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REPORT

ON THE

Health of the Borough of Wallasey,

FOR THE YEAR 1910,

BY

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MEDICAL SUPERINTENDENT OF THE CORPORATION'S INFECTIOUS DISEASES HOSPITAL.

LIVERPOOL:

CHARLES BIRCHALL, Ltd., PRINTERS, STATIONERS, &c., 7 & 9, VICTORIA STREET.

1911.



Health, Hospital and Cemetery Committee

OF THE

WALLASEY URBAN DISTRICT COUNCIL

To November, 1910.

Chairman:

MR. T. C. HURWORTH-ROBINSON, B.A., LL.B.

Vice=Chairman:

Dr. A. BANKS.

Councillors:

MR. J. BOUGHEY.

" T. V. BURROWS.

.. E. D'ARCY.

" J. JOYCE, J.P.

" A. J. MEAD, B.A.

Dr. A. W. MONTGOMERY.

Mr. C. J. WOODROFFE, J.P., Chairman of Council.

Mr. W. C. CURRIE, C.C., Vice-Chairman of Council.

Health, Hospital and Cemetery Committee

OF THE

WALLASEY TOWN COUNCIL

From November, 1910.

Chairman:

MR. ALDERMAN BANKS, L.R.C.P.I., &c.

Vice=Chairman:

MR. ALDERMAN OLDERSHAW, M.D., J.P., C.C.

MR. ALDERMAN DAWSON, F.C.A.

Councillors:

Mr. G. J. ATKINSON, LL.B.

- ., J. BOUGHEY.
- " H. COVENTRY.
- " J. JOYCE, J.P.
- ., W. SETTLE.
- " J. URMSON.
- ., W. J. YEOMAN,

. AND

HIS WORSHIP THE MAYOR (J. T. CHESTER, Esq., J.P.)

OFFICIALS OF THE

PUBLIC HEALTH DEPARTMENT.

T. W. NAYLOR BARLOW, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H. (Camb.); of Lincoln's Inn, Barrister-at-Law, Medical Officer of Health.

> *HERBERT CLAUDIUS BASCOMBE, Chief Sanitary Inspector.

CHARLES HORSFALL SCOTT.

Meat Inspector, and Inspector under the Contagious Diseases (Animals) Acts, 1885 and 1886.

> *JAMES MANSEL DAWKIN, Assistant Sanitary Inspector.

*ALBERT HENRY ORMESHER, Assistant Sanitary Inspector.

*THOMAS NICHOLSON CLEATOR, Assistant Sanitary Inspector.

*HIRAM THOMAS IRVING, Shop Hours and Workshop Inspector.

*MISS ISABELLA BIRRELL, Lady Sanitary Inspector.

> JOHN McNALLY, Chief Clerk.

CHARLES A. HOLLAND.

Assistant Clerk (to November).

RICHARD C. THOMSON,

CHARLES H. SQUIRE, (from November).

Junior Clerks.

*Hold the Certificate of the Royal Sanitary Institute.

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Information required by the Local Government Board in Annual Reports of Medical Officers of Health, and not included in the body of this Report.

Physical Features and General Character of the District.

The Borough of Wallasey is a part of the Wirral Peninsula and itself forms a Peninsula, bounded by the River Mersey on the East, the Irish Sea on the North, Birkenhead and Wallasey Docks on the South and South-West, with a mile of flat land on the West between head of docks and sea. The ground rises from Seacombe in a back-bone along the middle of the district, reaching a height of 200 feet above the sea at New Brighton, affording splendid facilities for drainage East and West of this natural ridge. New red sandstone underlies all this district, at a variable depth, with pockets of alluvium, drift clay, gravel and marl.

It is mainly a residential place, a large number of the inhabitants being engaged in business in Liverpool. Some large docks, forming part of the Port of Liverpool, are situated in the Borough. There are also in the district extensive Lairages, where imported sheep and cattle are killed. There is no occupation which would have any particular influence on the public health.

WATER SUPPLY.

The water supply of the Borough is partly from wells in new red sandstone, 320 to 900 feet deep, reinforced by a supply of 750,000 gallons per day from Lake Vyrnwy, upland surface water. No filtration is necessary. The service is a constant one, and the supply ample and pure.

SEWERAGE AND DRAINAGE.

The water-carriage system obtains throughout the Borough and the crude sewage is discharged into the Mersey below low water level.

The growth of Wallasey has been extremely rapid, with the result that most of the house drains are new, and have been constructed under modern bye-laws and strict supervision. All new house drains are subjected to a smoke test before being finally covered.

REMOVAL AND DISPOSAL OF HOUSE REFUSE.

There remain at present 1,083 single ashpits and 1,591 double ashpits. These are emptied on an average every six weeks by the employés of the Council. Their number is being steadily reduced. 555 ashpits have been abolished during the past 2 years and bins substituted. Bins are now required in all new property. These are emptied once a week, and the total number of bins is now 13,285.

STATISTICAL SUMMARY for 1910.

Area in acres					3,408
Estimated Population, June, 191	0				75,000
Population per acre				***	22.0
Number of Inhabited Houses					16,242
Rateable Value					£465,617
One Penny in the £ yields for Ge	eneral l	District	Purpo	ses	£1,768
Number of Persons per house at	time of	f last ce	ensus		4.98
Birth-rate per 1,000 living					22.9
Death rate per 1,000 living					11.8
Infant Mortality per 1,000 Birth					86
Percentage of Uncertified Deaths	s			***	0.9
Total Deaths from Diarrhea	***				15
,, ,, ,, (un	der 1 y	rear)			10
Diarrhœa Mortality per 1,000 B	irths				8
Phthisis Death Rate per 1,000 li	ving				0.7
Respiratory Death Rate per 1,00	00 living	or .			2.1

AREAS AND STATISTICS OF TOWNSHIPS

1910.

POULTON-CUM-SEACOMBE.

BIRTH RATE - - - 29.9

DEATH RATE - - - 13.2

INFANT MORT. RATE - 111

EST. POPUL'N PER ACRE 33.6

AREA - - 830 ACRES.

LISCARD.

BIRTH RATE - - - 18-5
DEATH RATE - - - 11-7
INFANT MORT. RATE - 70
EST. POPUL'N PER ACRE 38-8
AREA - 982 ACRES.

WALLASEY.

BIRTH RATE - - - 20-4
DEATH RATE - - - 8-1
INFANT MORT. RATE - 32
EST. POPUL'N PER ACRE 5-6
AREA - - - 1,596 ACRES.

DIAGRAM SHEWING BIRTH RATE AND DEATH RATE PER 1,000 OF ESTIMATED POPULATION, INFANTILE MORTALITY PER 1,000 BIRTHS, AND ESTIMATED POPULATION PER ACRE.

WHOLE DISTRICT.

 BIRTH-RATE
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Public Health Department,

March 28th, 1911.

To the Mayor, Aldermen and Councillors of the Borough of Wallasey.

Mr. Mayor and Gentlemen,

I have the honour to present to you my third Annual Report on the health of the Borough, in compliance with the duties statutorily placed upon me.

The report contains the vital statistics for the year and details of the work carried out in my Department.

The gross death rate is again lower than any previously recorded, and in the death rates of the large towns published weekly by the Registrar-General, Wallasey has on several occasions occupied the lowest place.

I should like to gratefully acknowledge the assistance which the various members of my staff have accorded me, and the willingness with which they have always met any exceptional demands upon their services.

In conclusion, I wish to thank the Chairman and Members of the Health Committee in particular, and the Members of the Council in general, for their kindness and courtesy towards myself and for the support they have invariably given me in my work.

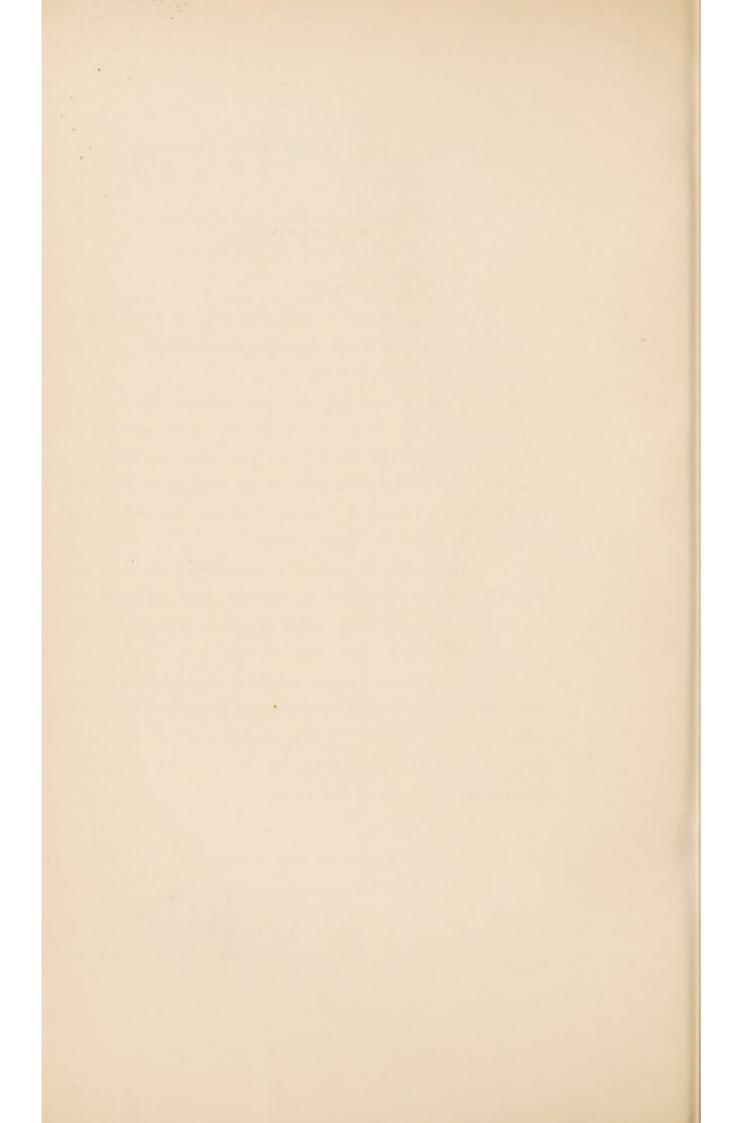
I am,

Mr. Mayor and Gentlemen,

Your obedient Servant,

T. W. N. BARLOW,

Medical Officer of Health.



Part 1.—VITAL STATISTICS:

Population.

The difficulty of correctly estimating the population of a rapidly growing district such as Wallasey has been pointed out in previous Annual Reports, as has also the extreme importance of having such estimate correct, since all mortality rates are calculated per thousand of population. For this reason, the census which is to take place in March of this year, will be cordially welcomed.

The population shown by the last three census returns has been as follows:—

					Census 1881.	Census 1891.	Census 1901.
Poulton-cun	n-Seac	ombe	***		7,640	14,900	20,749
Liscard					11,612	16,356	28,661
Wallasey	***	***	***	***	1,940	1,971	4,169
Entire	e Distr	ict			21,192	33,227	53,579

I will not trouble to refer in this Report to the Registrar-General's method of estimating the population. I have commented upon it in previous Reports. I will simply point out that his total estimate is 1,800 less than mine, although his estimated increase for the year is more than mine. I have taken pains not to overestimate the population, and I think it will be found when the census is taken that my estimate is considerably under the actual population. For instance, I have reduced the population per house which, at the 1901 census was 4.98, to 4.75, and although my estimated population for the middle of the year is 75,821, I have used 75,000 in all my calculations.

The following Table shows the number of Inhabited Houses for the past five years :—

	Poulton-cum- Seacombe.	Liscard.	Wallasey.	TOTALS.	Increase on Previous Year.
1906	5,002	7,501	1.313	13,816	1,907
1907	5,223	7,911	1,492	14,626	810
1908	5,562	7,976	1,686	15,224	598
1909	5,840	7,991	1,852	15,683	459
1910	6,083	8,135	2,024	16,242	559

The population at the end of 1909 was estimated at 74,494. The number of inhabited houses at the end of 1910 (16,242) multiplied by 4.75 (number of people per house) gives an estimated population at the end of 1910, of 77,149, an increase, therefore, of 2,655 for the year. Take half this increase (1,327) and add it to the estimated population at the end of 1909 (74,494) and we have an estimated population for the middle of the year of 75,821, which I have still further reduced to 75,000 for statistical purposes. The effect of under-estimating the population is, of course, to increase all the rates, and of over-estimating, to decrease them.

It will be observed from the table above that there was an increase in the number of inhabited houses in the district during the year of 559. Allowing only four persons per house, instead of 4.75, would mean an increase in the population of 2,236, whereas, in my calculations, I have estimated an increase of only 2,000 over the population of 1909.

The following Table shows the number of new houses certified for habitation during the past seven years.

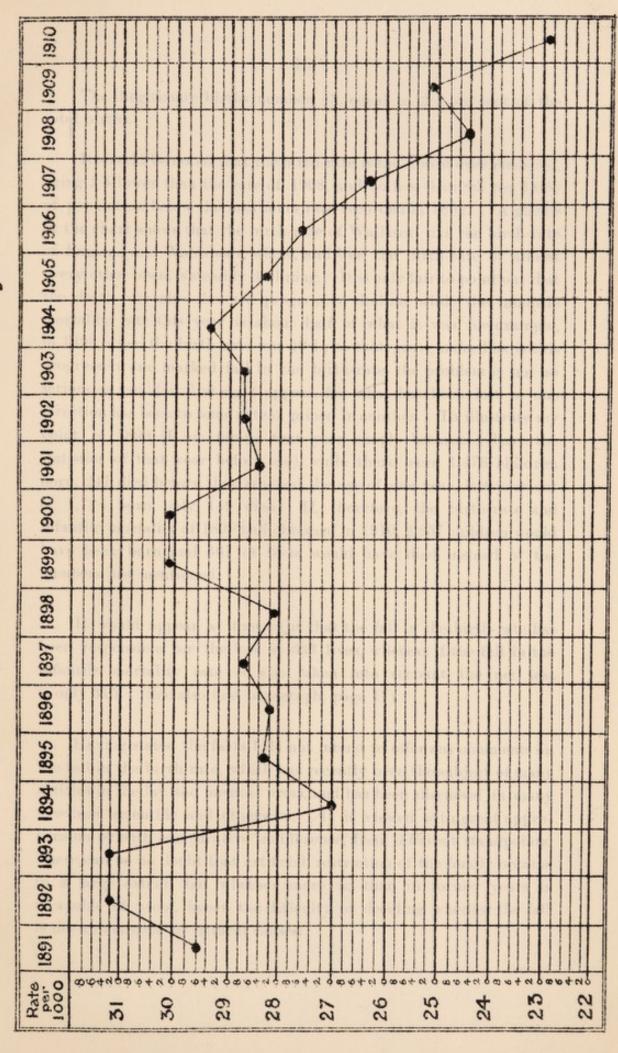
1904	***				259
1905	***				432
1906					614
1907	***	***	***		706
1908					604
1909		*			630
1910		***		***	739

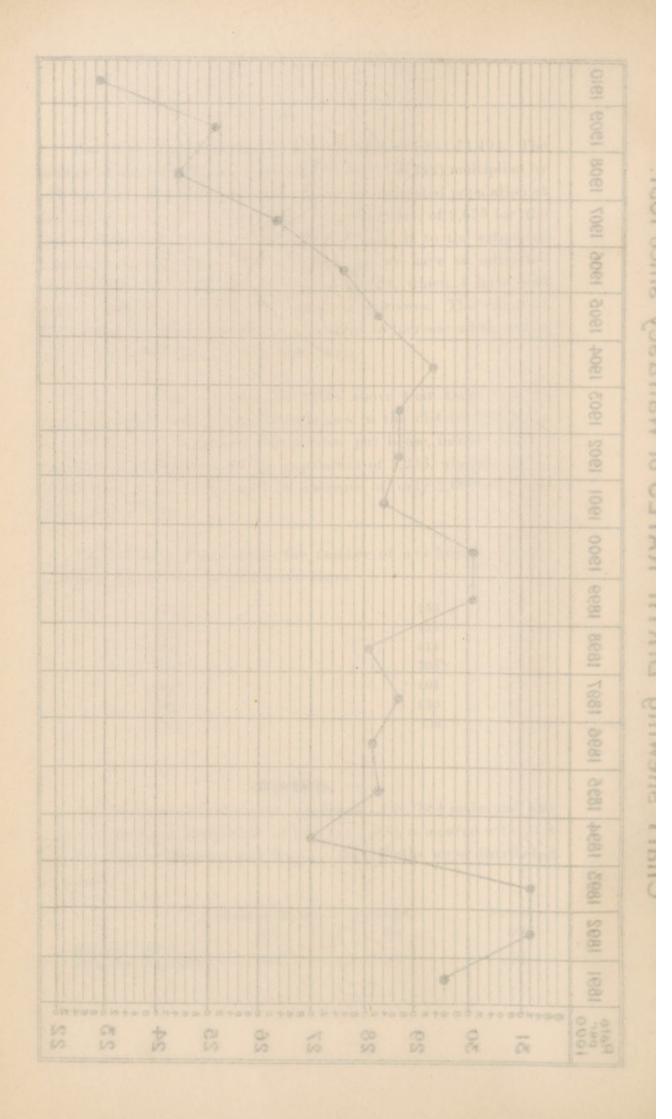
Births.

The Births during the year numbered 1,724 (884 males and 840 females), giving a Birth-Rate of 22.9 per 1,000, compared with 24.8 for the whole of England and Wales. The Births were distributed as follows:—

Poulte	m-cum-Seaco	mbe.	Liseard.		Wallasey.
	836		705		183
Rate per 1,000 of estimated Population .	29.9		18.5	2	20.4

Chart shewing BIRTH RATES of Wallasey since 1891





The illegitimate births number 43, equal to 2.4 per cent of the total births.

It should be noted that the birth-rate is the lowest ever recorded, being 1.5 lower than the rate of 1908, and no less than 8.3 per 1,000 of population below the maximum rate recorded in 1892. at the chart shows that the birth-rate of Wallasey, like the birth-rate of England and Wales as a whole, and like the birth-rate of almost every other town, is steadily declining. It is only fair to point out that the death-rate also shows a progressive decline, while the infantile mortality rate this year is about half of what it was, for example, in 1899, when the birth-rate was 30.1; so that, grave indeed as is this progressive and marked fall in the birth-rate, the problem is not so serious as would at first sight appear, for what has been lost in one direction has been to some extent gained in another. To illustrate my point, in 1899 (I am taking that year simply because I have the statistics of that year before me), while there were 1,476 children born, 241 died before they reached the age of one year, last year out of 1,724 born only 149 died. If, therefore, the birth-rate and infantile mortality of 1899 had obtained in 1910, 2,257 children would have been born and 367 of them would have died instead of the numbers just mentioned.

It would appear at first sight that the fall in the birth-rate has been responsible for the loss of 533 lives, whereas if the fall in the infantile mortality rate is also taken into account the net loss is only 315. (See also first paragraph, page 17).

Having stated the facts I do not intend to offer any comments on the fall in the birth-rate, which has recently been the subject of many articles in the lay and medical press, and has been discussed in many meetings, scientific and otherwise. It is viewed with great apprehension or with comparative indifference, from different standpoints. There can be no doubt that artificial restriction of the family obtains to a large extent, but whether more so than in former years is incapable of proof, hence the difficulty of deciding whether the fall is due to artificial or natural causes. The following Table shows the natural increase of population, that is, the excess in the number of births over deaths in the different Townships:—

	1	Poulton-	cum-Seace	ombe.	Liscard.	Wallase:	y
Births Deaths			836 369		705 446	 183 73	
Excess of Bir Deaths	rths o	ver	467	***	259	 110	Total 836

A comparison of the birth rate of Wallasey for the past four quinquennial periods is interesting.

> For the period 1891-1895 it was 29°50. ,, 1896-1900 ,, 29°08. ,, 1901-1905 ,, 28°72. ,, 1906-1910 ,, 25°27.

Deaths.

