78 61 77 70 61 72 41 27 20 13 18 7 9 5 2 11 6 28 8 39 21 33 23 50 30 13 19 10 9 5	1 8 5 2 1 4 11 5 4 7 32 6 19 6 3 5 15 6 26 10 23 11 22 22 18 37 80 48 25 11 12 4 3 7 7 7 8 1 9 4 4 13 6 5 8 1 5 2 3 26 3	12 14 13 8 4 5 4 6 9 9 10 11 27 6 25 14 30 16 21 21 28 39 32 43 57 57 57 57 57 57 22 11 12 12 12 12 12 12 12 13 14 15 16 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	15 32 44 55 38 24 35 36 30 32 20 36 16 25 28 12 14 44 27 69 22 22 16 5 12 5 13 15 4 4 4 4 4 4 5 5 6 7 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1	10 11 13 1 1 1 3 4 3 12 13 11 23 28 27 18 40 20 28 38 31 31 23 50 34 13 12 10 13 6 -1 -5 2 2 11 7 7 7 8 10 6 10 10 10 10 10 10 10 10 10 10 10 10 10	7 54 12 21 25 44 45 55 64 81 54 36 73 110 126 120 143 101 122 56 87 51 54 40 43 13 22 6 12 3 1 3 2 2 2 8 10 34 11 12 28 27 21 31 33 58 45 52 27 11	26 51 28 20 39 30 40 34 70 77 94 62 40 55 61 48 36 24 17 15 18 24 5 5 7 6 19 22 7 4 3 3 5 5 5 7 7 7 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	9 33 13 23 10 40 27 37 44 24 29 17 20 6 16 8 20 8 37 44 51 67 30 44 53 33 52 28 33 13 6 4 11 11 6 3 9 9 16 16 16 16 16 16 16 16 16 16 16 16 16	46 68 26 40 31 65 48 69 53 29 52 24 24 31 13 20 18 24 30 36 36 38 72 37 37 31 13 21 21 21 21 21 21 21 21 21 21 21 21 21

NOTE.—For explanation of the meanings of the different types used, see the text of the report (page 47).

TABLE XII.

Measles: Prevalence, 1903-1913.

Diseas	e Non-Ep	idem	ic.		Tran	nsitional S	tage.			Dis	ease Epid	lemic.		
	No. of	C	ases j	per .	n . (Initial	No. of		ses p		Period	No. of		ses pe week.	r
Period segan—ended.	weeks covered.	Average.	Max.	Min.	Period { Initial Final began—ended.	weeks	Average.	Max,	Min.	began—ended.	weeks covered.	Average,	Max.	Min
1/03-24/03	24	5.0	21	-	{				)	25/03-29/03	5	37:8	48	2
30/03—36/03	7	2.2	4	1	$\substack{ \left\{ 37/03 - 39/03 \\ 13/04 - 18/04 \right. }$	3 6	15.6 13.1	19 19	10)	40/03-12/04	25	43 0	124	1
19/04— 7/05	40	2.9	12	-	{ 8/05—10/05 31/05—33/05	3 3	12.6 17.0	18 20	9)	11/05-30/05	20	61:7	131	2
34/05—39/05	6	6.6	11	2	f 148/05 - 50/05	3	14.0	19	10}	40/05-47/05	8	29.0	50	
51/05—18/06	20	7.7	32	1	{30/06-31/06	-2	11.2	12	11)	19/06-29/06	11	29-2	89	1
32/06—50/06	19	4.3	13	-	{51/06- 3/07				1					
4/07—14/07	11	7:3	11	3	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3	13.3	17	11)	15/07-30/07	16	30-9	57	
34/07—38/07	5	4.8	12	1	{52/07— 1/08	2	12.0	15	9}	39/07—51/07	13	43:3	72	
					{				)	2/08-22/08	21	31.4	69	1
23/08—52/08	30	4.8	16	-	{ 1/09— 3/09	3	11.3	13	10)					
4/09 8/09	5	2.4	4	1	$\left\{ \begin{smallmatrix} 9/09 - 11/09 \\ 25/09 - 29/09 \end{smallmatrix} \right.$	3 5	12·0 12·2	13 13	11 )	12/09 -24/09	18	30.0	50	1
30/09-43/09	14	4.7	11	_	$ \substack{ \left\{ \begin{array}{ccc} 44/09 - & 1/10 \\ 26/10 - & 29/10 \end{array} \right. } $	10 4	10·9 13·2	21 22	8)	2/10-25/10	24	67:3	148	1
30/10-38/10	9	2.4	8	-	\$39/10-42/10 25/11-29/11	4 5	16.5	34 22	10)	43/10 - 24/11	34	38:8	94	1
30/11-46/11	17	5.8	10	1	{				)	47/11-30/12	36	26.5	67	
31/12-41/12	11	5.9	11	2	{				1	42/12—31/13	42	38.5	74	
32/13-53/13	22*	1.4	7	_	1				1					

Note.—See text of report (page 47) for explanation of this Table.  $^{\circ}$  This period extended into 1914.