The total number of deaths of residents of the district, including those dying in the Workhouse (50) and in Liverpool Hospitals (14), but excluding those of visitors (17), was 888, equal to a death-rate of 11.8, which again is the lowest death-rate for the Wallasey district as far as records go. It is 0.2 lower than the death-rate of 1909, which then constituted a record

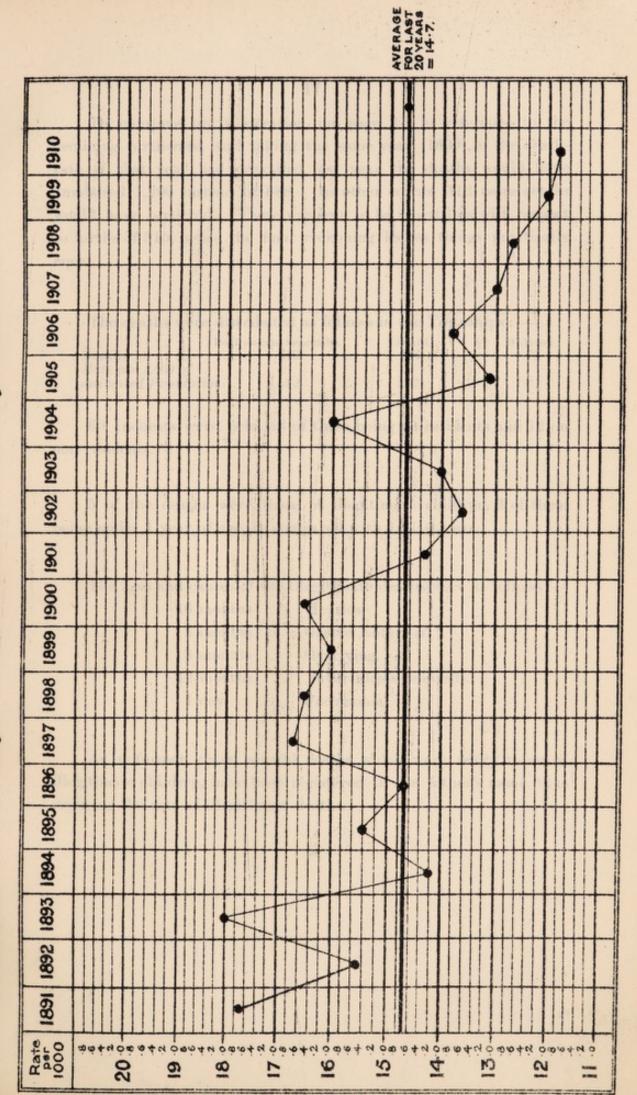
I would point out that if the deaths of visitors are included, the death-rate would be 12. It does not appear to me, however, that in a place to which thousands of visitors are attracted in the summer months, the deaths of visitors should be included, since the death-rate with their inclusion to some slight extent affects whatever value may be attached to the death-rate taken alone as an indication of the healthiness of a district.

I may remark that the Registrar General has made arrangements whereby such deaths shall in future be referred to the district whence they came.

A comparison of the death-rate of Wallasey for the past four quinquennial periods is appended:—

> For the period 1891-1895 it was 16·1. ,, 1896-1900 ,, 16·1. ,, 1901-1905 ,, 14·2. ,, 1906-1910 ,, 12·6.

Chart shewing DEATH RATES of Wallasey since 1891.



To continue my illustration on page 15 in reference to the declining birth-rate, and taking the same year (1899), if the death-rate of that year had prevailed last year the deaths would have numbered 1,200 instead of 888. In other words, 312 more deaths would have occurred. There was seen to be a nett loss with respect to births of 315, hence the final reckoning leaves things practically equal.

The deaths were distributed as follows in the Townships:-

	Poulton	-cum-Seacon	ube.	Liseard.	Wallasey.
Deaths Rate per 1,000 of		369		446	 73
estimated Population	n	13.2		11:7	 8.1

60 Inquests were held, 48 of these being on residents and 12 on non-residents.

5 of the deaths were those of illegitimate children, 3 of them being under 1 year of age, as compared with 14 last year.

The ages and causes of the illegitimate deaths were as follows:-

16 months ... Measles.

2 months ... Gastro Enteritis.

3 months ... Overlying.

12 months ... Tuberculosis (inquest).

1 day ... Pneumonia.

As in former years, several deaths which were really those of illegitimate children, have been registered in the father's name, thus reducing the rate of illegitimate deaths.

Table showing Comparative Statistics of various neighbouring Towns with Wallasey.

NAME O TOWN.			Population.	Gross Death Rate, 1910.	Death Rate cor- rected for Age and Sex Distri- bution.	Birth Rate, 1910.	Infan- tile Deaths per 1,000 Births.	Phthisis Death Rate.	Zymotic Death Rate.
BIRKENHEAD			122,232	16:3		30.5	135	1.24	2.05
BLACKBURN			136,996	15.1	14.2	21.5	136	0.80	1.4
BOLTON			190,315	13.4	15.1	23.0	116	1.02	1.02
BOOTLE			72,000	14.1		28:0	123	1.1	1.8
BURY			59,409	14.61	16.35	20.79	124	1.23	1.06
Crewe			48,340	11.5	11.8	23.0	103	0.7	1.4
LIVERPOOL			767,606	17.4	18.6	30.0	139	1.3	2.2
OLDHAM			144,111		17.2	26.0	127	1.2	1.8
SALFORD			244,636	15.3	16.9	26.9	131	1.3	1.7
ST. HELENS			96,523	14.56	15.7	32.52	122	0.94	1.26
STOCKPORT			105,087	16.11	17.02	25.6	137	1.39	1.62
WARRINGTON		***	73,580	14.5	15.6	30.5	113	1.07	1.2
WIGAN	***		94,654	15.69	14.55	29.26	133	0.69	1.39
WALLASEY			75,000	11.8	12.9	22.9	86	0.7	0.8

Table showing comparison of Wallasey Rates with those for England and Wales as a whole, with the 77 large towns (among which Wallasey is included) with the 136 smaller towns, and with England and Wales less the 213 towns.

				Ai	nual rate 1,000 livin	per ig.	Infantile
				Birth	Deat	h Rate.	Death Rate per 1,000
				Rate.	Crude.	Corrected	Births.
ENGLAND AND WALES				24.8	13.4	13.4	106
77 GREAT TOWNS	***			25.0	13.4	14.3	115
136 SMALLER TOWNS ENGLAND AND WALES,	LESS	THE	***	23.7	12.4	12.9	104
213 TOWNS			4.07	25.0	13.6	12.8	96
WALLASEY		***		22.9	11.8	12.9	86

^{*} The Corrected Death Rates are the rates which would have been recorded had the age and sex constitution of the populations of the several areas been identical with that of England and Wales as enumerated in 1901.

COMPARATIVE VIEW of TWELVE of the PRINCIPAL CAUSES of DEATH in WALLASEY during 1910.

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	EPIDEMIC INFLUENZA.	ZYMOTIC DIARRHŒA.	PREMATURE BIRTH.	DEATHS BY VIOLENCE.	SENILE DECAY.	SEA	MOTIC	BRONCHITIS.	CANCER	PNEUMONIA.	HEART DISEASE.	ALL FORMS TUBERCULOSIS.

COMPARATIVE VIEW of TWELVE of the PRINCIPAL CAUSES of DEATH in WALLASEY during 1910.

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Infant Mortality.

During the year 1910 the deaths of 149 children were recorded who had not at the time of their death reached the age of one year. This gives an Infantile Mortality Rate of 86 per 1000 births.

In my last Annual Report, in drawing attention to the remarkable drop in the infant mortality rate, which was 18 per thousand births lower than the recorded minimum rate up to that time, I expressed my fears that this low rate could hardly be expected to continue. It is somewhat surprising to me to find that this particular rate has kept at so low a level. Although 6 per 1,000 births higher than last year, it is still very considerably lower than the rates previously recorded.

Let us examine the table relating to Infantile Mortality on page 92 and compare it with similar tables of the last two years.

		1908	1	909	1	910
1.—Common Infectious Diseases caused	21	deaths.	 40	leaths	 11	deaths
2.—Diarrhœal Diseases caused	23	',,	 14	,,	 38	,,
3.—Wasting Diseases (including Pre-						
mature Birth, Atrophy and	1000		22		1212	
Marasmus) caused			 56	**	 32	"
4.—Tuberculous Diseases caused	11	**	 13	**	 9	99
5.—And other causes, including Res-						
piratory Diseases, Convulsions						
and Overlying, caused	46	,,	 61	,,	 59	27

Under the heading of Wasting Diseases in 1908, 39 deaths were of children prematurely born. Deaths due to Atrophy and Marasmus numbered 25. In 1909 the numbers were 27 and 20 respectively, and in 1910 were 19 and 3.

The increase in Group 1 is due to the fact that whereas in 1909 not a single death from Whooping-cough was reported, last year there were 10.

The increase in Group 2 is not so satisfactory. The deaths in this Group, generally speaking, may be said to be due to errors of feeding. Some of the deaths recorded in this group were registered at the same time as the births were registered, and thus before a visit could be made to the house by the Lady Sanitary Inspector. Although the early part of the Summer was wet and cold, there was a prolonged hot Autumn which increased the number of deaths from Diarrhea.

It is interesting to note with respect to Groups 2 and 3, which are very intimately associated, that the total deaths in 1910 added together are exactly equal to those of 1909, although the numbers of deaths from the specific causes forming those groups have differed considerably, as will be seen in the table below.

	Diarrho	ea. Enteriti	s. Gastritis.	Total Diarrheal	Diseases.
1909	5	4	5	14	
1910	10	18	10	38	
	Premature Birth.	Congenital Defects.	Injury at Birth	Atrophy, Debility and Marasmus.	Total Wasting Diseases.
1909	27	6	1	22	* 56
1910	19	10		3	32

The numbers are so small as not to admit of any inferences being drawn. It would seem as if the deaths inserted in 1909 under Atrophy, Debility and Marasmus, had been transferred in 1910 to Gastritis and Enteritis. This may simply mean a difference in nomenclature arising from the fact that the diseases were somewhat more acute in 1910 than 1909. The fact that of the 70 deaths in these two classes, 31 of them, or very nearly half, were aged under one month when they died, is one of the reasons why I have advised the Council to adopt the Notification of Births Act for the ensuing year.

By the Registration of Births Act the time allowed for the registration of a birth is six weeks. It is thus possible, and indeed it very often happens, that a child dies before its birth is even registered. The Notification of Births Act compels notification of birth to the Medical Officer of Health within 36 hours, and it is hoped that through this early notification, the supervision exercised, and the advice given by the Lady Health Visitor, may have the effect of saving some of these lives so prematurely brought to an end. There are several factors concerned in appraising the rate of infant mortality.

One is undoubtedly the social well-being of the people. One always finds the highest rates of infant mortality in the portions of a town inhabited by the poorer-class people; where also are usually found the conditions which co-exist with a high rate, viz. :- poverty, ignorance, excessive drinking, and insanitary conditions, such as overcrowding. Wallasey is a new district inhabited in the main by people of what I might call, for this purpose at any rate, the better-class, that is, people who are not ignorant, and who will look after their There still remains, however, a portion of the population amongst whom one would expect to find a fairly high rate of infant mortality, but this class has not increased proportionately with the other, with the result that just as many, or nearly as many, children now die in the poorer districts as used to die, but the proportion to the total number of children born grows less and less as the place increases in size, and this will account, in some degree, for the lower infantile mortality rates of late years, though it will hardly account for the phenomenally low rates of the past two years. These low rates must not be taken as an indication that no further improvement need be looked for. There is still a fair sprinkling of the population profoundly ignorant of all that appertains to the bringing up of children, some profoundly careless, and others so poor as to be unable to provide proper nourishment for the child when artificial nourishment is rendered necessary, owing, perhaps, to the fact, that through insufficient food, the mother is herself unable to suckle her infant; and if I were asked to suggest a line of action for charitably disposed persons which would confer the utmost benefit upon the community, I would mention the provision of one good meal per day to poor expectant mothers, with the proviso that the meal be not eaten at home, because, in many cases that would mean giving it to the children, but that the meals be provided at some central depôt.

The fact that babies are artificially fed presupposes, in the majority of instances, though by no means in all, some weakness on the part of the mother, and presumably, therefore, there will follow some inherent weakness on the part of the child, apart altogether from the baneful effects of artificial feeding per se. It cannot be too often repeated that a healthy baby, artificially fed, has a distinctly less

chance of being reared than one fed naturally from the breast, and if the reason for its being artificially fed is that the mother *cannot* feed it, it is a natural inference that the chance of its being reared is considerably minimised owing to the presumption which I have just mentioned.

Inquiries instituted in 1908 as to the causes and circumstances attending the deaths of children under one year have been continued in 1910, and the results again bring into prominence how important it is that young children should be breast-fed where possible. 1,128 births were visited. At the time of the first visit 78 per cent, were fed entirely on the breast; 12 per cent, were bottle-fed, 6 per cent. on breast and bottle. Of the deaths of children under one year (149 in number), 35 were breast-fed, 72 were bottle-fed, 17 were fed on breast and bottle, 11 were not fed at all, and particulars were not ascertained with regard to 14 of the deaths. It will thus be seen that although six times more children are breast-fed than are bottle-fed, there are actually double the number of deaths of bottle-fed children. These figures are most striking. If it is necessary to offer any inducement to mothers anxious for the welfare of their children to feed them from the breast where possible, these figures ought to supply that inducement.

Owing to the death of the Registrar and to the consequent interregnum, the returns with regard to births were not received by me after October 15th. The figures given above, therefore, practically only relate to the first three quarters of the year.

The Infantile Mortality Rates in the districts are as under :-

Poulton-cu	um-Se	acombe	 111 per	1,000 births.
Liscard			 70	,,
Wallasey			 32	

Whereas last year there was very little difference in the infant mortality rates of the three districts, the rates only varying from 75 to 83, this year there is a very marked difference, the rate for Seacombe district being nearly four times that of Wallasey. In my last Report I said:—"Seacombe is, of course, a district where, "perhaps, the preponderance of the poorer classes live, and where one "would naturally expect a higher rate than in the more favoured "districts."

Year.	No. of Deaths of Infants under one year.	Per cent, of Total Deaths,	Rate of Infant Mortality per 1,000 Births.	Deaths of Children under 5 Years.
1899	241	30.58	163	328
1900	208	24.18	132	276
1901	219	28:33	142	293
1902	172	22.84	108	242
1903	183	23.92	113	269
1904	265	30.04	157	385
1905	163	21.10	98	240
1906	201	24.39	117	304
1907	179	20.43	101	357
1908	176	19.42	101	284
1909	148	16.7	80	227
1910	149	16.7	86	252

It has been noted that whereas in 1909 there were 53 illegitimate births and 14 deaths, equal to an Infantile Mortality Rate amongst illegitimate infants of 264, in 1910 there were but 43 illegitimate births, with 3 deaths, giving a rate of 69.7, a rate actually lower than the rate for all children born. As before stated, however, several children whose deaths were registered as legitimate children were really illegitimate.

Details of Deaths under one year for the last nine years, from those diseases most fatal to infants, are given below:—

		1902	1903	1904	1905	1906	1907	1908	1909	1910
Diarrhœa		9	23	50	29	55	14	12	5	10
Convulsions		15	14	24	9	14	15	10	14	10
Bronchitis and Pneumon	ia	31	20	31	15	26	30	21	27	30
Enteritis		7	11	9	- 5	11*	11*	11	9	18
Premature Birth	***	26	24	32	29	17	36	39	27	19
Atrophy and Debility		35	38	44	21	21	26	25	20	3
Totals	441	123	130	190	108	145	132	118	102	90

*Includes Gastritis.

N.B.—In reading this table it should be remembered that the actual number of children born progressively increased from 1902 to 1910.

The Deaths of Children under one year in the four quarters were as follows:—

First Quarter		***	 35
Second Quarter	***	***	 40
Third Quarter			 46
Fourth Quarter			 28

The number of deaths in the third Quarter was highest owing to the deaths from diarrhea, 10 occurring in that Quarter.

One factor in causing a high rate of infant mortality is always supposed to be the work amongst married women. It has been suggested several times, that the time before and after confinement during which women should not be allowed to work in factories, should be lengthened. With the idea of getting information as to the alleged evil effects of work upon married women, the Home Office held an Inquiry and requested a number of Medical Officers of Health to assist them in getting exact information on the point. A form of inquiry was settled at a meeting held at the Home Office, and concerned the children born in 1908 who either died during the first year or lived 12 months. The inquiries were thus completed at the end of 1909, because a child born on the last day of December, 1908, would not have completed a year until the last day of December, 1909. As I attended the Home Office meeting shortly before my appointment to Wallasev, and bearing in mind the larger the field of enquiry the more valuable would be the result, I followed up as far as was possible the lives of 300 children born in this district in 1908 for a whole year. The results have, of course, been sent up to the Home Office, but were summarised too late for inclusion in my last Annual Report. It may be of interest if I reproduce a summary of the results obtained.

			Mot	hers In	dustria	Mothers Industrially employed.	Mothers
			At	In Ftory or Wkshop	Else- where	TOTAL	industrially employed.
Total cases—followed for 12 months	:	300	33	=	45	68	211
Total deaths of children		39	03	8	6	14	25
RATE OF INFANT MORTALITY per	per 1,000 Births	130	09	272	200	157	118
Period during which Breast-feeding alone continued in	ling alone contir	nued in					
(B	Between birth and 1 month	month	68	~	35	%99.06=89	155=83.3 %
A Ohilduan enumining fact man	., 1 ,, 2	2 months	36	00	16	45=60.00%	130=69-89%
Summen surviving mer year	65		66	80	8	33-44.00%	118=63.44%
Mothers Industrially employed 75 Mothers Not 186		: .	30	60	1-	30-40.00%	115=61.82%
)	Between birth and I month	month	0.5	3	6	14 = 100%	18 = 72%
_	1	2 months	:	:	3	3=21.4 %	9 = 36%
b.—Children dying in first year <	63	3	:	:	-	1 = 7.1 %	8 = 36%
Mothers Industrially employed 14 Mothers Not 25	, 8	9	1	-	1	i II	5= 20%
C. Periods during which Deaths occurred.	eaths occurred.						
B	Between birth and 1 month	month	:				
	., 1 ,, 2	2 months	:		1	1= 7.1 %	2= 8%
	3	8	:		0₹	2=14.2 %	1= 4%
	. 3 .,		-	:	4	5=35.7 %	13= 50%
	6 ., 12		-	00	0≥	6=42.7 %	9= 36%

In dealing with such small numbers, one must be very careful not to attach too much importance to any inferences drawn therefrom. With respect to the enquiries I conducted, the results pan out in accordance with what one would have expected. The industrial employment of women, simply because it takes the woman from home, must necessarily result in a smaller number of children being naturally fed, and this of itself must inevitably lead to a larger rate of infant mortality among them.

Table A shows that in the first month of life a larger percentage of children was breast fed amongst mothers industrially employed than amongst those not industrially employed. This may be taken to conform to what one would expect, because, to be industrially employed, a woman must be more or less physically capable of doing work, whereas amongst those not industrially employed, there are, doubtless, some mothers not physically capable of doing work. The workers, therefore, as a whole may be expected to be physically more capable than the non-workers; a larger percentage, consequently, are able to feed their children naturally. The children, moreover, of the women who work, from the fact that their mothers are probably physically superior, possibly start life with some initial advantage.

It will be noticed, however, that after the first month, the percentage of breast-feeding more rapidly declines amongst mothers industrially employed than among those not so employed. The effect is seen in Table C, where it will be noticed that, while there was no death in the first month amongst the children of those industrially employed, the percentage of the total deaths proportionately increases in the later months, presumably when imperfect feeding, the result, perhaps, of the mother's absence from home, has had time to have its effect.

of ELEVEN of the PRINCIPAL CAUSES of INFANT MORTALITY (below ONE YEAR of age) in WALLASEY during 1910.

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COMPARATIVE VIEW of ELEVEN of the PRINCIPAL CAUSES of INFANT MORTALITY (below ONE YEAR of age) in WALLASEY during 1910.

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											35
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DISEASES.	PHEDWOMIN	BIRTH	MASTING DISEASES (13)	AHOODING-COUGH	Виоментів	CYNEES	COANTRIDME	LABERCHTORIZ	MENINGITIS.	MEVEFER	
		-21			1						

Deaths from Zymotic Diseases.

DISEASE.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1916
TOTALS	95	122	67	75	163	64	121	51	87	50	61
Smallpox	0	0	0	1	0	0	. 0	0	0	0	0
Measles	26	5	12	3	32	1	13	6	27	13	15
Scarlet Fever Diphtheria and	4	5	5	18	8	6	6	6	10	20	3
Croup	3	12	5	3	12	10	12	7	8	9	4
Whooping Cough	22	15	17	10	42	2	15	13	21	0	19
Fever (Typhoid)	17	31	12	5	7	8	5	3	4	2	5
Diarrhœa Rate per 1,000	23	54	16	35	62	37	70	16	17	6	15
of population	1.82	2.25	121	1 33	2.85	1.00	1.95	0.76	1.22	0.68	0.8
English Rate do.	2.00	2.05	1.64	1.46	1.94	1.52	1.73	1.26	1.29	1.12	0.99

Infectious Diseases.

The number of Infectious Diseases notified during 1910 shows a decrease of 395 compared with those notified in the previous year.

After the first quarter of the year the incidence of all infectious diseases was surprisingly low. It is worthy of note that, for the week ending November 26th, not a single notification of any kind was received by me, and, about that time, in several weeks the notifications numbered but one or two.

The following Table shows the number of Notifications of Infectious Diseases in the last eleven years:—

DISEAS	E.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Small-pox			1	40	26	6				1		7
Diphtheria		25	52	40	38	52	64	57	92	72	57	44
Membranous												
Croup		3	3		2	3	1	1				
Erysipelas		34	31	35	41	39	53	28	45	32	32	32
Scarlet Feve	r	119	147	293	440	270	348	266	255	248	716	329
Typhus												
Typhoid		163	257	64	47	39	61	65	31	34	18	14
Puerperal Fe	ver	4	2	4	2	4	6	2	4	3	2	4
Chicken-pox Cerebro-Spin				93*								
Meningitis								***		1		
TOTALS		348	493	569	596	413	533	419	427	391	825	430

^{*}Chicken-pox made notifiable from June 28th, 1902, to end of year.

Small-pox.

FIRST OUTBREAK.

There were 7 cases of Small-pox during the year.

In reality there were two outbreaks at the same time, and there were many interesting features with regard to each, but so far as could be ascertained there was no connection between them, and the primary source of neither could be traced. The first case was that of J.B., aged 29 years, a worker in a Grain Warehouse. He was taken ill on April 5th, the rash appeared on April 7th, and he was notified and removed to Hospital on April 11th. His wife and child were vaccinated on April 11th. The wife's vaccination took well. She, owing to her approaching confinement, was removed to the Workhouse, and on April 20th was removed from the Workhouse to our Hospital, the rash just appearing. The re-vaccination showed four marks in the pustular stage with good areola. Her baby was born a day before the rash appeared, and was admitted with her to the Hospital showing no signs of Small-pox. The baby was vaccinated on the day after admission (April 21st), and the vaccination took exceedingly well. On May 4th, when the vaccination was at its height, the baby developed a few pocks, the nature of which will be discussed later on.

The third (G.B., aged 19) and fourth (C.B., aged 23) cases were brothers of No. 1. The illness was said to commence in both on April 20th, and the rash appeared on G.B. on April 21st and on C.B. April 22nd. The last two cases admitted to being in contact with the first case (J.B.) on Sunday, April 10th. They also saw him on April 5th, the day after the first case (J.B.) was taken ill. They strenuously denied contact between these dates, in spite of repeated questionings. These boys were both re-vaccinated on April 12th, which, in the case of G.B., who had four scars of a very good primary vaccination, was unsuccessful, and in the case of C.B., who had three very good primary marks, a very slight re-action took place on re-vaccination. G.B. was a mild discrete case. C.B. had a semi-confluent attack and he promised to be severely ill, but the rash never went to pustulation,

These cases show that the incubation period for Small-pox may sometimes be either less or greater than the usual period of 12 days, for, if with the normal incubation period they contracted Small-pox on the first exposure, namely, April 5th, the rash ought to have appeared on April 19th. The incubation period must, in that event, have been prolonged. If, however, they contracted Small-pox on the second exposure, namely, April 10th, the rash should not have appeared until the 24th of April, and the incubation period must have been shorter than the normal. (N.B.—The rash appeared on the 21st and 22nd respectively).

SECOND OUTBREAK.

The fifth case was G.D., aged 50 years, admitted to Hospital, April 25th. He worked in a Flour Mill adjoining the place where J.B. worked, but apparently had never seen him. They certainly did not know one another, and no connection whatever between the two could be traced. His primary vaccination showed four very small scars. The course of the disease was mild.

The sixth case was Mrs. M.C., aged 62 years, admitted to Hospital, May 14th. Mrs. C. was a visitor at the house of G.D., and was there on the day of his removal to Hospital. She stated that she had only been in the house for a few minutes, had not been in the room where the patient was, and had not even seen his wife who was his only attendant. I was asked to see her on May 13th, and found a rash beginning to be vesicular, although she and the Doctor positively asserted that the rash had not made its appearance until the preceding day, May 12th—Supposing it had first appeared on May 11th, it would still mean that in this instance the rash appeared on the 16th day instead of the 15th day after contact. Although Mrs. C. was 62, and had been vaccinated only in infancy, of which vaccination there remained three very faint scars, and although in the early stages she promised to be severely ill, the pocks died away in a most remarkable manner, not even proceeding to complete vesiculation.

The seventh case was E.R., aged 3½ years, admitted to Hospital on May 24th. In many respects this was the most interesting case of

the series. She was the daughter of one of the disinfecting staff. This disinfector had assisted in the removal of G.D. on April 25th, but had had no connection whatever with Small-pox patients or bedding after that date. I may mention that this man was re-vaccinated unsuccessfully three years ago, and he stated that he had also been vaccinated unsuccessfully three years before that. He went off duty ill on May 7th, and was attended by a doctor, whose certificate was to the effect that he was suffering from Pleurisy. He returned to work on May 16th. On being closely questioned as to his illness it appeared that he vomited before leaving work on May 7th (12 days after removing G.D.), and about the beginning of his illness there had appeared on his forehead some spots which disappeared in a few hours. I was asked to see the child with a doctor on May 23rd, 16 days after the commencement of her father's illness, and found the rash well out. There appeared to be no other way by which the child could possibly have become infected except by the father; and having in view the fact that the father's association with Small-pox absolutely ceased after April 25th, and the child's rash did not appear until on or about May 21st, it seems almost certain that the illness from which he was suffering was an exceedingly modified form of Small-pox, and that the child contracted the disease from him directly. This child had never been vaccinated, and was, therefore, highly susceptible. She had a very severe confluent attack and was dangerously ill for several days, but ultimately recovered. I may mention here that the disinfectors, when handling infected bedding, clothing, &c., wear overalls, and when the bedding, &c., has been put into the disinfecting apparatus the overalls are put in also. The men have also definite instructions that they must carefully wash before leaving the Hospital, and periodically disinfect their ordinary clothes.

The question as to whether the newly-born baby who was admitted to Hospital with her mother was suffering from generalized Vaccinia or a modified form of Small-pox, is a difficult one to decide, and various opinions were expressed by different medical men who saw the case. The baby was born while the mother was suffering from Small-pox, but one day before her eruption appeared. Exactly 15 days after the birth the baby developed the first pock. It should be

remembered also that the mother had been re-vaccinated 8 days before the birth of the child, and her re-vaccination was very well advanced at the time of the birth. One would have expected the baby either to have developed the rash of Small-pox concurrently with its mother, or that the combined effects of the vaccination and Small-pox in the mother would have protected the child not only from the vaccination, but from Small-pox also. The child's vaccination, however, took most vigorously, and the pocks appeared exactly at the time when the vaccination pocks were pustular, and had very large areola, when the arm was much swollen and the glands in the arm-pit were affected; in short, when the effects of vaccination were at their height. the pocks were exactly like those of Small-pox, but their distribution and behaviour differed considerably from the latter. For instance, the pocks appeared irregularly on the head, wrist, body, then head again, trunk, hands, and so on. Again, some of the pocks became pustular within an hour or two of their first appearance.

Having regard to all the circumstances of the case, I myself was of opinion that the case was one of generalized Vaccinia, although I would not like to be too confident, because I have never before seen a case. I read, however, that there are cases in which it is absolutely impossible to say whether the disease from which a person is suffering is generalized Vaccinia or Small-pox, however learned the observer, or however great his experience.

In connection with this outbreak, it may be well to sound a note of warning on the tendency which is manifested here, as in other places, to neglect to take advantage of the benefits which vaccination affords as a protection against Small-pox.

This is shown in two ways. First, by the increased number of exemption certificates applied for, and secondly, by the fact that even where a child is vaccinated it is often very inefficiently vaccinated, so inefficiently indeed that in all probability the protection afforded is gone, or greatly lessened, in a very short time.

If children are vaccinated by the Public Vaccinator, he is compelled to vaccinate in four places. No such obligation rests on the private practitioner, and there are some who respond to the appeals of the patient to the extent of vaccinating sometimes in one, sometimes in two places. In my opinion this should be forbidden by law. No one who has had any experience with Small-pox doubts for one single instant the importance of vaccination as an absolute preventative, if the operation is recently performed, and in those cases not sufficiently recently vaccinated to be absolutely protected, vaccination modifies the disease, if contracted, in a most amazing way.

A large number of medical men, nowadays, have never seen a case of Small-pox, and it may be this is the reason why some place such small store on vaccination, and allow themselves to be persuaded to vaccinate in only one place.

During the past year, Chicken-pox has been very prevalent, and advantage has been taken, when visiting these cases, to ascertain the nature of the vaccination of those children so suffering.

208 cases were thus visited. 2.6 per cent. were found to be unvaccinated. 16 per cent. had only 1 mark; 43.6 per cent. 2 marks; 10.12 per cent. 3 marks; 27.6 per cent. 4 marks. Thus more than half of the vaccinated children had 2 marks and under. In my remarks on vaccination, I do not wish it to be inferred that I reflect on the medical practitioners in this district in particular. As a matter of fact, I know that a very large number of infants in this district are taken to a neighbouring town to be vaccinated, because it is notorious that a certain gentleman in that town will meet the parents in the most handsome manner, and allow them absolute discretion in regard to choosing the extent of the vaccination of their children.

There would be no objection to the vaccination of children in one place provided that at the age of ten all children were compulsorily re-vaccinated. The protection thus afforded would, probably, last them throughout life, except under exceptional conditions of exposure; but while the State requires vaccination only in infancy, and no re-vaccination, it is the best policy to make the most of what one can get, and vaccinate in four places while opportunity offers.

It is a curious fact that, at a time when vaccination as a protection against Small-pox is gradually declining in favour, the most promising advances in the modern treatment of disease are on analogous lines to vaccination, e.g., tuberculin and various vaccines.

Cholera.

During the year I was notified by the Medical Officers of the Port Sanitary Authorities concerned that 5 people had arrived in this district from Cholera-infected ports. These people were all visited, but none developed the disease.

Dysentery.

One case of Dysentery removed from board ship to this district was notified to me during the year by the Liverpool Port Sanitary Authority.

Scarlet Fever.

The incidence of Scarlet Fever during the year was markedly less than in 1909, considerably less than half the number of notifications being received. 329, however, is somewhat in excess of the average number of the preceding ten years. The number of notifications decreased gradually from the beginning to the end of the year. The usual Autumn-Winter rise about November was conspicuous by its absence.

The notifications for each Quarter were :-

First Qu	arter	 	127
Second	,,	 	92
Third	,,	 	56
Fourth		 	54

The disease has been of a particularly mild type, only three deaths having occurred during the year, giving a percentage of deaths to cases of just under 1 per cent., compared with 4.0 in 1908 and 2.7 in 1909. Of the 329 cases notified 229 were sent to Hospital, of whom 2 died, giving a death-rate per cent. of cases equal to 0.8.

These mortality rates are considerably lower than ever previously recorded.

There is nothing of importance to be noted during the year. I think it is the general experience with regard to Scarlet that the exact source of a very small percentage only of the cases can be traced. Five of our cases, as far as it was possible to ascertain, contracted the disease outside the district.

44 of the Scarlet Fever cases notified at houses where two or more cases occurred, were removed to hospital at the following intervals:

2 cases	at an interval	of	1	day afte	r admission of	previous case
12	do.			days	do.	1
1	do.			days	do.	en ii.
1	do.			days	do.	still in sequen d.
7	do.			days	do.	st see
1	do.			days	do.	subsequent
1	do.		7	days	do.	ious patients si al when subsi- cases occurred.
7	do.	7	14	days	do.	sen oc
4 3	do.	14	21	days	do.	es & p
3	do.	21	28	days	do.	Previous ospital w
-	do.	28	35	days	do.	Previor hospital
3 2	do.	35	40	days	do.	sp sp
2	do.	40	50	days	do.	H of
_						*
44						

In 13 houses 2 cases occurred and were removed to hospital at same time,

The foregoing tables show the necessity of repeating what I have pointed out on several occasions, namely, that a little care on the part of parents in isolating children at the onset of the illness would have prevented many cases. It is quite a usual thing amongst the poorer people, when a child is taken ill, for it to be removed to the kitchen—the living room—and if the disease happens to be Scarlet Fever, that of course means that every one in the house is exposed to infection. I have met several cases, indeed, in which after the disease has been diagnosed as Scarlet Fever, the parents have brought the child into the kitchen preparatory to its removal to hospital, and the other children in the house have been playing with it.

The following Table gives some very interesting information with regard to Scarlet Fever cases in this district since the year 1881:—

Statistics re Scarlet Fever since 1881.

Year,	Estimated Population at Middle of Year.	Total Notifications,	Attack Rate per 1,000 of Population.	Percentage of Cases removed to Hospital.	No. of Deaths.	Death Rate per cent. of Cases.	Death Rate per 1,000 of Population.	No. of Cases Admitted to Hospital.	No. of Deaths in Hospital.	Percentage of Deaths in Hospital to Admissions,
1881	21,192									1
4000	(Census)				-					1.15
1882	22,743‡				29	144	1.27	***		***
1883	24,037:	***		***	21		0.87			
1884 1885	25,228‡			***	5		0.18		(0.00)	***
1000	28,000			444	4	***	0.14	***	***	***
1886	29,500 30,500	***	***	***	8	***	0.13	***	***	***
1888	31,500	***			1	****	0.03	10		
1889	32,500	+			15	***	0.43	25	3	12.0
1890	34,000	116	3.4	14.6	12	10.3	0.35	17		11.8
1891	33,500	89	2.6	20.2	7	7.8	0.21	18	2	5.5
1892	(Census) (33,229) 34,500									
1893	35,500	49 123	3.4	18.4	3 2	6.1	0.06	9 21	1	11.1
1001	37,000	246	6.0	22.7	5	1.0	0.13	56		
1895	39,000	130	3.3	36.1	4	3.0	0.10	47	2	4.2
1896	41,500	157	3.7	38.2	4	2.5	0.09	60	3	5.0
1897	44,000	256	58	48.0	15	5.8	0.34	123	7	5.7
1898	46,800	220	4.7	44.1	11	5.0	0.53	97	7	7.2
1899	49,000	167	3.4	53.3	5	3.0	0.10	89	3 7 7 3	3.3
1900	52,000	119	2.3	50.4	4	3.3	0.08	60	2	3.3
1901	54,000	147	2.7	45.5	5	3.4	0.09	68	2 4	5.9
	(Census) (53,579)									
1902	55,000	293	5.3	67.9	5	1.7	0.09	199	4	5.0
1903	56,000	440	7.8	70.2	18	4.1	0.35	309	11	3.2
1904	57,000	270	4.7	62.9	8	3.0	0.14	170	7	4.1
1905	58,500	348	5.9	62.0	6	1.7	0.10	227	3	1.3
1906	62,000	266	4.3	66.9	6	2.2	0.09	178	6	3.3
1907	67,000	255	3.8	73.7	6	2.3	0.08	188	6	3.5
1908	71,000	248	3.5	70.1	10	4.0	0.14	174	9	5.1
1909	73,000	716	9.8	70.8	20	2.7	0.27	507	14	2.7
1910	75,000	329	4.3	69.6	3	0.2	0.04	229	2	0.8
			1							

^{*} First Case in Hospital, October 28th, 1887 (7 to end of year).

Appended are two Charts dealing with Scarlet Fever since 1890.

No. 1 Chart shows the "Attack" rate per 1,000 of population, and

No. 2 shows the percentage of cases removed to Mill Lane Hospital.

^{† 1889} Notification Act adopted December 2nd, 1889. (30 Scarlet Fever Cases notified to end of year).

[.] These figures are for the end of the year.

These two charts must be read in conjunction with one another. They certainly do not point to the conclusion that the isolation of Scarlet Fever in hospital has been attended by all the benefits which at the time of the establishment of the practice it was prophesied would result. It will be observed that when the percentage of cases removed was much below the average, the attack rate was considerably below the average also. Of course too much importance must not be placed on this fact, because the higher the incidence of disease, the larger will be the number of cases going into hospital, and the greater will be the number of concealed, unrecognised or missed cases, which in their turn tend to make the attack rate still Moreover, the establishment of hospitals for Scarlet Fever can be justified on other grounds than their effect on the incidence of the disease, but, at the same time, there can be no doubt that many cases are removed to hospital which could, with perfect safety to the other members of the family and the public, be isolated at home. The only reason that can possibly be adduced for sending some of the extremely mild cases from good homes into hospital is that thereby the parents are saved some trouble. I do not sympathize with that view.

During the year there have been five "return" cases amongst those treated in hospital, and three amongst those treated at home. As I have stated in my previous Report it is exceedingly difficult to state positively whether or not the second case was actually infected by the first. For instance, on December 15th, 1909, a case was notified at a certain house, a second case occurred on January 24th, 1910, while the first child was in the hospital. Again on September 20th a case was notified and removed to hospital, a second case being reported on the 29th of the following month whilst the first was in hospital. If these two "first cases" in these instances had returned home a day or two before, instead of a day or two after the onset of the second case, no doubt these second cases would have been put down as "return cases."

Home-Treated Cases.

With regard to the home-treated "return cases," two of them were in one house. The infecting patient was isolated for six weeks and one

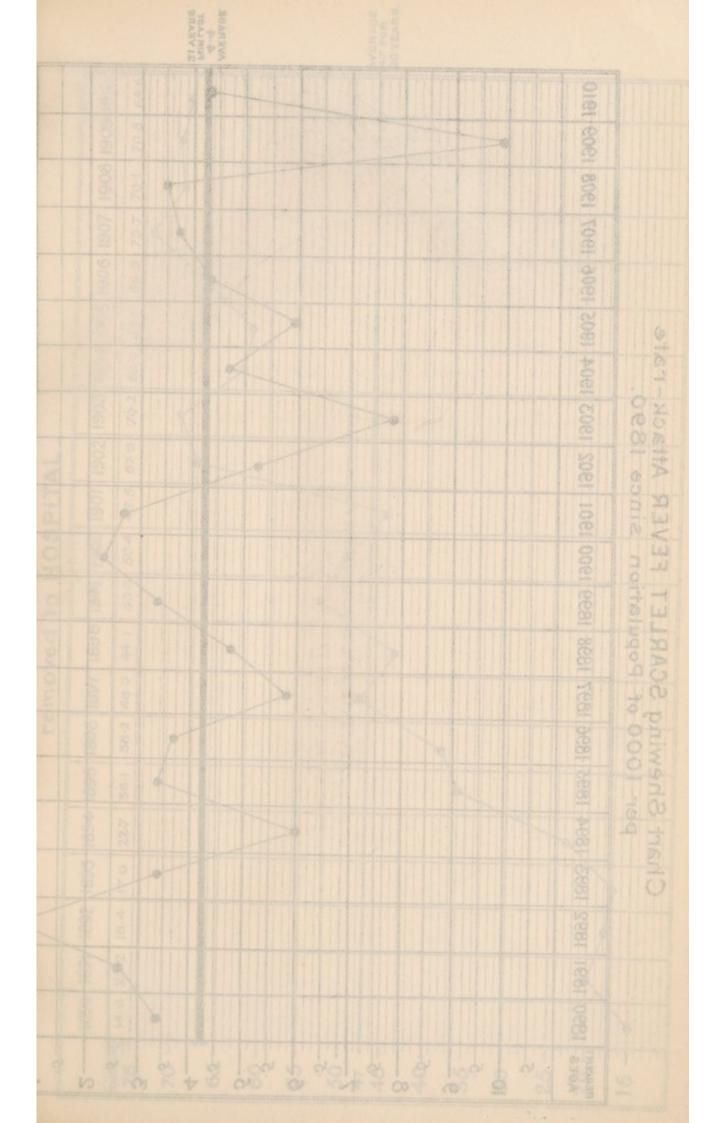
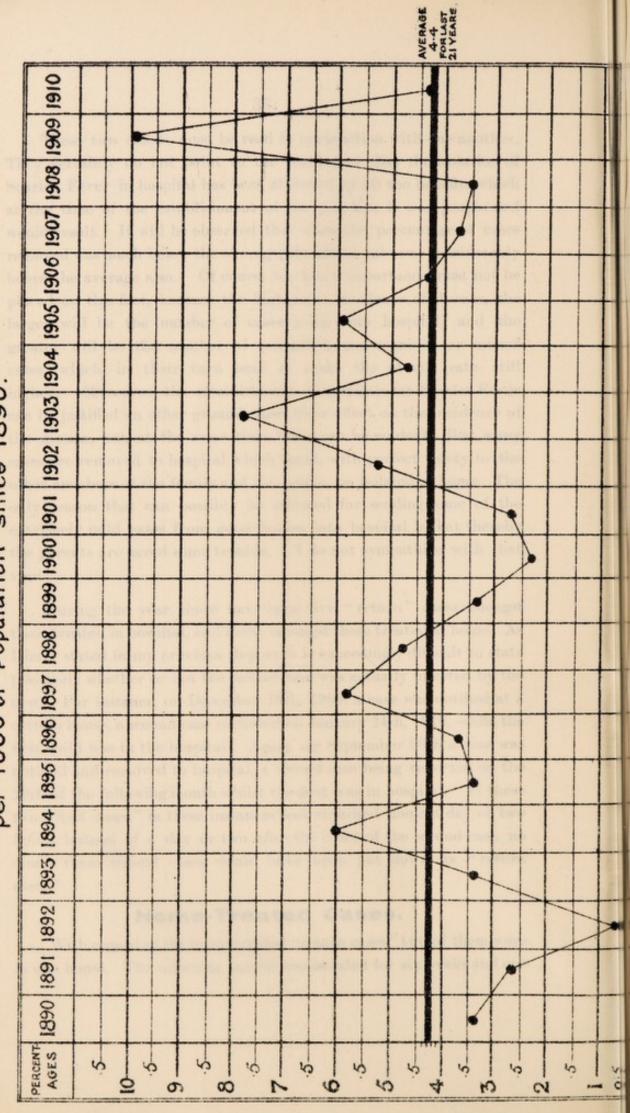
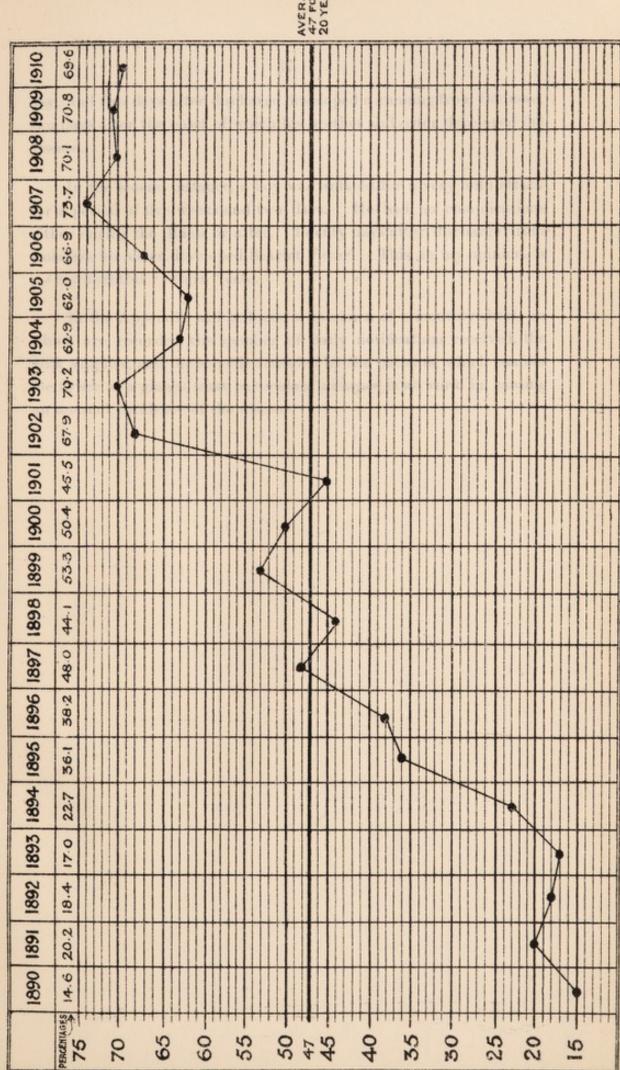