## TABLE XIII.

## 1.—Inspections.

## Including Inspections made by Sanitary Inspectors.

H.O.

Donnier		Number of	
Premises.	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries) Workshops (including Workshop Laundries) Workplaces (other than Outworkers' premises included in Part 3 of this Report)	115 3,544 36	7 -	=
Total	3,695	9	-

3.-Номе

		-						
NATURE OF WORK.		Tw	Lists r			ce in the	year.	Notices served on Occupiers
			Outwo	rkers.		Outwo	rkers.	as to keeping or
		Lists.	Con- tractors.	Work- men.	Lists.	Con- tractors.	Work- men.	sending lists.
Wearing Apparel— (1) making, &c (2) cleaning and washing Furniture and upholstery Electro-plate Umbrellas, &c Artificial flowers Brush making Stuffed toys	***	102 4 2 3 8 8 3	15 	496 	5 - 1	ППППП	40   1 	} 124
Total		118	17	546	6	_	41	124

## 4.—REGISTERED WORKSHOPS.

Worksh	ops on the	e Registe	r (S. 181)	at the e	nd of the	year.		Number.
Workshops Do. Bakehouses			***				 	1,293 51
		Total n	umber of	worksho	ps on Re	gister	 	1,844

## 2.—Defects Found.

				N	umber of Defe	cts.	
Parti	culars.			Found.	Remedied.	Referred to H.M. Inspector.	Number of Prosecutions
0		defective		89 7 21 68 1	89 7 21 		
Offences under the Factory of Illegal occupation of under Breach of special sanitary (SS. 97 to 100) Other offences (excluding which are included in Pa	rground bakeh requirements  offences relati	ouse (S. 10 for bakeho	uses	-	-		_
	Total	***		187	187	_	_

## WORK.

			K IN UNWE		OUTWORK II	n Infecter	
Prosec	utions.						
Failing to keep or permit inspection of lists.	Failing to send lists.	Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110).	Prosecutions (SS. 109,110)
	_	_		-	7 7		_
-					1 1		
-	-		100				44
-					8 2		
	-		-		10 7	-	
		-	_				
			-	200			
-	-	-					
_	-	_		_	8	-	

## 5.—Other Matters.

	Cla	ss.						Number.
Matters notified to H.M. Inspector of F Failure to affix Abstract of the Factor Action taken in matters referred by H	ry and Wo	orkshop	Act (S. 13 Notified by		Inspector			84
as remediable under the Public He			Reports (o					
not under the Factory and Worksh			Reports (o Inspecto					9
not under the Factory and Worksh Other Underground Bakehouses (S. 101) :—					taken)	sent to	H.M.	
not under the Factory and Worksh Other	op Act (S.	.5) (	Inspecto	r	taken)	sent to	H.M.	9

#### TABLE XIV.

## PROCEEDINGS DURING 1913.

L.C.C. Number of Places-Number Number Number of of of Prose-Premises: Notices, On Register Inspections, cutions, On Register Removed at end of in 1918. at end of 1918. Milk premises Cowsheds ... 408 Slaughter-houses ... Other offensive trade premises 116 Ice cream premises Registered houses let ) (a) 7,597 27 1.376 in lodgings 1,348 2,267 5 (6) 6 (b) For other conditions (including annual cleansing). (a) For overcrowding. 663 Total number of intimation notices served for all purposes ... Overcrowding, 1913-Number of dwelling rooms overcrowded ... Number remedied ... ... 246\* Number of prosecutions Underground rooms-Illegal occupations dealt with during year ... Number of rooms closed ... 10 Insanitary houses-Number closed under the Public Health (London) Act, 1891 ... Number closed under the Housing Acts ... Number of premises cleansed under Sec. 20 of the L.C.C. (General Powers) Act, Shelters provided under Sec. 60 (4) of the Public Health (London) Act, 1891-Number of persons accommodated during the year ... Number of houses for which applications were received during year Number of tenements comprised therein... ( (a) granted (b) refused Number of tenements for which certificates were (c) deferred Number of prosecutions under By-laws under Public Health Act, 1891-(a) For prevention of nuisance arising from snow, ice, salt, filth, &c. ... (b) For prevention of nuisance arising from offensive matter running out of any to health the second of the second of the (d) As to paving of yards, &c., of dwelling houses ... (e) In connection with the removal of offensive matter, &c. ... (f) As to cesspools and privies, removal and disposal of refuse, &c.
(g) For securing the cleanliness of tanks, cisterns, &c. ...
(h) With respect to water closets, earth closets, &c. ... (i) With respect to sufficiency of water supply to water closets
(j) With respect to drainage, &c. (Metropolis Management Act, Sec. 202)
(k) With respect to deposit of plans as to drainage, &c. (Metropolis Management Acts Amendment (By-laws) Act, 1899) Total number of bodies removed... Mortuaries-

\* In 14 cases no action was taken, the total deficiency of air space being less than 50 cubic feet."

Total number of infectious bodies removed...