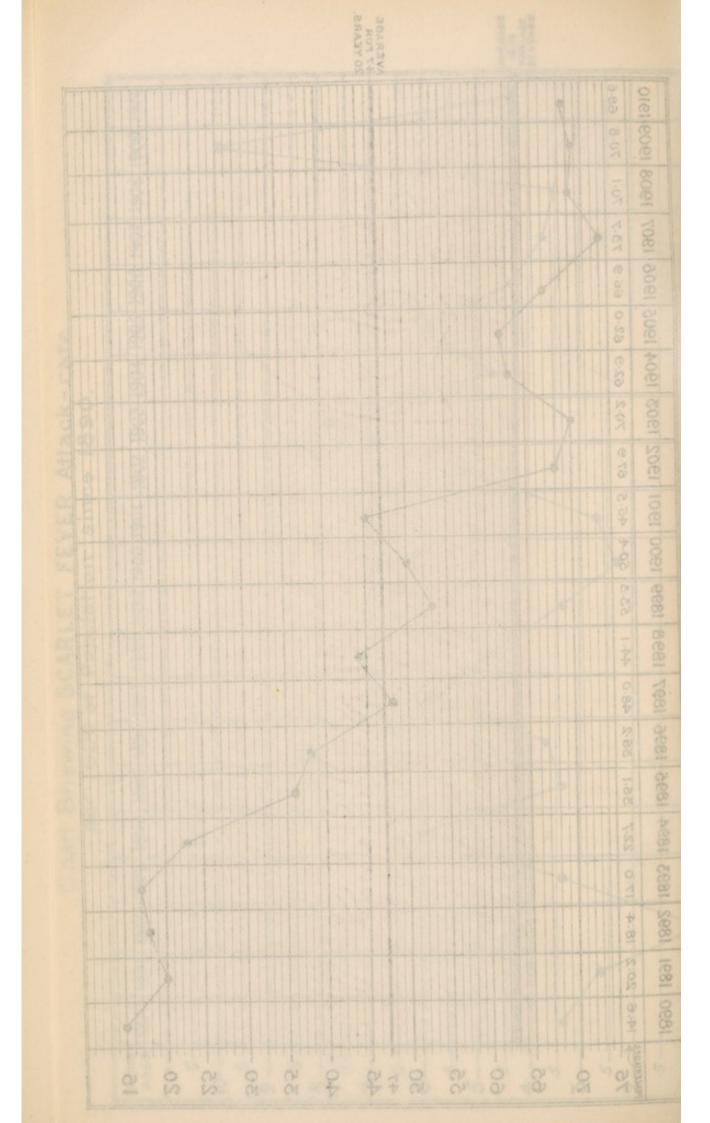
Chart Shewing SCARLET FEVER Attack-rate per 1000 of Population since 1890.



shewing percentage of SCARLET FEVER Cases removed to HOSPITAL Chart



AVERAGE 47 FOR 20 YEARS.



day, and two days after discharge developed a running from the nose, two days after the onset of which his brother and sister developed the disease.

In the second instance, a boy was isolated for a very mild attack for a period of five weeks and two days. He had no complications either during the illness or after. Twenty days after discharge from isolation his sister developed Scarlet Fever. This, in my opinion, is a very doubtful "return" case.

In the Appendix will be found a specimen of a monthly sheet, on which are recorded the number of daily notifications received, the milk supplies, and the schools attended by the patients, which enables me to see at a glance what particular influence is at work in causing an unusual incidence of the disease.

Details of "Return" Cases.

JRN" CASES	Interval between discharge of first onset of onset of second.	Days. 55	[2 cases]	:
HOME-TREATED "RETURN" CASES	Interval between discharge of first onset of second.	Days. 12	20	:
HOME-TRE.	Length of isolation of first case.	Days. 43	37	:
20.	Period from first onset of the disease.	Days. 67	23	1
"RETURN" CASES.	Interval between dis- charge of first and onset of second.	Days.	6	
"RET	Stay in Hospital of first case.	Days. 56	11	1
	Interval etween dis- charge of first onset of rst case and the disease. second.	Days. 39	#	75
DOUBTFUL.	A ,A	Days.	∞	53
De	Length of stay in Hos- pital of first f	Days. * 35	4*36	* 46

* None of these cases had complications either in hospital or afterwards, and in the case of + the child had attended a school from which two cases had been removed in the same week,

Diphtheria.

In 1910 the number of cases of Diphtheria notified was 44 (of which number 4 died), compared with 57 notifications in 1909 and 72 in 1908. The percentage of deaths to cases was 9.0. The distribution of the cases was as follows:—

Poulton-cu	ım-Sea	combe	 	 21
Liscard			 	 22
Wallasev			 	 1

The number of cases notified is 13 less than in 1909, and the number is 12 below the average for the preceding ten years.

25 cases were admitted to hospital, of which one died (4.0 per cent.).

There was no special incidence of the disease in any particular district or in any particular school. The cases were sporadic and scattered.

Of the 25 cases admitted to hospital as Diphtheria 1 was found on examination not to be Diphtheria.

Three of the cases notified contracted the disease outside the district.

I have often in these reports drawn attention to the fact that the mortality from Diphtheria depends very largely upon the promptness with which the disease is cut short by the use of anti-toxin. Arrangements have now been made whereby anti-toxin can be obtained free of charge by any medical man requiring it, and it is to be hoped that this will ensure its more prompt administration, whether or not the case is removed to hospital. It will be a distinct advantage if a medical man were to administer this remedy before removal, since it may easily happen that owing to pressure of work it may not be possible immediately to remove to hospital any particular case.

The following table gives some very useful information with respect to Diphtheria and Croup in this district since 1890.

Year.	Estimated Population Middle of Year.	Total Number of Cases Diphtheria and Croup.	No. of Peaths Registered Diphtheria and Croup.	Fatality per cent, of Cases.	Number of Cases Treated in Hospital.	Attack Rate per 1,000 Population.	Percentage of Cases Removed to Hospital.	Mortality per 1,000 Population.
1890	34,000		3					0.09
1	33,229			20.0				
1891	census	38	1	28.9	2	1.1	5.2	0.33
1892	34,500	34		17.6	3	1.0	8.8	0.16
1893	35,500	39	9	23.0	4	0.9	10.2	0.50
1894	37,000	35	9 9	25.6	10	0.9	28.5	0.24
1895	39,000	25		36.0	10	0.6	40.0	0.53
1896	41,500	35	6 3 5	17.1	8	0.8	22.8	0.14
1897	44,000	12	3	25.0	4	0.5	33.4	0.08
1898	46,800	32		15.1	12	0.6	37.5	0.10
1899	49,000	39	10	25.6	21	0.8	53.8	0.50
1900	52,000	28	3	10 7	8	0.2	28.5	0.06
1901 }	53,579 census	55	12	21.8	22	1.0	40.0	0.55
1902	55,000	40	5	12.5	20	0.7	50.0	0.09
1903	56,000	40	3	7.5	27	0.7	67.5	0.02
1904	57,000	55	12	21.8	33	0.9	54.5	0.51
1905	58,500	65	10	15.3	45	1.1	69.2	0.17
1906	62,000	58	12	20.7	30	0.9	51.7	0.19
1907	67,000	92	7 8 9	7.6	61	1.3	66.3	0.10
1908	71,000	72	8	11.0	50	1.0	69.4	0.11
1909	73,000	57		15.7	31	0.7	54.4	0.15
1910	75,000	44	4	9.0	25	0.28	56.8	0.02

Typhoid.

The number of cases of Typhoid notified was 14, compared with 18 last year.

3 of these were found on observation not to be Typhoid, and 4 were contracted outside the district. None of them had eaten shell-fish.

The drop in the number of notifications of Typhoid in recent years is very remarkable. I ought to mention that the drop is not confined to Wallasey. I think it can be truthfully said that Typhoid is a disease which is rapidly disappearing in England.

The cases admitted to hospital were of a peculiarly severe type, as is shown by the fact that of the 7 cases admitted 5 died.

Deaths from Typhoid since 1887, with Rates.

Year.	Deaths.	Wallasey Rate per 1,000,	Notified Cases,	English Rate
1887	11	0.45	***	0.21
1888	9	0.58	***	0.19
1889	12	0.36	(Act passe	ed in 1889) 0.19
1890	9	0.26	42	0.19
1891	20	0.59	77	0.18
1892	20	0.57	62	0.14
1893	23	0.64	132	0.24
1894	13	0.35	89	0.16
1895	8	0.20	67	0.17
1896	10	0.24	112	0.17
1897	9	0.50	93	0.16
1898	9	0.19	87	0.18
1899	11	0.53	132	0.50
1900	17	0.35	163	0.17
1901	31	0.57	257	0.16
1902	12	0.21	64	0.13
1903	5	0.08	47	0.10
1904	7	0.15	39	0.09
1905		0.13	61	0.09
1906	8 5	0.08	65	0.09
1907	3	0.04	31	0.07
1908		0.02	34	0.07
1909	2	0.02	18	0.06
1910	5	0.06	14	

Measles.

During the year 15 deaths occurred from Measles, equal to a rate per 1,000 living of 0.2.

The diagram on next page shows at a glance the number of deaths from Measles in the past few years. It also shows the tendency of the disease to become epidemic every second or third year.

The incidence of this disease, which was epidemic in character in October to December of 1909, continued to be very prevalent until April of 1910.

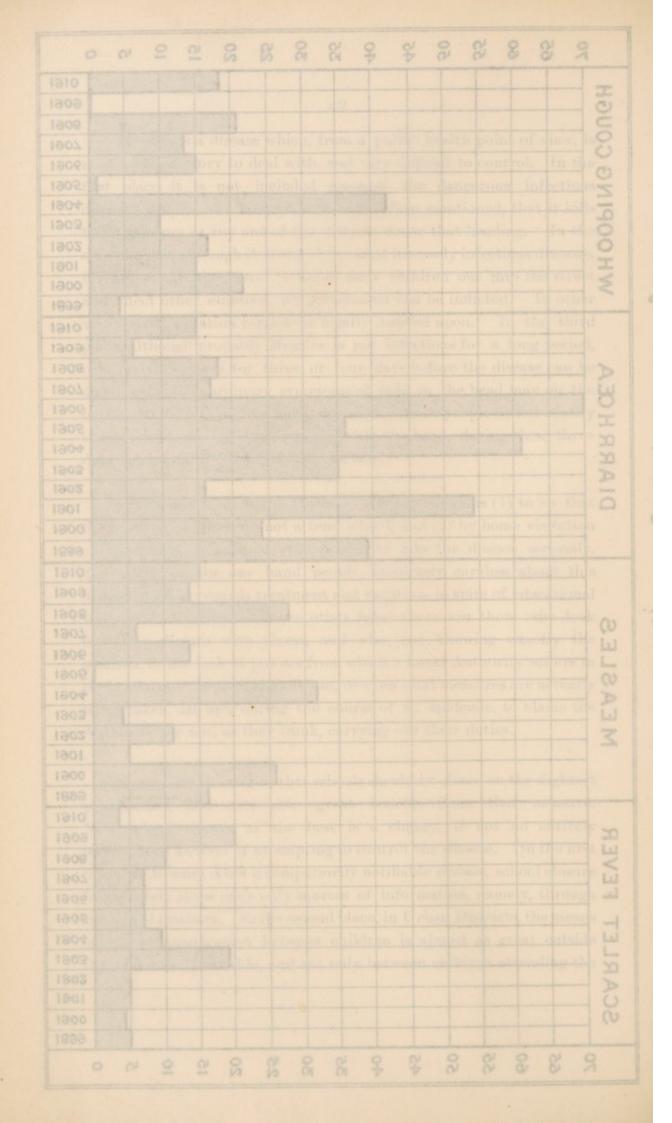
Tables 4 and 5 on page 47 show how the number of cases suddenly fell; for what reason is not apparent. That is one of the characteristics of Measles; it begins suddenly and ends almost as suddenly. Measles is a disease which, from a public health point of view, is most unsatisfactory to deal with, and very difficult to control. In the first place it is not included amongst the dangerous infectious diseases, despite the fact, as I have so often mentioned, that it kills twice as many as any one of the diseases under that heading. In the second place, although it is one of the most intensely infectious diseases, if careless parents choose to allow their children out into the street and infect other children, no punishment can be inflicted. In other words strict isolation cannot be legally insisted upon. In the third place, although probably Measles is not infectious for a long period, it is very infectious for three or four days before the disease can be diagnosed. The ordinary symptoms of cold in the head may on the fourth day be followed by a measles rash. Since people do not usually isolate children suffering from a cold in the head, during these three days much mischief is nearly always done.

Practically all that the Health Authority can do is (1) to see that the infected children do not attend school, and (2) by home visitation or by leaflet, to persuade the people to take the disease seriously. There are on the one hand people absolutely careless about this disease, both as regards treatment and isolation, in spite of educational visits and warnings. On the other hand there are those who look upon the disease with alarm, and who, not knowing exactly the position, or the lack of powers from which a Local Authority suffers in their efforts to control the disease, or even what measures are actually being taken, are apt, during the course of an epidemic, to blame the Authority for not, as they think, carrying out their duties.

Some seem to imagine that schools should be closed on the slightest provocation, and anticipate great benefits from that measure. Now, school closure at the best is a clumsy, if not an entirely inefficacious method of attempting to control the disease. In the first place, as Measles is not a compulsorily notifiable disease, school closure immediately stops one's only sources of information, namely, through the school teachers. In the second place, in Urban Districts, the means of intercommunication between children is almost as great outside the school as it is inside, and not only between children attending the

WHOOPING COUGH +061 DIARRHOEA MEASLES +061 FEVER SCARLET

Deaths in Wallasey during the past Twelve years



same school, but between children attending different schools in the district. It is almost impossible in an Urban District to confine an outbreak to one locality. What we desire to effect is the exclusion from schools of infected persons, not the keeping out of school of those who are well, and it appears to me that this can be accomplished much more efficiently by perfecting our arrangements for notification through the schools, and by home visitation, without at the same time interfering unduly with the education of the children. Where notification and means of visitation are perfect, the occasion for school closing should rarely, or never, arise. I have before stated that Measles is a very serious disease not only by reason of its immediate, but also of its remote consequences. Chronic eye troubles, ear troubles, bronchitis, pneumonia and consumption follow in its train.

While it has been shown in many instances that notification of the disease and isolation in hospital have had no effect in controlling its incidence, or indeed lowering its death rate, I am of opinion that many of the remote effects enumerated above may be obviated, if Measles cases could be taken from homes where the conditions are unsatisfactory, and treated in hospital. It would be an impossibility in times of epidemic to isolate anything approaching all the cases which could with advantage be treated in hospital, but I certainly think a selection might be made and the experiment tried. As I said last year in my Annual Report, home conditions are the determining factor in deciding the issue in the majority of cases. I am continuing my enquiries into every death. The numbers are at present too small to give in the form of a summary, but it is a striking fact, however, that with few exceptions, the deaths last year are of children artificially fed, thus confirming what has been stated over and over again, that breast feeding not only lessens the chances of death in the first year of life, but has a beneficial effect throughout life.

Another aspect of this question deserves serious attention. The deaths from Measles after the age of 5 years are practically nil. My further experience is to the effect that the *incidence* of the disease after the age of 5 is comparatively trifling. Children are not compelled to attend school before the age of 5. In the opinion of many even that

age is too young (as a fact, in some Continental countries, and in most of our colonies, the minimum age is 7), but in this country children at ages between 3 and 5 are almost universally admitted to school. Quite apart from the accommodation required for these very young children, and considerations as to the value of educating such young children which naturally occur to one, there can be no doubt that these children supply the bulk of the cases during an epidemic of Measles, and there can be no doubt also that in many instances the disease is contracted at school. If these children were excluded from school it is probable that the biennial epidemics of Measles would be averted or considerably curtailed in extent, and even if the effect were simply to alter the age incidence of the disease, I would point out that that would mean a lessened mortality, and probably lessen the baneful after effects, since the older the child attacked the greater the stamina of the child, and the more likely not only to recover, but to suffer less from the succeeding complications. Several years ago I expressed the opinion that the disadvantages of allowing children below the age of 5 to attend school considerably outweighed the advantages, and I have seen no reason to change the opinion then expressed; on the contrary, instead of allowing children below 5 to attend school, the minimum age might, with advantage, be raised to 6.

Whooping-cough.

While in 1909 there was not a single death from Whooping-cough, last year there were 19.

Whooping-cough, from a public health point of view, is, if possible, more difficult to control than Measles. Practically the only indication one has of its presence is by the death returns, since the sufferers for the most part are below the school age. The period of infectivity, too, is very prolonged.

The following Tables show the number of cases of Infectious Disease reported by the School Authorities:—

TABLE I.

Cases of Infectious Disease notified by Elementary Education Authority (from Medical Certificates received) to the Medical Officer of Health, 1910

		3				Tota	ds un	der "	Other	Disea	ses."
School,	Measles.	Chicken-pox.	Whooping- Cough.	Other Diseases.	Total.	Mumps	Searlet.	Diphtheria.	Sore Throat.	German Measles,	Suspicions Sickness.
St. Paul's St. Joseph's Riverside Wesleyan Somerville Poulton	1 5 1 7 3 8	6 14 6 11 8	4 14 14 2 8 2	9 3 8 2 11 3	20 22 37 17 33 21	3 1 1 3	7 1 4 1 8	1	 1 	1 2 1	
St. Mary's St. Alban's Manor Road Magazine Lane	35 10 5	4	3 9 1	11 11 	49 10 29 1	9	2 6 	 1	 1	 1	
Egerton Street S.S. Peter and Paul Vaughan Road	5 11	2	5 7	1 3	10 1 23		1 3				
Wallasey	19	1	9	4	33		4				
Total	110	52	78	66	306	19	37	2	3	5	

DISTRICT TOTALS-

Poulton-cum-Seacombe Liscard New Brighton Wallasey	25 50 16 19	45 4 2 1	44 13 12 9	36 22 4 4	150 89 34 33	8 11 	21 8 4 4	1 1 	2 1 	4 1 	
	110	52	78	66	306	19	37	2	3	5	

TABLE II.

Cases of Suspected Infectious Disease notified by Elementary Education Authority (per reports of Head Teachers or Attendance Officers) to the Medical Officer of Health, 1910.

	1	.x.	in			Tota	ls une	ler "	Other	Dise	ases.
School.	Measles	Chicken-pox.	Whooping- Cough.	Other	Total.	Mumps.	Searlet.	Diphtheria	Sore Throat.	Rash.	Suspicious Sickness.
St. Paul's St. Joseph's Riverside Wesleyan Somerville Poulton	8 18 5 8 36 22	11 4 8 33 77 42	14 20 13 13 92 26	8 12 18 12 63 118	41 54 44 66 268 208	11 13 10 30 85	2 1 3 7 1	1	2 1 20 8	3 2 5 3	 1 21
St. Mary's	48 11 22 2	6 1 24 	14 23 54 18	46 15 34 35	114 50 134 55	44 15 22 35	 4		3	2 4 	 1
Egerton Street	 1		13 1 14	2 82	15 1 97	2 81	 ï				
Wallasey	70	2	41	109	222	99	2				8
Total	251	208	356	554	1369	447	21	2	34	19	31
DISTRICT TOTALS—											
Poulton-cum-Seacombe Liscard New Brighton Wallasey	97 83 1 70	175 31 2	178 109 28 41	231 130 84 109	681 353 113 222	149 116 83 99	14 4 1 2	2	31	13 6 	22 1 8
	251	208	356	554	1369	447	21	2	34	19	31

TABLE III. CASES VISITED.

	Total number visited.	Number found not suffering as reported.
Mumps Measles	447 251	101 60
Chicken-Pox	208 356 107	17 52 30
TOTAL	1,369	260

47

TABLE IV.

Shows the Number of Cases of Infectious Disease reported Month by Month in 1910.

	Mensles,	Chicken-pox.	Whooping- Cough.	Other Diseases.	Total.	Mumps.	Searlet.	Diphtheria.	Sore Throat.	German Measles.	Suspicious
January	27			31	58	19	10		2		
February	40		2 4 8	9	51	***	8	***	1	***	
March	31	2 7	4	21	58		19	2		***	-4.4.5
April	3	7		2 2	20			4.6.4		2	
May	2 5	2 2	14	2	22	***				2	
June	5	2	24	1	32		1			1	
July	1	2	5		8	***		***	144		
August	***		16		16	***					
September	1	2	1		4						
October		14	2		16	***		***			
November		10	1		11						
December		9	1 2 1 1		10	***	+++		***		
	110	52	78	66	306	19	37	2	3	5	

TABLE V.

Shows the Number of SUSPECTED Cases of Infectious Disease reported Month by Month in 1910.

	Meusles.	Chicken-pox.	Whooping- Cough.	Other Diseases	Total.	Mumps.	Scarlet.	Diphtheria.	Sore Throat.	Rash	Suspicions
January	46	100	***	184	230	172	3		4 3	1 2	4
February March	68 15	2	1	133 86	204 102	108 76	4 4	1			15
April	86	1	41	60	188	47	1		4	***	8
May	8	9	96	48	161	42			4 4 2 4	3	1 8 1
June	13	6	103	13	135		3		4	6	
July	5	1	7		13		***				
August	2 2	17	77	7	103				3	3	1
September		14	19	10	45	2	3	300	2	2	1
October	1	58	5 2	7	71		3		4		
November	2	43	5	4	54	111		***	2	2	
December	3	56	2	2	63	***		***	2	***	(011
	251	208	356	554	1369	447	21	2	34	19	31

Schools.

The medical inspection of School Children in this district is not carried out under the direction of the Medical Officer of Health, but the latter Officer and the School Medical Officer are in frequent consultation, and co-operate cordially.

By arrangement, the names and addresses of children suffering from such infectious diseases as come to the knowledge of the School Attendance Officers and Teachers, have been sent to me by the Director of Education. Those cases in which a Doctor was not in attendance were visited by the Lady Inspector, and steps taken to exclude children whose presence might be dangerous to other scholars.

On several occasions during the year when certain schools seemed to be instrumental in spreading disease, I visited them for the purpose of making enquiries, and examined suspicious children.

Diarrhœa.

During the summer of 1910 there was practically no Diarrhæa in comparison with former years, the number of cases being exceedingly small. 15 deaths in all were returned as being due to Diarrhæa, 10 of which were under the age of one year, viz.:—

- 2 between birth and 2 months old.
- 1 between 2 and 3 months old.
- 0 between 3 and 4 months old.
- 1 between 5 and 6 months old.
- 6 between 6 and 12 months old.

Of these, 11 were artificially fed, 2 were breast-fed, and 2 breast and bottle.

The increase in the cases was due to the fact that the Autumn
was prolonged and hot. The deaths from Diarrhœa are considerably
fewer than formerly used to be the case, due no doubt, to a combination

of circumstances,—the education of the people by the press, congresses, etc., the special efforts of Sanitary Authorities, the appointment of women inspectors and their educative influence, etc., etc.

With regard to the 15 deaths, I would remark that enquiries show that some children whose deaths were ascribed to Diarrhea were at the same time suffering from other diseases, and the history given by the mothers leads one to suppose that Diarrhea could have had but a small share in causing the actual death. It would seem to be the custom of some doctors to ascribe deaths occurring in August or September with symptoms of Diarrhea even of the slightest kind, to epidemic Diarrhea. It is well known that an attack of Diarrhea may be the termination of many illnesses, and in the notes to tables 4 and 5 printed on the back of the Local Government Board forms, occurs the following as an instruction to the Medical Officer of Health, but which, I think, might also be borne in mind by medical men:

- "Deaths from Diarrhea secondary to some other well-defined disease should be included under the latter."
 - Phthisis.

The deaths from Phthisis number 56, equal to a death-rate of 0.7 per 1,000 of the population, a rate much below that of the whole country. It should be noted, however, that low as this rate is, if the Phthisis rate is taken as affording any indication of the healthiness of this particular district, it is a misleading figure, because, as a matter of fact, the good reputation of this district attracts people suffering from Phthisis to come and live here, in the hope of improving or curing their condition. Of the 56 deaths above referred to no fewer than 11 occurred among people who had been resident in the place 12 months and under, and who had come to the district specially for the sake of their health. One other death occurred amongst people similarly placed but who had been in the district two years and under.

Excluding these 12, our rate per 1,000 of population would be 0.6.

Of the total number of deaths, nine died in the Workhouse Hospital, four of these being of persons notified in 1909.

Beyond the notification of cases coming under the cognizance of the Poor Law Authority no system of notification obtains in this district.

From the Union Infirmary we received 19 notifications. Nine had, however, been previously notified. In other words, the patients had left the Infirmary and returned there. Of the remaining 10, 3 were of males and 7 of females. From the Poor Law Medical Officers 5 notifications (4 of males and 1 of females) were received, and 1 notification of a male patient was also received from the Liverpool Infirmary.

11 notifications of changes of address of patients have also been received during the year, 10 of these being notifications from the Workhouse Master that the patient had left the Hospital for an address in this Borough.

NOTIFICATIONS.

The following Table shows the number of notifications of Phthisis received during 1910, the sexes and the ages.

		Over 70	1		:		
		20	:	:	:		
				65	:	1	:
				09	:	1	1
		55 60 65 70	0.5	1	es.		
zó.		35 40 45 50	Н	67	00		
IOD	Under	der	45	:	1	1	
AGE PERIODS			40	-	1	05	
BE		35	:	1	1 1		
A(30	:	П	-		
		25	;	03	03		
		50	**	:	:		
		15	-	1	0.5		
		10 15	0.5	1	0.5		
		20	:	:	1		
	SEXES.		MALES7	FEMALES9	TOTAL16		
	tal	ations.	F.	6	*		
	Total	Law M.O.'s & Notifications.	M.	-	16*		
BY	Local Poor	Law M.O.'s & L'pool Inf'ary.	E.	62	25		
CASES NOTIFIED BY	Local	Law M	M.	4			
SES NO	Jnion	Infirmary M.O.	표.	2-	0		
CA	Un	Infirm	M.	60			

(*In addition 2 persons were notified twice during the year. The figures do not include 7 other persons previously notified in 1909, but again notified in 1910.)

DEATHS.

Table showing the number of deaths from Phthisis of residents and non-residents in the district and in the Union Infirmary, and showing also the sexes and the ages.

1		Over 70	1	-	1	
		02	1	1	1	
		65	1	:	:	
	Under		09	1	П	П
				22	1	63
8		50	1	0.5	00	
IOD		45	-	:	1	
AGE PERIODS.		Under	40 45	22	0.5	2-
GE			Un	35	60	£
A		30	9	00	14	
1			52	00	4	-1
			20	4	1	5
			15	:	:	:
		10	:	1	-	
		30	1	1	1	
Gravino			MALES25	FEMALES 31	TOTAL56	
HS OF	DENTS IN	Wallasey.	F.	9	10	
DEATHS	RESIDENT	Wall	M.	4	1	
ASEY		ranmere Hospital.	F.	5		
WALL	NI SIN	Tranmere Hospital.	M.	4	6	
DEATHS OF WALLASEY	RESIDENTS IN	asey.	F.	20	37	
DEA		Wallasey.	M.	17	0.0	

It is the practice in this district to disinfect after every death from Phthisis. The method of disinfection is as follows:—The infected rooms are sprayed with a strong solution of formalin, and the bedding and clothing taken away to be disinfected by steam. Permission is asked from the landlord to strip the paper from the walls of the infected room, and to limewash the ceilings. During 1910, 64 houses or parts of houses were disinfected, and 27 rooms stripped. Bedding, etc., was disinfected in 40 instances, other bedding was destroyed in 1 instance, and in 15 instances the disinfection could not be carried out, or was not considered necessary because of the short time in which the patient had lived in the house (sometimes only a single night).

Disinfection is also carried out periodically in the houses in which known Phthisis patients live, and on any change of their address the rooms formerly occupied by a patient are disinfected whenever possible. This, however, is found to be a very difficult matter. Some patients seem to have a perfect mania for changing their addresses. They are encouraged to notify me whenever they remove, and all have been supplied with stamped postcards, but it is very rarely indeed that they are made use of We only find that they have moved their address on the occasion of the routine visit and may not find them again for several weeks. This is a very serious difficulty in carrying out supervision over these patients. Efforts are made to instruct them how not to become a danger to others, by care of the sputum, advocacy of the open window, advice as to sleeping, food, etc., but in many instances one is bound to confess that the time spent on this instruction is It is of no avail to tell a widow in receipt of parish relief that she should not sleep in the same bed as her children when she has only one bed, or to advise good food and warm clothing to people who find it hard to keep body and soul together,

In a previous part of this Report I have referred to Measles as a very common pre-disposing cause of Phthisis, and it occurs to me that at those times when there is plenty of available accommodation at our Infectious Hospital it might be advisable to select cases of Measles and treat them there. It is possible by effecting a more complete recovery from that disease that the development of Phthisis in some

of them in after years might be prevented. If Measles were not prevalent the surplus accommodation in the Infectious Hospital might still be made use of for the treatment of selected cases of Consumption. I can see no reason why a ward should not be set apart in our Infectious Hospital for either or both of these purposes as occasion demands and opportunity offers.

It appears to me that in regard to Phthisis we are very apt to under-estimate the importance of the resistance of the individual, and devote too much time to killing the bacillus. I do not think it is even yet realised sufficiently that Phthisis is to a very large extent a secondary product of long-continued ill-feeding and malnutrition, and that the efforts which will have most result in stamping out this terrible disease, will be exactly those which have been so efficacious in the past, viz., those which tend to improve the social well-being of the people, particularly as regards good housing, good food and temperance.

RESULT OF ENQUIRIES-FAMILY HISTORY.

In 33 instances no previous history of Phthisis among actual members of the family could be ascertained.

- " 12 " one member of the family had died of Phthisis,
- ,, 11 ,, two members ,, ,, ,, ,,
- ,, 2 ,, three members ,, ,, ,, ,,
- " 1 " five members " " "

These figures show that a history of a previous death in a family from Phthisis occurred in 36.1 per cent. of the cases.

The foregoing table has reference to 59 persons, and includes notifications as well as deaths of Phthisis patients. It excludes reference to those notified in 1909 and again notified in 1910, and also "repeat" notifications in 1910.

Enquiries also showed that in 6 instances other members of the family were at present suffering, or supposed to be suffering, from Phthisis. This is equal to 10.1 per cent. of the cases. With regard to the sources of infection, one case was a lithographer's apprentice who had been working alongside an affected workman. In this trade I am given to understand that acid fumes are breathed by the workers.

Commencement of Illness.

Enquiries have also been made with a view to ascertaining the probable date of onset of the disease.

In 29 instances the illness was said to have commenced less than a year prior to notification or death.

,,	9	,,	between 12 and 18 months	,,	,,	,,
,,	-	,,	between 18 months and 2 years	,,	,,	,,
22	4	,,	between 2 and 3 years	,,	**	,,
22	5	,,	between 3 and 4 years	,,	**	.,
,,	3	,,	between 4 and 5 years	,,	,,	,,
,,	4	,,	between 5 and 6 years	,,	17	,,
,,	1	,,	between 6 and 7 years	,,	**	.,
,,	_	22	between 7 and 8 years	11	,,	,,
,,	2	- ,,	between 8 and 9 years	**	:,	
,,	_	,,	between 9 and 10 years	,,	53	22
,,		,,	between 10 and 11 years	,,	,,	,,
,,	1	:,	between 11 and 12 years	,,	,,	22

In the remaining instances the date of commencement of illness could not be ascertained.

ALCOHOL.

The enquiries with respect to the use or abuse of alcohol in each case gave the following results :—

Intemperate,	or he	avy	drin	cers	 	 11
Moderate dr	inkers				 	 30
Abstainers			***		 	 22
Not ascertain	nable				 	 2

HABITS.

Enquiries were made in each case as to the "tubercular" habits of the patient, viz., whether the sputum was burnt, and whether due precautions were being taken to prevent the infection of others. In 9 instances the patients were said to be of dirty habits, in six fairly clean, whilst in the remaining cases, so far as could be ascertained, the patients took every precaution.

The sanitary conditions prevailing were as follows, the points particularly noted being whether the houses or rooms were dark, damp or dirty:—

In 20 instances the houses were damp or dark, or both, and in 8 instances were dirty.

The following table shows the occupations, so far as could be ascertained, of the Phthisis cases, notified or fatal, that occurred during 1910.

General labourers				 4
Saddler				 1
Bootmaker, &c.				 1
Apprentices				 - 3
Shop Assistants				 3
Clerks, etc				 5
Sailors				 3
Domestic Servants				 5
Charwomen				 2
Wives				 15
School Children				 4
Postal Telegraphist				 1
Independent means	or no	occupat	ion	 4
School-teacher				 1
Plasterer				 1
Team Owner				 1
Dressmaker				 1
Widows				 2
Errand boy				 1
Flour miller				 1
Publican				 1
Monthly nurse				 1
Corn merchant				 1
Surgeon				 1
Master Stevedore				 1
Infant				 1

Deaths from Phthisis In Wallasey since 1901.

YEAR.	М	F	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	00 0	Poulton- cum- S'combe.	Liseard.	Wallasey	Deaths in Work- house,
			M F	M F	M F	M F	M F	M F				M F
1001	99	00		~~	2	7	48	2	29	27	3	~~
1901	33	26	244		4	-		2			9	6
1902	36	33		1	1	12	55	15.5	33	28	8	7
1903	29	29			2	7	46	3	19	37	2	6
1904	30	28		1	5	10	38	4	24	26	8	7
1905	24	19		3	2	8	29	1	22	19	2	3
1906	45	24	2	7	2	11	45	2	31	31	7	12
1907	34	25	ĩ	i	2	10	45	~	23	33	3	5 1
	100		1	1		10						The state of the s
1908	36	22		***	2	4	49	3	24	28	6	7 4
1909	34	29	***		0 1	5 2	25 26	4 0	28	28	7	2 2
1910	21	26	1		1	8 6	13 17	1	16	24	7	4 5

Deaths from "Other Tuberculous Diseases" in Wallasey since 1901.

YEAR.	M F	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	00 0	Poulton- cum- S'combe.	Liseard	Wallasey	Deaths in Work- house,
1901	712	2	2	1	1	3		7	1	1	1
	8 4		3	î	2	5	1	6	4	2	1
	0 7	6	3	2	2	4		3	9	5	1
	9 8	5	3	4	1	4		6	9	2	
1905	7 6	3	4	2	1	3		7	6	2	1
19061	2 8	3	8	4	2	3		10	7	3	
1907 2	7 8	11	6	6	3	8	1	18	17		2
1908	35	10	8	. 4	4	8	1	18	16	1	1
1909	34	13	13		6	2		14	17	3	2
1910	35	7	17	2	5	4		17	13	5	1

The value of the above particulars in throwing light on the local incidence of Phthisis will be much enhanced when in future years the total number of cases enquired into is large enough to found definite opinions upon. The Order of the Local Government Board enjoining the notification of all cases coming under the cognizance of the Poor Law to Sanitary Authorities is, in my opinion, a very excellent measure, and one which, in many districts will, for practical administrative purposes, provide all the information which is necessary. I have

always thought that the general practitioner was the person in whose power it lay principally to give the necessary instructions to people whereby they are enabled to prevent themselves from becoming a source of danger to their neighbours. No doubt this is always done as regards the better classes—in short, the people who would resent the interference of the Sanitary Authority. The poorer classes are those to whom suitable advice is, perhaps, not always given, and this is the class among which the efforts of the Sanitary Authority will largely lie. My previous experience of the voluntary notification of Phthisis has not impressed me favourably. I found that in the first year a very small proportion of the cases was notified, and a decreasing number in the succeeding years.

I found also that many of the cases were notified after death, thus giving me information which I could obtain in a day or two from the death returns, and which was, therefore, quite unnecessary. Moreover, I found that the cases which were notified were just those which are now notified through the Poor Law. The better class patients were those which were notified after death and simply for purposes of disinfection.

With regard to the compulsory notification of Phthisis, I do not think that the step is necessary in a town like Wallasey, especially when the arrangements for dealing with cases of Phthisis are incomplete.

Midwives Act.

Under the Midwives Act a Local Authority is either a County Council or the Council of a County Borough. Wallasey is not, therefore, a Local Authority within the meaning of the Act, but the work of supervising the Midwives of this district is placed upon me by the County Council.

During the year all the Midwives have been regularly visited.

STIMMARY	OF THE	WORK	DONE	UNDER	THE 1	MIDWIVES A	ACT
AND MIMARY	OF THE	AL OUR	DUNE	UNDER	A LI E	TIMMINES T	ALC: N

	Routine Visits paid to Midwives' houses, In	nspection		
	of Bags, Case books, etc		294	
	Enquiries re Still-born Children		78	
	Other Enquiries		131	
	Total Visits paid under the Midwives' Act .		503	
			Manager A	
	Under the Rules of the Central Midwives	Board	(E. 18) t	he
follo	owing notifications have been received :—			
	Records of sending for Medical Help (see Tab	ble below)	57	
	Notifications of Still-births		29	
	Deaths of Children before Attendance of a	Medical		
	Practitioner		1	
	Cases of Puerperal Fever attended by Midw	vives	2	
	Cases of other Infectious Diseases notified by	Midwives	0	

The following is a list of the causes for which Medical Help was sought in the 57 cases mentioned above:-

Protracted Labour .			 	 12
Retained Placenta .			 	 2
Instrumental Aid .			 ***	 10
Prematurity			 	 2
Rise of Temperature .		***	 	 6
Post-partum Hæmorrh	age		 	 3
Ante-partum Hæmorrl	nage		 	 2
Laceration of Perineur	n		 	 2
Placenta prævia .			 	 1
Inflamed Eyelids .			 	 2
Abnormal Presentation	n		 	 8
Various			 	 7
				57

Under Section 8 I have to keep the Central Midwives' Board acquainted with the death, change of name or address of any midwife.

The undermentioned changes have been notified:-

Change of Name			 	_
Change of Address			 	8
Death of Midwives			 	
Notice of intention to	cease	practice	 	
Removed from distric	t		 	3

There are 49 Midwives on the Roll, one of whom cannot write. Their registers are on the whole kept well.

The total number of cases attended by Midwives was 928.

It was found necessary in one instance during the year to report a Midwife to the Local Supervising Authority for a serious breach of the rules. The matter was referred by them to the Central Midwives Board, and in the end the name of the woman was removed from the Roll of Midwives.

In 18 instances I interviewed and warned Midwives for slight irregularities which did not appear to me to be gross enough to warrant reporting them to the Supervising Authority.

Mill Lane Hospital.

SUMMARY OF CASES TREATED IN 1910.

Disease.	Remaining at end of 1909.	Admitted during 1910,	Discharged during 1910.	Died during 1910.	Remaining at end of 1910,	Average Residence in Days.
SMALL-POX		7	7			36.0
SCARLET FEVER	40	229	256	2	11	49.4
Cases admitted to Hospital as, but subsequently found not to be, Scarlet Fever	\					
DIPHTHERIA	3	24	25	1	1	24.3
Cases admitted to Hospital as, but subsequently found not to be, Diphtheria		1	1	***		
ENTERIC FEVER	1	7	3	5		27.5
Cases admitted to Hospital as, but subsequently found not to be, Enteric Fever	1	5	3	3		
ERYSIPELAS						
OTHER ADMISSIONS		5	4	1		19.2
TOTAL	45	278	299	12	12	

For the purpose of comparison the following table shows the number of admissions of patients notified as suffering from the various diseases during the years 1902 to 1910:—

Disease	Cases admitted during the year									
Disease.	1902	1903	1904	1905	1906	1907	1908	1909	1910	
Small-Pox Scarlet Fever Diphtheria Membranous Croup Enteric Fever Erysipelas	20	25 309 27 31 3	5 170 33 1 24 3	227 45 48 5	178 30 1 48 3	188 61 1 24 3	1 174 49 25	507 31 	7 229 25 12	
Other Diseases	1	2	3	3	3	2	4	7	5	
Totals	294	397	239	328	263	279	253	558	278	

Vaccination Returns for Wallasey for the last two years, from the 1st July to the 30th June in each year.

(Supplied by the Vaccination Officer.)

				1908-9.	1909-10.
Successfully Vaccinated			****	1,433	1,332
Died before Vaccination				118	103
Insusceptible		***		17	9
Conscientious Objections			***	70	94
Postponed by Medical Certif	ficate			42	50
Removed, Traced, and Vacci	nation	Office	rs noti	fied 30	30
Not found, or removed to pla	aces un	know	n	57	40
Not Vaccinated or otherwise	e accou	inted f	or	45	79
Total Number of Birtl	hs Reg	istered	1	1,812	1,737

The number of Certificates and Statutory Declarations of Conscientious Objection received during 1908-9 was 66; during 1909-10 the number was 105.

For my remarks on the question of Vaccination and Small-pox, see page 31.

Meteorological Data for 1910, from observations made at the Corporation's Meteorological Station, Marine Park, New Brighton.

					63								- 4
No. of days		00	1	.:	63	1	.:		1	:	:		
lo sated Jielwons	99nd	& 27th	25th	101	1	1		:	o:	- :	:		
Xo, of days with .01 ins, or more recorded.		16	25	111	16	17	13	6	20	6	12	24	38
Average Daily Bainfall.	Inches	20.	-66	10.	80.	90"	.10	Ţ.	.13	.01	60.	.15	60.
No. of days with no Bainfall.		14	00	20	17	13	15	19	00	20	18	9	00
Greatest Fall in 24 hours.	Inches	08.	-34	114	17.	24.	.65	1.02	-94	.15	08.	19.	.45
Greate in 24	Date	23rd	20th	8th	28th	7th	29th	20th	18th	1st	18th	23rd	26th
Total Depth Rainfall for month.*	Inches	5.35	2.28	0.57	2.44	1.95	3.51	3.54	3-97	0.35	3.05	4.67	3.09
Average Daily Sunshine.	Hours	2.51	3.40	4.51	4.57	7-22	18.9	6.37	4.70	4.21	19.7	2-35	1.33
ist hine.	Hours	S'shine	do.	do.	do.	do.	-	S'shine	do.	14	No S'shine	do.	do.
Lenst	Date	10 d'ys	4 d'ys	4 d'ys	4 d'ys	2 d'ys	5th	2 d'ys	2 d'ys	29th	6 d'ys	6 d'ys	13 dy's
test hine.	Hours	634	916	1034	12	131/2	16	131/2	1214	11	834	§19	516
Greatest	Date	30th	27th	22nd	29th	23rd	14th	14th	10th	4th	1st	21st	27th
Average Daily Temperature,		39.61	42.39	43.94	45.47	52.55	58-79	58-98	59-95	56.05	52.20	40.52	44.58
rest rature.	0	55.0	32.0	33.0	30.0	37.0	47.0	49.3	20.0	43.0	39.0	29.0	31.5
Lowest Temperature.	Date	27th	9th	18th	2nd	9th	1st	18th	29th	20th	30th	30th	lst
hest rature.	0	58.5	54.8	55.8	61.5	75.0	2.22	0.82	74.2	63.0	0.69	53.5	22.0
Highest	Date	14th	5th	29th	18th	20th	20th	14th	11th	26th	1st	12th	23rd
		JANUARY 14th	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER.	OCTOBER	NOVEMBER	DECEMBER

"Total Rainfall for year: 31.74 ins. †It must be remembered that the recorded temperatures were not taken on the ground level.

Meteorological Data for 1910,

(Supplied by Mr. Plummer,)

From observations made at the Bidston Observatory :-

			ТЕМРЕ	RATURE.	RAI	NFALL.
1910.		Mean Barometer, in.	Mean.	Difference from Average	Amount.	Difference from Average in.
January		29.769	39.1	-0.1	2.168	-0.026
February		29.513	41.8	+0.2	2.369	+0.648
March		30.124	43.6	+1.4	0.640	-1.118
April		29.803	45.6	-1.7	2.339	+0.728
May		29.894	52.0	+0.5	2.070	+0.155
June		29.879	58.3	+0.9	2.601	+0.571
July		29.852	58.5	- 2.3	3.027	+0.341
August		29.819	59.3	-1.2	3.492	+0.504
September		30.244	55.7	- 0.2	0.460	-2.446
October		30.029	51.8	+2.2	2.538	-1.050
November		29.606	40.0	- 3.2	4.194	+1.565
December		29.624	44.4	+4.5	2.687	+0.113
Yearly	144		Av. 49·2	+0.1	28:585	- 0.015

Ashpit Abolition.

The efforts made in the past two years to deal with nuisances arising from defective and offensive ashpits have been continued during the year. A large number of notices have been issued requiring the abolition of insanitary pits and the substitution therefor of galvanised iron ashbins in accordance with Section 77 of the Wallasey Tramways and Improvement Act, 1906.

233 pits were dealt with in 1910, as compared with 322 abolished in 1909.

Part 2.—GENERAL SANITARY WORK.

Insanitary Property.

A large amount of work has been done during the year to improve the housing conditions prevailing in some parts of the district.

Section 30 of the Housing of the Working Classes Act, 1890, runs as follows:—

> "It shall be the duty of the Medical Officer of Health "of every district to represent to the Local Authority of that "district any dwelling-house which appears to him to be "in a state so dangerous or injurious to health as to be unfit "for human habitation."

Section 17 of the Housing, Town Planning, &c., Act, 1909, reads:—

- (1) "It shall be the duty of every Local Authority within "the meaning of Part II of the principal Act to cause to be "made from time to time inspection of their district, with a "view to ascertaining whether any dwelling-house therein is in "a state so dangerous or injurious to health as to be unfit for "human habitation, and for that purpose, it shall be the duty "of the Local Authority, and of every officer of the Local "Authority, to comply with such regulations, and to keep such "records as may be prescribed by the Board."
- (2) "If, on the representation of the Medical Officer of "Health, any dwelling-house appears to them to be in such a "state, it shall be their duty to make an order prohibiting the "use of the dwelling-house for human habitation (in this Act "referred to as a Closing Order) until in the judgment of the "local Authority the dwelling-house is rendered fit for that "purpose."

In compliance with the provisions of the above Acts, the following 25 houses were represented as unfit for habitation:—

47, Oakdale Road,
1, 2 and 3, Hygeia Cottages,
1 and 2, Laburnum Cottages,
27 to 51, Burnaby Street,
1 to 5, Union Court, Union Street,
The Old Farm, Poulton,
5, Stafford Buildings.

The following Closing Orders were made (20 in number):—
1 and 2, Mona Place (represented as unfit in 1909),
47, Oakdale road,
1, 2 and 3, Hygeia Cottages,
1 and 2, Laburnum Cottages,
27 to 51, Burnaby Street,
The Old Farm, Poulton,

All the above were closed in accordance with the Orders, and 3 additional ones, 1, 2 and 3, Garden Cottages, Wallasey Village, which were closed under an agreement made in 1909.

The following houses were demolished (12 in number) :-

191a, Wheatland Lane (represented in 1909). 191b, Wheatland Lane do.

20, School Lane do. 1-5, Hope Place do.

1 and 2, Laburnum Cottages.

4, 6 and 8, Wallasey Road do.
47, Oakdale Road (represented in 1910).

The following houses have been thoroughly repaired (3):—195, Wheatland Lane,

TABULAR INFORMATION WITH RESPECT TO INSANITARY PROPERTY DEALT WITH IN WALLASEY DURING 1910.

No. of houses inspected under Section 17 of the H.T.P.A., 1909... ... 25

No. of houses found unfit for habitation ... 25

No. of houses represented to Local Authority for Closing Orders... 25

No. of Closing Orders made ... 20

No. of houses where defects were remedied without making of Closing Orders ... —

No. of houses made fit after making of Closing Order 3

GENERAL CHARACTER OF DEFECTS FOUND.

- Lack of sufficient or through ventilation.
- Inefficient water supply, e.g., one standpipe for several houses.
- 3. Lack of proper w.c. accommodation.
- 4. Damp and dark rooms.
- Lack of conveniences for decent living, e.g., proper facilities for storing food, washing accommodation, etc.
- 6. General dilapidations.

The following additional work has been done under Sections 14 and 15 of the Housing, Town Planning, etc., Act, 1909.

Statutory	Notices	served .			9
,,	,,	complied w	ith		6
,,	,,	in hand .			2
		not complie	d with	1	1

There was one appeal to the Local Government Board against a demolition order, but the appeal was subsequently withdrawn.

In the work in regard to insanitary property there has always been kept in view the fact that any work of demolition must not be done too rapidly, so that hardships may not be inflicted on tenants by their being unable to find suitable houses in the time at their disposal.

Sub-Let Houses.

There are 50 sub-let houses on the Register. These houses have been regularly supervised throughout the year.

1,093 visits have been paid by the Inspectors.

It is exceedingly difficult to keep a proper Register of these houses, as the people inhabiting them are continually changing, and what would be an accurate Register one day would not be so seven days afterwards.

For contraventions of the Bye-laws 63 notices have been served, mostly for overcrowding and filthy conditions, all of which were complied with.

Sewers and Drains.

Defective sewers in the following streets and passages have been re-constructed or repaired during the past year :—

> Passage between Wheatland Lane, Kelvin Road, Fairfax Road and Brotherton Street.

> Passage between Laburnum Cottages, Kelvin Road and Wheatland Lane.

> Passage between Nos. 78 to 108, Bell Road, and Nos. 71 to to 101 Buchanan Road.

Main brick sewer, Brighton Street, 100 yards re-inverted and repaired.

A considerable amount of storm water relief work arising out of the rapid development of the Borough has been carried out.

Old gullies, where found to be defective, have been replaced with new gullies.

The usual attention has been paid to sewer flushing and cleansing of manholes.

The drainage systems at the following houses have been entirely re-constructed under the supervision of the Health Department:—

SEACOMBE.

32, Edgmond Street.

36, Kenilworth Road.

69, Brighton Street.

152, Wheatland Lane.

20, Buchanan Road.

35, Byerley Street.

36, Florence Road.

LISCARD.

25, Holland Road.

206, 208 and 210, Rake Lane.

155-161, Withens Lane.

1, 2 and 3, Mariner's View.

101, Seabank Road.

"Wood Cottage," Magazine Lane.

34-36, St. Alban's Road.

103, Manor Road.

NEW BRIGHTON.

8, Carlton Road.

25, Montpellier Crescent.

The following drainage systems were partially re-constructed during 1910 under the supervision of the Health Department :—

SEACOMBE.

1, Peter Street. 1 and 3, Alfred Road. 37, Albemarle Road. 54, 56, 58 and 60 Byron Road.

LISCARD.

20, Mill Lane.28-32, St. Alban's Road.26 and 28, Sandrock Road.

New Brighton. New Brighton Railway Station. 3, Stoneyhey Road.

Wallasey.
1 and 2, Rose Cottages, St. George's Road.
26, Hillside Road.

The drains were found on examination to be defective following the onset of

> Typhoid Fever, in 0 instance. Diphtheria, ,, 4 instances. Scarlet Fever ,, 13 ,, Erysipelas ,, 0 instance.

and on inspection following private complaints, in 343 instances.

In this district the drains of all new houses are examined, and must pass a smoke-test before being filled in and a certificate of suitability for habitation granted.

Factory and Workshop Act, 1901.

The Medical Officer of Health is required to report specifically on the administration of this Act, and to send a copy of such report to the Secretary of State. The chief points to be reported on are as follows:—

- (1) The Sanitary condition of Workshops, including
 - (A) Ventilation.
 - (B) Cleanliness of floors and walls.
 - (c) Lighting.
 - (d) Water-closet provision.
 - (E) Overcrowding.
 - (F) Drainage of floors where wet processes are carried on.
- (2) Special Sanitary Regulations for Bakehouses.

(3) Homework.

(4) The keeping of a list of outworkers.

(5) The keeping of a Register of Workshops.

All these points are dealt with in the Summary.

Factories.

For the most part the law relating to Factories is administered by the Home Office.

260 visits were, however, made to factories, 211 being in reference to sanitary accommodation, and 49 in reference to emissions of smoke from chimneys.

Workshops.

The Number of Workshops on the Register is as follows:—

TRADE.	Number of Workshops.	Number of People Employed.	Number of Visits.	
Bakers		50	96	439
Confectioners		60	134	520
Laundries		26	130	125
Tailors		18	36	95
Dressmakers		75	215	169
Milliners		22	49	41
Bootmakers and Boot Repairers		59	98	220
Cycle Builders		10	16	52
Cabinet Makers and Upholstere		9	18	48
Watchmakers		3	8	20
Photographers		3	8	12
Wheelwrights and Smiths		12	19	50
Joiners		15	29	70
Tinsmiths		1	2	6
Saddlers		1		6
Leadlight Manufacturers		2	12	24
Rag Sorters		2 2	2	12
Picture Framers		4	9	15
Coffin Makers		1	2	8
Wringing Machine Repairers		1	2	8
Electric Fitting Repairers		1	2 12 2 9 2 2 2	8 -
Disinfectant Manufacturers		1	3	4
Motor Repairers		2	12	12
Stonemasons		2 2 4	5	12
Stevedores			97	8
Printers		2	5	12
Woodturners		1	1	6
Coopers	***	î	1	6

All the Workshops and Workplaces on the Register were regularly inspected, with the result as shown in the Summary which follows.

11 references were sent to H.M. Inspector of Factories in accordance with the various requirements of the Act.

Factory and Workshop Act, 1901.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

	Number of							
Premises.	Inspections.	Written Notices,	Prosecutions.					
FACTORIES (Including Factory Laundries.)	260	14*						
WORKSHOPS (Including Workshop Laundries.)	1838	74	***					
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	226	12						
Total	2324	100						

^{* 2} Black Smoke.

2. DEFECTS FOUND.

		No. of Defec	ets.	
PARTICULARS.	Found.	Remedied.	Referred to H.M. Inspector,—	Number of Prosecutions
Nuisances under the Public Health Acts:—				
Want of Cleanliness Want of Ventilation Overcrowding Want of Drainage of Floors Other Nuisances	28 4 1 2 48	27 4 1 2 47		
Sanitary Accommodation:				
Insufficient Unsuitable or Defective Not Separate for Sexes	1 21	1 21		in less
Offences under the Factory and Workshop Act :—				
Illegal Occupation of Under- ground Bakehouse (s. 101)			***	
Breach of Special Sanitary Requirements for Bakehouses (ss. 97 to 100)	60	60		***
Other offences (excluding offences relating to outwork which are included in Part 3 of this Report)			11	
Total	165	163	11	

3.-HOME WORK.

IN PRE.	IONS	'60I suo	ins suc	Prosection (Section 11	(19)		1
OUTWORK IN INFECTED PRI	MISES, SECTIONS 100, 110.		oll m s	Order (S)	(18)		1
INF	MISE	5.	om	qsuI	(11)	a desertion and another	
IN	. se	*suc	itn	Prosec	(16)		
UNWHOLESOME	PREMISES, SECTION 108		per red		(15)	cs .	63
UNW	SEC	'8	əəun	etenI	(3.5)	cs .	65
.88		is, Lu		и омзиО	(13)	36	36
	ntions.	puəs	sp (01)	guilled ál	(13)		1
	Prosecutions.	spec- spec- geep	ot ni t sif lis	SaillieT harsqre o noit	(E)		
	-dəə	A ot 8	E S.I	Notice Secuple s to gai	(10)	-	1
SECTION 107.	rkers.	i to	ano; oəpa	ямтоЧ Элэфэ	(6)	65	0.5
	Addresses of Outworkers.	rom,	nuo	Receir O refiter	8	75	- 54
LISTS		n the	rkers.	Work-	(3)	10	10
OUTWORKERS' LISTS,	ployers.	Sending once in the year.	Outworkers,	Con- ractors	19		
OUTWO	Lists Received from Employers.	Sendi		stsiJ	(5)	63	0,5
	seeived f	in the	rkers.	Work- men.	(4)	4	24
	Lists R	Sending twice in the year.	Outworkers.	Con-	38		
		Sendin	()	stsid	(2)	01	10
			NATURE OF WORK.		(3)	Wearing Apparel (1) Making, &c (2) Cleaning & Washing Lace, lace curtains & nets Artificial Flowers Nets, other than wire nets Tents Sacks Furniture and Upholstery Fur pulling Father sorting Carding, &c. of buttons, &c. Paper bags and boxes Basket making Brush making Brush making Brush making Brush making Brush making Brush making Carding and tennis balls Stuffed toys File making Electro-plate Cables and chains Cables and chains Anchors and grapnels Cart gear Locks, latches and keys Locks, latches and keys	Totals

4.—REGISTERED WORKSHOPS.	68
Workshops on the Register (s. 131) at the end of the year :-	Number.
General Workshops	252
Bakehouses, including Confectioners' Bakehouses	110
Laundries	26
Total number of Workshops on Register	388
5,—OTHER MATTERS.	
Class.	Number
Matters notified to H.M. Inspector of Factories:	
Failure to affix Abstract of the Factory and Workshop Act (s. 13)	3) 6
Action taken in matters referred by H.M. Inspectors	
remediable under the Public Health Acts, but not under Factory and Workshop Act (s. 5)—	
Notified by H.M. Inspector	8
Reports (of action taken) sent to H.M. Inspector	
Other	
Underground Bakehouses (s. 101):—	10
Certificates granted during the year	
In use at the end of the year	16

Bakehouses.

At the end of the year there were 110 Bakehouses in occupation, of which 16 were underground.

These places have been regularly inspected, and were, on the whole, kept in a cleanly condition, although in several instances it has been necessary to serve notices or to write letters complaining of the conditions prevailing in certain of them. In some instances better provision for the washing of the bakers' hands should be provided.

A few of the existing Bakehouses have been in use a very long time, and are not up to modern requirements. When the tenancies of the present occupiers cease, I think objection ought to be taken to their continued use.

A circular letter with regard to unused bread was sent to the bakers in June, a copy of which will be found in the Appendix.

Seats for Shop Assistants Act.

Under the above Act, the title of which reveals its object, the following work has been done:—

No. of visits to shops 650

 Notice to provide seats was sent in one instance, and this was complied with. Seats were already provided in the remaining shops.

Wallasey Early Closing Order 1909.

The following work has been carried out under the above Order which fixes the hours for closing certain trades each day:—

 No. of Visits of Inspection
 ...
 6,676

 No. of Contraventions
 ...
 ...
 42

 No. of Prosecutions
 ...
 ...
 2

Dairies, Cowsheds and Milkshops Order.

There are 28 Cowsheds on the Register.

The number of cows in the registered sheds at the end of December was 83.

The Cowsheds have been regularly inspected (518 visits) throughout the year, and the efforts made to secure systematic grooming of the cows, the washing of the udders, and the cleansing of the milkers' hands before milking, have been continued.

No disease of a contagious nature has occurred in the Cowsheds, nor, so far as is known, has any disease been caused by milk.

DATRIES.

Much the greater part of the milk sold in Wallasey comes from farms outside the district. I offer no opinions as to its quality or cleanliness, since the administration of the Food and Drugs Act is not in my hands, this not being a Borough with a separate Quarter Sessions or a separate Police Force.

Food and Meat Inspection.

Meat Inspection is performed by one Inspector, who gives his whole time to this work and to the inspection of food stuffs in shops. The Sanitary Inspectors also examine hawkers' barrows and baskets whenever they meet them. On Page 84 will be found a summary of the visits made to food premises. It will be noticed that very few foreign cattle have been killed at the Lairages in the past year. In former years the numbers from each Lairage ran into many thousands.

There are 4 registered Slaughter-houses and 3 licensed Slaughter-houses, in addition to those at the Wallasey and Alfred Lairages.

The following table shows, approximately, the number of animals slaughtered:—

	Cattle.	Sheep.	Pigs.	Calves.	Total.
Private Slaughter-houses *Wallasey and Alfred Lairages	620 †100	5,694	318	540	7,172 100
Totals	720	5,694	318	540	7,272

* These figures are supplied by the Mersey Docks and Harbour Board.

† The cattle were killed in the Wallasey Lairage.

Table showing amount of Tuberculous Meat seized and Destroyed.

				Private Slaugh	ter Houses.	Lair	ages.
BEEF	 		***	9¾ carcases			
MUTTON	 	***	100				
PORK	 			6 carcases	-		-
VEAL	 			1 carcase		-	
	To	CAL		16¾carcases	-		

Amount seized and destroyed for other causes.

				Private Slau	ghter-houses.	Lair	ages.
BEEF	 			CARCASES, 81/2	QUARTERS.	CARCASES,	QUARTERS.
MUTTON	 			14	_		
PORK	 			234	_		
LAMB	 			111/4	1-		
VEAL	 		***	*441/2	-		
	To	TAL		81		-	

Note.—Not only were inspections made at Slaughter-houses, but at all shops where food is sold. For detailed information see page 84.

* 24 Carcases were Immature.

Sale of Food and Drugs Acts.

Report To Work Carried Out in Wallasey in 1910 by the County Food Inspector.

TABLE.

Particulars of Samples purchased in the District of Wallasey and submitted for Analysis under the Sale of Food and Drugs Acts, during the year ending December 31st, 1910.

		Name	of S	sampl	le.				No. of Samples Analysed.	No. of Sample Certified as Adulterated.		
D								-	2			
Beer	111			***	***	***		***		***		
Bread									1	***		
Butter	***		***	111		2.00	***		34	200		
Butterm	ilk								1			
Cheese				100					4	344		
Coffee						***	111		4	***		
Cream		***					111		6			
Dripping	g								1			
Lard	/								9			
Lardine					434			171	1	***		
Margari	ine								8			
Milk									92	3		
Pickles									1			
Rum									1			
Vinegar							-600		1			
Whiske	V								2			
Yeast (1			
						T	otals		169	3		

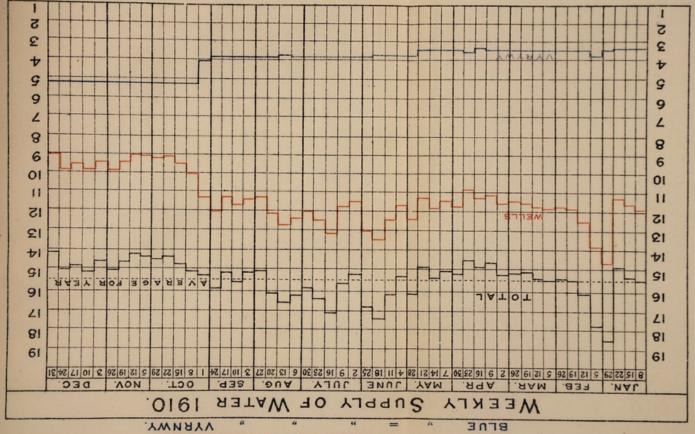
One sample of milk was reported as adulterated with 2 per cent. of water, and as this figure was considered too low to warrant a prosecution the seller was cautioned. The second sample of milk reported against was deficient in fat to the extent of 13 per cent., and upon tracing this milk to its source and obtaining a corresponding sample from the cows, it was found that owing to the unequal intervals between the milking, the farm milk (mornings) was only just up to the standard. The farmer was advised upon this matter, and cautioned. The third sample of milk reported against was adulterated with 17 per cent. of water, and the seller was summoned and fined 40/-, together with 14/6 costs.

The samples of lard, lardine and margarine were specially tested

INDEX

BED " = WEEKLY SUPPLY FROM WELLS."

BLOCK LINE = TOTAL WEEKLY SUPPLY.



VINGER VINES BLACKOES

IJSW MOST VINEDREDNESW.

NEVV . BLUE. ..

	SE	A		13	A	M		8	BE		A P	i.						
							7		1 21		2210							
													61					19
								1					81					18
													VI					17
		1			200								16					
H		16	T				1	1	t	ti								16
							4				4		15					15
													-61					14
							-						51					13
													12					
				1														12
												+	11					11
								1	1				101					10
													6					9
1													8					8
										Ħ								
			+	-								+	7					7
						-	4	4	4			+	9					6
													5					5
													4					4
					51				1						1			
	H												3		1			3
			-				-						2		1			2
1		11										4	1	1	1			1

for paraffin and excess of water, with negative results. The margarines were all served in properly marked wrappers.

The six samples of cream were from different sources and were purchased during the strawberry season.

Offensive Trades.

The offensive trades are as follows :-

Trade.	No. of Visits.
Knacker's Yard and Manure Manufacturer	171

Whenever a nuisance has been discovered suitable action has been taken.

The knacker's yard above referred to has now been discontinued

Water Statistics for 1910.

Volume of Water supplied from 1st January, 1910 to 31st December, 1910, 810,670,000 gallons, made up as follows:—

									-
From Wells at Liscard								596,750,000	Galls
From Vyrnwy									
Average supplied per day									
Average consumption per da	y per	head	l					29.82	,,
Divided as follows:									
Supplied by Meter					5.6	4 Gs	ills.		
Supplied to Shipping					.1:	5	,,		
Watering Streets and R	oad M	Iakin	g		.4	2	,,		
Flushing Sewers by Hos	e and	Cart			-2		**		
Domestic and other pur	poses,	inch	adin	g					
Drinking Fountains					23.3	2	**		

The quantity of Water used for flushing sewers and drains during the year was 7,937,000 gallons.

A Chart showing the weekly supply of Water is appended.

Inspection of Stable Yards.

3,043 visits have been made, as compared with 2,128 during last year.

In several instances manure pits have been emptied by the Department's own men, failing compliance with notices issued under the Bye-laws. In other cases accumulations or deposits of an offensive nature have been removed by the Department's men where owners or occupiers had failed to comply with the notices served under Section 49 of the Public Health Act, 1875. In each case the expenses were recovered in a summary manner.

With a view of diminishing the number of flies, their favourite breeding places, namely, manure pits, have been attacked. The object aimed at has been the emptying of every manure pit in the district, during the summer months especially, at intervals of not longer than 10 days. We have to a very large extent received the hearty co-operation of the proprietors of stables, but there still remain some instances where improvement may be manifested. Powers exist under the bye-laws whereby a weekly removal can be enforced, and it may even be necessary in the future to take one or two refractory gentlemen into the Police Court. It must be acknowledged, however, that the fact that the manure occasionally is not removed weekly is not wholly due to the stable proprietor, but to circumstances over which he has no control, and allowance must of course be made for these cases when they occur.

Camps.

I would put on record the improved condition of the camping ground in Green Lane, Wallasey. The offensive pits used as privies have been abolished, and proper earth closets, supplying deodorizing material automatically, have been substituted. Three services of water have also been supplied to different parts of the Camp, and galvanized iron ashbins provided for the convenience of the campers. During the summer two visits weekly were paid to the Camp, which was generally found to be in a clean condition. Three notices for contravention of the bye-laws were served, and all were complied with.

A camp was also discovered along Leasowe Road, and numerous visits have been paid to this. As a result of the action of the Department a proper water supply has been obtained and a bin provided for each bungalow. The general condition of this camp was also satisfactory as regards cleanliness.

Summary of General Sanitary Work.

WORK OF THE LADY SANITARY INSPECTOR DURING 1910,

Number o	f Houses visit	ed					1,771
Do.	found dirty		***	***			231
Do.	families visit	ed					1,964
Do.	do, re-v	isited			***		876
Do.	Notices sent	to Occup	iers for	dirty	floors	and	
	bedding						230
Do.	Notices sent	to Occupie	rs for o	vercro	wding		37
Do.	do.	Owners	for defe	ective s	sash co	rds	4
Do.	do.	complied w	ith				217
Do.	References t	o Sanitary	Inspecto	ors			81
Do.	do.	other Dep	partmen	ts			177
Do.	Enquiry visi	ts					291
Do.	Visits to cas	es of minor	infectio	ous dise	eases		1,027
Do.	References t	o Elementa	ry Educ	ation .	Author	ity	306
Do.	Sub-let hous	es visited					293
Do.	do.	found di	rty				107
Do.	do.	do. ov	ercrowd	ed			27
Do.	other infring	gements					79
Do.	Routine visi	ts to Midwi	ves				264
Do.	Enquiries re	Still-births		***			74
Do.	Visits under	Midwives .	Act				113
Do.	do. re reg	istered birt	hs				1,540
Do.	do. inf	ant deaths	***				156
Do.	do. to We	orkshops					210
Do.	do. Ou	tworkers	/				46
Do.	Special visit	s re Diarrh	œa cases				_
Do.	Visits re Pht						53
Do.	do. re Phi	hisis notific	cations				168
Do.	do. re Me	asles deaths					11
Do.	do. re Wl	coping Cov	igh and	Enteri	tis Dea	ths	4

WORK OF THE INSPECTORS DURING 1910.

NUISANCES.

Num	ber of	houses	found	in a	lirty o	conditi	on					94
,	,	,,	,,	in an	overc	rowde	d condi	ition				41
,	,	,,	**	with	defect	tive, in	suffici	ent or	choke	d drain	s	835
,	,	,,	,,			pply of			rinking	g, dome	stic	203
,	,	**	"		flushi		erns, p	utty jo	ints, to	.C. ba	aste-	1,725
						ive ya						572
,	,	"	**			tive ya	-					101
,		**	19					inat w	ienao		oral	101
,	,	"	"			insecui				by gen	erai	24
,	,	**	,,	with	damp	or def	ective	walls	***			82
,	,	**	**	with	defec	tive ro	ofs, gu	tters a	and do	wnspou	its	758
,	,	,,	31	with	out pr	oper ar	d suffi	cient a	shpits	or ash	bins	510
,	,	,,	17	with	dirty	yard s	urface	s	***		***	145
,	,	**	,,	with	offens	ive acc	umula	tions 1	equiri	ngrem	oval	233
Num	ber of	offensi	ve dit	ches a	nd po	nds re	quiring	g clear	sing	***		8
,	,	anima	ls kep	t so as	s to be	e a nui	sance		***			14
,	,	matte	rs refe	rred t	o oth	er Dep	artmer	nts				581
,	,	inform	ations	s laid	in res	pect of	nuisa	nces			17.14	8
,	,	convic	tions	obtai	ned	***		***		***	100	3
	,	Magis	trates	' Orde	rs obt	tained						3
	,,	Nuisa	nces a	bated	and o	cases v	vithdra	wn or	payn	nent of	costs	5
Amo	unt of	f fines a	nd co	sts							£2 4	s. 0d.
				SM	OKE	NUL	SANC	ES				
		STE	PS TA			REVEN			UISAN	CES		
Nun	ber of	fobserv	ations	made					***			49
						ct of bl	ack sn	noke	***		***	2
	,,								with	Notice		
	.,	Inform										
Amo		f Fines					-					
		BYE-	LAW	s wi	TH	RESPI	ECT T	O NU	JISAN	ICES.		
Nun	aber o	f stable	vards	inspe	cted							3,043
	,,											366
							-			notice		

umber of Stable yards without manure					10
" notices served to provide mar					21
notices served to provide s and/or drainage	tables	with su	fficient	paving	16
und, of drumage		***			1,
ABATEMENT OF	NUIS	ANCES.			
umber of preliminary notices issued for	the aba	tement	of nuisa	nces	2,658
" Statutory Notices issued					620
CANAL BOAT I	NSPEC	TION.			
			0 =		
The number of Boats inspected i	m 1910	was 5	50.		
Infringements :-					
Registration					_
Notification of Change of M	Iaster	***	***		
Certificates					8
Marking					
Overcrowding					
Cleanliness					-
Ventilation	***				
Painting					11
Provision of Water Cask					
Separation of the Sexes					22.00
Removal of Bilge Water					-
Notification of Infectious D	isease		***		
Admittance of Inspector					
Name of Owner on Certifica	ites				
Sleeping Berths unprotected	d from	dirt :	and wea	ther	5
Defective Deck Seams					7
Notices sent in respect of in	fringer	nents			22
Cases of Infectious Disease	dealt v	vith, an	d meas	sures	
of isolation adopted					
Detention of Boats for clear	using a	nd disir	nfection	1	-

SUB-LET HOUSES.

Number of houses on Re	wiston							50
		***	***	***	137	***	***	
" day inspectio				***	***	***	***	1,088
,, night inspect		t Bro	lawe	***		***	***	76
" infringements				male	***	191	***	
" preliminary i							***	63
" failures to co						***	***	
" informations		spect o	I iniri	ngeme	nts	***		
Amount of Fines and Co	sts		***	***	***	***	***	
CO	MMON I	LODGI	ING	HOUS	ES.			
Number registered unde	r Public I	Health	Act		***	***		3
" of day inspectio	ns				***			148
" night inspect	ions				145			8
" infringement	of Bye-la	ws					5	1
" failures to cle	anse wall	ls, ceili	ngs, e	te				-
,, cases where i	ooms wei	re over	crowd	ed			***	
" informations	in respect	t of inf	ringer	nents		***		
" convictions								
	CELLA	R DW	ELLI	NGS.		1		
Cellars found occupied a	s dwelling	rq						2
Notices served to vacate								1
Troubles served to rueure	Sume	4.4.1	***	***		***	***	-
HOU	JSE-TO-E	HOUSE	INS	PECT	ION.			
Number of streets visite	d							170
houses visited	1	***		***				1,928
anautus anta sa		***	***	***		***	***	5,855
f.		n	***	***	***	***	****	5,772
	ound dirty			d for N			***	83
,, ,, IC	rana antes	and 1	cporte	u 101 1	, ources		***	00
COUR	T AND	ALLE	EY II	NSPEC	TION			
Number of streets visited	d	***		***				608
" courts visited								574
" alleys visited		***						116
" W.C.'s found	clean							2,075
" " found	dirty	***			***	***	***	36
" " re-insj		***	***			***	***	36
" , cleanse		***				***		36

DAIRIES, COWSHEDS AND MILKSHOPS.

Number of	Milkshops on Register					120
,,	shippons with Milkstores attached					12
**	inspections made					475
**	notices served for defects					16
,,	notices complied with					12
,,	notices served re utensils and coverin	g of m	ilk ves	ssels		-
,,	notices served requiring the removal	of ma	nure			2
**	notices served requiring liming or cle	ansing	g			21
	FACTORY AND WORKSH	OP A	CT			
	PACIONI AND WORKSH	OI A	CI.			
Number of	Workshops on Register					387
,,	visits made					752
,,	re-visits made					162
,,	workshops found defective					23
,,	workrooms with dirty walls			***		8
,,	" with dirty ceilings					8
,,	" with dirty floors					4
,,	" with dirty lavatories					47
,,	" not properly ventilated					3
,,	" found overcrowded					
**	defective drains and water-closets					22
,,	miscellaneous defects found					40
,,	notices issued on occupiers			***	***	28
11	" " on owners					38
.,	references to the Factory Inspector					11
	DAVELOUER					
	BAKEHOUSES.					
Number or	Register					50
	minito mado					439
,,	re-visits					20
**	bakehouses found dirty (walls and ce	ilings)				12
,,	16 11 11					16
,,	bakehouses limewashed without notice	e				38
.,	notices issued for defective drainage					1
,,	" " " walls and f					3
,,	" to repair defective of				***	1
**	" , cleanse tables, uten			***		6
.,	" to clean areas			'		4
,,	references to Postery Increator					

CONFECTIONERY BAKEHOUSES.

Number on	Register	***						60
,, of	visits made							496
.,	re-visits		***					39
**	found dirty (walls	and ceili	ngs)	+++	4.4.4		***	34
**	notices issued for	limewash	ing	***	***	344		34
,,	.,	defective	drainage	***	***			3
,,	,, ,,	to cleanse	e floors, u	tensils	s, etc.			4
		OUTWO	ORKERS.					
Number of	outworkers on Re	gister						16
,,	visits made to ho				***			46
								4
.35	notices served for							-
	unwholesome pre							2
"	dirty walls and co					***		~
,,	notices complied			***	***	***	***	
"			***				***	
Number of	outworkers emplo	yed in W	allasey fo	or Live	erpool	Firms-		
		lors	***			111		
	Tai	loresses						7
	Dre	essmakers						5
	outworkers emple	oved in L	iverpool f	or Wa	llasev	Firms		
"		lors	1783					2
		loresses	***			***		
		essmakers					***	
	Dit	- osilia kero			1111	***	***	
	WALLASE	V PADI	V CLOSI	NG (DDE	D		
				NG (JKDE.	n.		
Number of	visits of inspection				***			1,906
",		(by night)						4,770
"	instances in which				vere fo	und no	ot to	40
	be com				***			42
"	persons warned t		vening A	ct	***			33
, ,,	informations laid			****	222	***	***	2
Amount o	f fines and costs	*** **		211				12/6
	SEATS	FOR SH	IOP ASS	ISTA	NTS.			
Number o	f shops affected							255
,,	assistants emplo	yed			,,,			345
,,	seats provided			444	***	***		289
,,	visits	***			***			650
"	contraventions	***						1
31	notices (complie							1

EMPLOYMENT OF CHILDREN ACT, 1903.

Number o	f visits	***							52
"	contraventions								23
,,	persons warned						*		23
"	informations laid					***		***	5
"	convictions				***				5
Amount o	f fines and costs				***		***	£2	9s. 6d.
	SHOP	HOUR	S AC	CTS, 1	892-1	895.			
Number o	f shops in which y	oung pe	ersons	emple	oyed				550
,,	copies of Act dist	tributed	1		***			147	550
,,	visits of inspection	on to sl	iops						1,100
,,	persons warned				***				3
,,	re-visits			***					3
	M	EAT	INSP	ECTI	ON.				
Number	f visits paid to the	Walle	DOM: S	and A	lfrod	Laira	roe dur	ing	
the ye							ses dui	mg	1,002
	of Meat seized at	the La	irage	s and	destr	oyed a	s unfit	for	
huma	n food			***			***	3,3	53 lbs.
	m-:			C-11					
	This amount is	made u	ip as f	follows					
	Beef		ip as f	follows		lbs.			
	Beef Mutton					lbs.			
	Beef Mutton Veal			•••	65				
	Beef Mutton			•••		,,			
	Beef Mutton Veal Offal				3,288	.,			
	Beef Mutton Veal Offal				65 — 3,288	"			
	Beef Mutton Veal Offal	 Fotal			65 3,288 3,353	"			
Nambara	Beef Mutton Veal Offal	···· ···· Fotal	 	CATTI	65 3,288 3,353	,, ,, ,, ,,			4 395
Number o	Beef Mutton Veal Offal	···· ···· Fotal	 	CATTI	65 3,288 3,353	,, ,, ,, ,,			4,385
Number o	Beef Mutton Veal Offal INSPECT	FION the ye	OF (CATTI	65 3,288 3,353 LE P	,, ,, ,, ,,			4,385
Number o	Beef Mutton Veal Offal INSPECT	···· ···· Fotal	OF (CATTI	65 3,288 3,353 LE P	,, ,, ,, ,,			4,385
Amount	Beef Mutton Veal Offal INSPECT f visits paid during	Fotal FION The year	OF (CATTI	65 3,288 3,353 LE P	" " " " " " " " " " " " " " " " " " "	stroyed	as	
Amount o	Beef Mutton Veal Offal INSPECT f visits paid during of meat, etc., seize for human food	FION the year of the year of the second terms	OF (CATTI	65 3,288 3,353 LE P	" " " " " " " " " " " " " " " " " " "	stroyed 	as 21,1	4,385 74 lbs.
Amount o	Beef Mutton Veal Offal INSPECT f visits paid during of meat, etc., seize for human food of visits to pork	FION the year of the year of the second terms	OF OF O	CATTI	65 3,288 3,353 LE P	" " " " " " " " " " " " " " " " " " "	stroyed 	as 21,1	
Amount o	Beef Mutton Veal Offal INSPECT of visits paid during Soft meat, etc., seize for human food of visits to pork pre	FION the year of the year of the second in second shops	OF OF O	CATTI CATTI CATTI CATTI PECTION premis le	65 3,288 3,353 LE P ON. ties at	eENS.	stroyed meats	as 21,1 are	74 lbs.
Amount of unfit in Number of	Beef Mutton Veal Offal INSPECT f visits paid during of meat, etc., seize for human food of visits to pork pre ,, butch	FION the year of in srops opered f	OF (ear INSP mall q and for sal	CATTI CATTI PECTI quantit premis	65 3,288 3,353 LE P ON. ties at	" " " " " " " " " " " " " " " " " " "	stroyed meats 	as 21,1' are 	74 lbs. 3,042
Amount of unfit in Number of	Beef Mutton Veal Offal INSPECT f visits paid during of meat, etc., seize for human food of visits to pork pre ,, butch ,, fish ar	Floring the year of the second forms of the se	OF OF Or and ops try sh	CATTI CATTI PECTI quantit premis	65 3,288 3,353 LE P ON. ties at	eENS.	stroyed meats 	as 21,1 are 	74 lbs. 3,042 4,968

SLAUGHTER-HOUSE INSPECTION.

Number of visits to Private Slau Amount of Meat, etc., seized and						21.1	2,256 74 lbs.
consisting of:						,,-	
Beef			12,299	lbs.			
Mutton	111		678	,,			
Veal			2,718	,,			
Offal			4,155	.,,			
Pork	***	***	1,063	,,			
Lamb			261	,,			
	Total	3	21,174	,,			
INSPECTION OF	F ICE	CREAN	M CA	RTS,	&c.		
Number of visits to premises wh	ere Ice C	ream is	s manu	factur	ed or	sold	48
UNFENC	ED EXC	CAVAT	TIONS.				
Number of quarries found in an	unfenced	Leondit	ion				
Notices sensed to use							
" Notices served to pro	vide proj	per rene	, , ,		***	***	
SPECIA	AL COM	PLAIN	NTS.				
Number of special complaints re							1 100
Number of special complaints re	cerved ar	nd dean	t with		***	***	1,108
HOUSES WITH	INSUFI	FICIEN	NT AS	HPIT	S.		
Number of houses found without	t sufficier	nt ashpi	its or a	shbins			420
" offensive ashpits abo	lished						233
PRIV	Y CONV	ERSIC	N.				
Number of offensive privies conv	erted int	o prope	er and s	ufficie	nt wat	er	
closets	***						5
D.D.	LINE MIN						
	AIN TES						
Number of houses at which dra tested by means of smol	ins or br	ranches					194
totted by means of smor	te of wate	er	***			***	134
EXAMINATION O	F UNDE	ERGRO	UND	DRAI	NS.		
Number of applications made to Health Act, 1875, to lay	Council u bare pipe	inder Se es and t	ection 4	1 of th		lie 	15
OFFE	NSIVE 7	TRADE	ES.				
Number of inspections paid to boiling purposes	premises 				g or f	at	171

MARINE STORE INSPECTION.

Number of	premises e	ntered on R	egister						5
"	inspection	s							100
,,		conditions di			time	of vis	it, and	for	1
.,		ns laid							1
,,	conviction								1
**		es Orders ob							1
Amount of	Costs		***						3/6
		PETROLE	UM II	NSPE	CTION	٧.			
Number of	persons lic	ensed to stor	re Petr	ol, etc					19
,,									68
,,	contravent	ions discove	red (no	on-ren	ewal o	f licen	ises)	***	
					,				
		GAM	E LIC	ENSE	S.				
Number of	tradesmen	licensed to	deal in	Game		-24			10
	INSPEC'	TION OF T	ENTS,	VAN	SAN	DSH	EDS.		
Number of		to encampm							50
Aumoer or	vierte para	to encampin	ches ac	TT GIIO	incy		***	***	00
		DISI	NFEC	TION.					
Number of	Houses dis	infected afte	er fever	rs					386
,.	Rooms	,,	,,						810
,,	Houses	,,		isis		***	***	***	64
**	,,	"	other	r disea	ses	4.67	**		25
11	,,	,,	verm	in, etc		***			4
		Public, Priv	ate, or	Schoo	l Libr	aries o	lisinfe	eted	100
		LIST OF ART	TICLES	DISINI	FECTE	D.			
Number of	Mattresses								123
,,	Beds		***	***	***	***	***		573
,,	Pillows and	bolsters		***	***			***	1,152
,,	Blankets	*** ***	***				***		845
	Quilts				***	1.11			584
	Sheets						***		533
,,	Articles of	wearing app	arel				***		2,762
**	Miscellaneo	ous articles	***	***		***	***		1,275
		Total						***	7,847

The following is a list of the articles destroyed by request of owners after infectious or other diseases:—

Number of	Mattresses	s	***					***		20
,,	Beds				111					21
,,	Pillows an	d bol	sters							3
,,	Blankets									3
**	Quilts	***				***			***	2
,,	Sheets									3
,,	Articles of	wear	ring app	arel						21
,,	Miscellane	ous a	articles							26
		Т	otal	***			***			99

FLUSHING.

The work of flushing the drains from house to house has been continuously carried out by four gangs of men throughout the year.

HOUSE TO HOUSE WORK.

Number of	of streets visited	444	***	****	***			3,243
,,	houses visited			1				48,463
,,	yard W.C.'s flushed	***						44,970
,,	yard gullies flushed	***					1	135,206
**	drains found choked	***	***					3,753
,,	drains cleared	141						3,405
	opports britari	TNO THE		TOTE >				
	SPECIAL FLUSH	IING IN	INFECT	1003	CASES.			
Number of	of streets visited	***					444	386
,,	houses visited	***						995
,,	yard W.C.'s flushed			242	9			995
,,	yard gullies flushed							2,572
,,	drains found choked			***		***		166
36	drains cleared	***						160
	FLUSHING OF	SCHOOLS	, HOSI	TTALS	ETC.			
37 1								
Number	of streets visited	***	***	***		4+4		131
"	schools, public buildi	ngs, etc.			***			165
**	yard W.C.'s flushed	*** * *						1,642
"	yard gullies flushed		***					5,054
,,	drains found choked		***		***			375
,,	drains cleared	***	***			2.11		373

NUMBER OF PASSAGES SPECIALLY FLUSHED DURING THE HOT WEATHER...79

Vital Statistics of Whole District during 1910 and previous Years.

ATHS AT	LONGING TO THE DISTRICT.		Rate.*	13		le.	13.69	14.00	16.03	13.19	13.82	13.07	12.70	12.00	12:31 Av. far 8 ym.	8.11
NETT DEATHS ALL AGES	BELONGING TO DISTRICT.		Number.	12		t available	752	813	938	772	857	876	906	882	849 Av. for 8 378.	888
Deaths of Deaths of Non- Residents	regis- tered in	tered in Public In- Public In- stitutions	the	District.	ou common	r iguies not	35	53	09	49	99	09	59	54	54 Av. for 8 yrs.	64
Deaths of Non-	residents regis-	Public In-	in the	District.	- E	, T	5	5	4	3	00	1	10	5	4 Av. for 8 yrs.	1
TOTAL DEATHS	PUBLIC	TIONS IN	DISTRICT	6	.51	67	7.1	59	53	7.9	29	63	75	81	99	51
IN THE	Ages.	Poto *	Trave.	00	16.53	14.31	13.69	13.66	15.47	12.78	13-29	12.49	12.30	11.7	13.59	11.3
TOTAL DEATHS REGISTERED IN DISTRICT.	At all	Residents and Non-	residents	Number.	098	773	753,(1)	765	883	748 (2)	_	837 (4)	-	857 (6)	818	842 (7)
EATHS RI DIST	nder 1 year of age.	Rate per 1000 Births	regis-	tered.	132.6	142.7	6-801	113.5	157-9	98.9	117:1	101.5	101.4	0.08	115.4	98
TOTAL D	Under 1 ye	Numbor	ty dillipet.	2	808	219	172	183	265	163	201	181	176	148	191	149
Вития.		Roto *	thanc.	4	30.15	28.40	28-70	28-78	29.43	28.32	27.67	26.31	24.40	25.10	27-72	22-9
BIR		Number	Tagminet.	3	1,568	1,534	1,579	1,612	1,678	1,657	1,716	1,763	1,738	1,838	1,668	1,724
	Population estimated to	Middle of each Year.		63	52,000	54,000	55,000	56,000	57,000	58,500	62,000	67,000	71,000	73,000	60,500	75,000
	-	YEAR		-	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Averages for years 1000-1900,	1910

sickness or infirmity, such as hospitals, workhouses and lunatic asylums.

Institutions within the district receiving sick and infirm persons from outside the district, are:—Victoria Central Hospital, Liscard Cottage Hospital, Name Proceedings of accidents or sudden illness whilst they are in the district, Convalescent Home for Women and Children,

New Brighton.

Number of inhabited Institution outside the district receiving sick and infirm persons from the district, Workhouse Infirmary, Tranmere, Birkenhead, N.B.—The Union Workhouse is not within the district.

Area of District in acres (exclusive of area covered by water), 3,400. Total population at all ages at Census of 1901, 53,579, houses, 1901 Census, 10,756. Average number of persons per house, 4.98 at Census of 1901.

Vital Statistics of separate Localities in Wallasey in 1910 and previous Years. TABLE II.

Deaths under I year.	d.	: : : : : : : : : : : : : : : : : : :	9
Deaths at all Ages.	 C.	69 70 70 73 73 75 76 76 76 76 77 76 76 77	73
Births registered.	6.	124 125 125 143 143 143 168 168 168 168	183
Population esti- mated to middle of each year.	a.	3,900 4,800 4,850 5,130 5,735 8,329 8,329 5,706	8,963
Deaths under I year.	d.	717 100 100 74 88 88 88 88 88 88 88 88 88 88 88 88 88	51
Deaths at all Ages.	С.	410 370 370 381 484 484 461 461 462 463 463 463 463	446
Births registered.	р.	721 733 760 776 776 779 779 764 764	705
Population esti- mated to middle of each year.	a.	28,900 28,900 29,340 30,400 31,305 37,605 32,260	38,085
Deaths under I year.	d.	1143 98 88 88 88 88 88 88 88 88 88 88 88 88	92
Deaths at all Ages.	С.	381 318 318 318 319 371 371 370	369
Births registered.	<i>b</i> .	723 673 721 721 720 728 728 728 728 819 867 867	836
Population esti- mated to middle of each year.	a.	20,100 21,000 21,000 21,230 21,470 22,475 24,000 25,934 27,066	27,952
Deaths under I year.	d.	208 219 172 183 265 163 201 181 176 148	149
Deaths at all Ages.	-c.	860 877 773 873 873 885 885 885 885 885 885 885 885 885 88	888
Births registered.	р.	1,568 1,534 1,579 1,612 1,716 1,716 1,738 1,838 1,838	1,724
Population esti- mated to middle of each year.	a.	52,000 54,000 55,000 57,000 62,000 71,000 73,000	75,000
		ears :::::::::	1
ear.		of Y ₀	:
Y,		1900 1901 1902 1904 1905 1906 1908 1909	1910
	mated to middle of each year. Births registered. Ages. Deaths at all year. Population estimated to middle of each year. Births registered. Boaths at all Ages. Deaths at all Ages. Deaths at all Ages. I year. Deaths under a sech year. Deaths under a lyear. Deaths under a lyear. I year. Deaths under a lyear. I year. Deaths under of each year. I year. Births registered. Deaths at all Ages. I year. Deaths at all Ages. I year. Deaths at all Ages.	Population esti- and Population esti- bot each year. Population esti- Ages. Population esti- mated to middle of each year. Population esti- mated to middle of each year. Population esti- Births registered. Population esti- anated to middle of each year. Population esti- Ages. Population esti- anated to middle of each year. Population esti- of each year. Population esti- anated to middle of each year. Population esti- anated to middle of each year. Population esti- Ages. Population esti-	Population estimated to middle Population estimated to middle

NOTES.—(a) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns, such as

wards, parishes or groups of parishes or registration sub-districts.

(b) Deaths of residents occurring in public institutions beyond the district are included in sub-columns c of this table, and those of non-residents registered in public institutions in the district excluded.

(c) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased.

(d) The gross totals of the several columns in this Table respectively equal the corresponding totals for the whole districts in Tables I. and IV.; thus, the totals of sub-columns a, b, and c agree with the figures for the year in the columns 2 3, and 12, respectively, of Table I.; the gross total of the sub-columns c agree with the total of column 2 in Table IV., and the gross total of sub-communs d with the total of column 3 in Table IV

TABLE III.

Cases of Infectious Disease in Wallasey notified during the Year 1910.

														-
NOTIFIABLE		CASE	S NOTIFIE	D IN WID	CASES NOTIFIED IN WHOLE DISTRICT.	ICT.		TOTAL IN E.	TOTAL CASES NOTHTED IN EACH LOCALITY.	HETED LITY.	NO.	OF CASES REMO FO HOSPITAL FRO EACH LOCALITY	NO, OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.	A
	3		7	At Ages	-Years.			1	03	65	Н 1	63	H. 8	Total
	At all Ages.	Under 1 to 1.	1 to 5.	5 to 15	15 to 25	25 to 65	65 and up- wards.	Poulton- cum- Scombe.	Liscard, Wallasey	Wallasey	Poulton- cum- Scombe.	Liscard.	Wallasey	removed to Hospital
Small-pox	£-		1	***	3	89	-	9	-	:	9	1		2-
Cholera	***	:	:				:		***	***	****		***	***
Diphtheria (including Mem- branous Croup)	44	:	8	21	6	5	-	21	22	1	15	10	:	25
Erysipelas	33	67	-	9	4	50		30	8	7				
	329	-	87	195	38	18	***	130	171	58	101	116	12	559
Typhus Fever Enteric Fever	14	: :	:	:-	-	::=	: :	: 00	: 00	: 00	: 00	; 00	:-	: 67
Relapsing Fever	:	:	:		:				:	200	. :	****		
Continued Fever		:	1			:-	::	:		::	:		::	:
Dlama	di.	:				+		3	1					
Carebro-Sning Meningitie	-	:				:			****	:	:.			
Teolation						:		:	:	:	***	: 0		:0
Other Admissions					:	:		:			: 0	2 .	3000	200
Other Aumissions	***					:					2.5	-		20
Totals	430	00	26	523	45	19	-	183	211	36	127	138	13	278

Norrs.—The localities adopted for this table are the same as those in Tables II. and IV.
Isolation Hospitals: Mill Lane Hospital "(Poulton): Leasowe Road Small-pox Hospital + (Wallasey);
"North Meade House" (Seacombe), not used in 1910.

† Total available beds, 20, Number of discusses that can be treat at concurrently, 4.

"Total available beds, 90,

TABLE IV.

Causes of, and Ages at, Death in Wallasey during Year 1910.

Causes of Death.				oined ages of "Residents" in or beyond the District. Deaths at all ages of "Residents" belonging to Localities, whether occurring in or beyond the District.					Total Deaths whether of "Residents" or "Non- Residents"		
	All Ages,	Under 1 year.	1 and under 5,	5 and under 15.	15 and under 25.	25 and under 65.	HD-	P'ton -cum- S'c'be	Lis- card.	Wal- lasey.	in Public Institutions in the District,
1	2	3	4	5	6	7	8	9	10	11	12
			-				1				1
Small-pox			***	***		***					
Measles	15	1	13			1		8	7		2 2 1
Scarlet Fever	3		2	1				2	1	***	2
Whooping-cough	19	10	8	1				6	12	1	1
Diphtheria (including							1000				
Membranous croup)	4		4	***	Carrier .	***	1000	2	2		1
Croup											
(Typhus							***				112
Fever- Enteric	5				1	4		1	4		5
(Other contin'd							***		***		
Epidemic influenza	5		2.4.4		***	4	1	2	3	201	
Cholera				***						0.01	***
Plague	100						211		111	221	
Diarrhœa	15	10	4	***	***	1		7	8		
Enteritis	29	18	5	1	1	3	1	18	10	1	1
Gastritis	15	10		1		3	1	10	4	1	
Puerperal Fever	1					1		1		***	
Erysipelas	2			1		***	1	2			1
Phthisis (Pulmonary					1 22	1		00	0.0	0	
Tuberculosis)	56		1	1	10	42	2	22	26	8	***
Other tuberculous						1		1	10	-	1
Diseases	35	7	17	2	5	4		17	13	5	1
Cancer, malignant di-						10	0=	1 10	10	0	7
sease	72	7.55	1	***	***	46	25	17	46	9	1 1
Bronchitis	62	11	2			14	35	31	27	3	3
Pneumonia	79	19	13	4	1	26	16	42	34		1
Pleurisy	4	511			200	1	3		4	444	1
Other diseases of Res-	40						-	1 ~	4	2	1
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Population estimated to middle of 1910, 75,000.

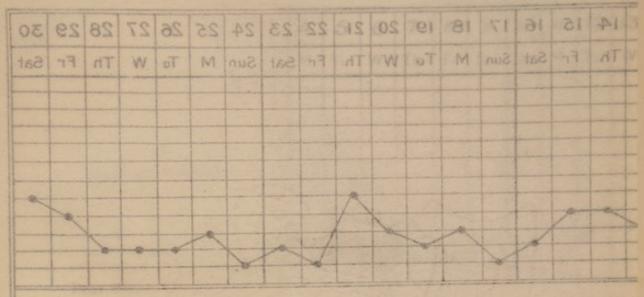
Births in the year—Legitimate, 1,681, Illegitimate, 43—1,724. Deaths in the year of legitimate infants. 146, illegitimate infants, 3.

Deaths from all Causes at all Ages, 888.

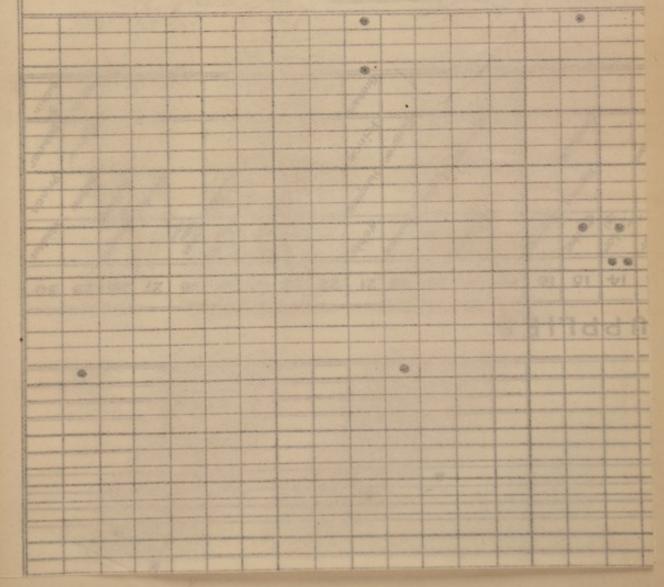


FIFTCATIONS of SCARLET FEVER

April 1910.

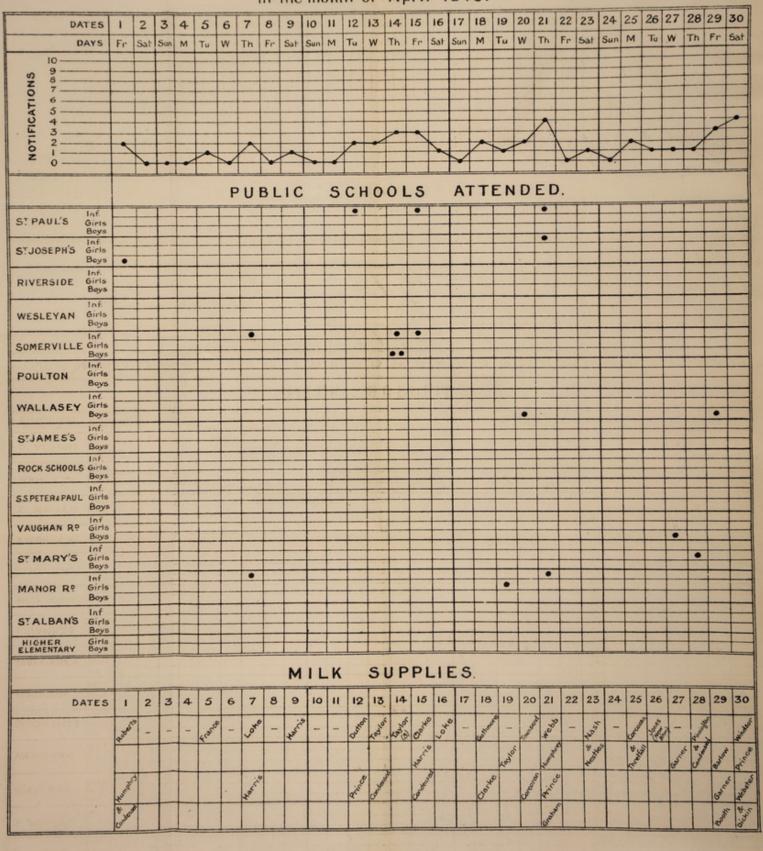


JOLS ATTENDED.



(SPECIMEM.)

Chart shewing the DAILY NOTIFICATIONS of SCARLET FEVER in the month of April 1910.



APPENDIX.

Copy of Circular posted to local Bakers with regard to unused bread.

JUNE 4th, 1910.

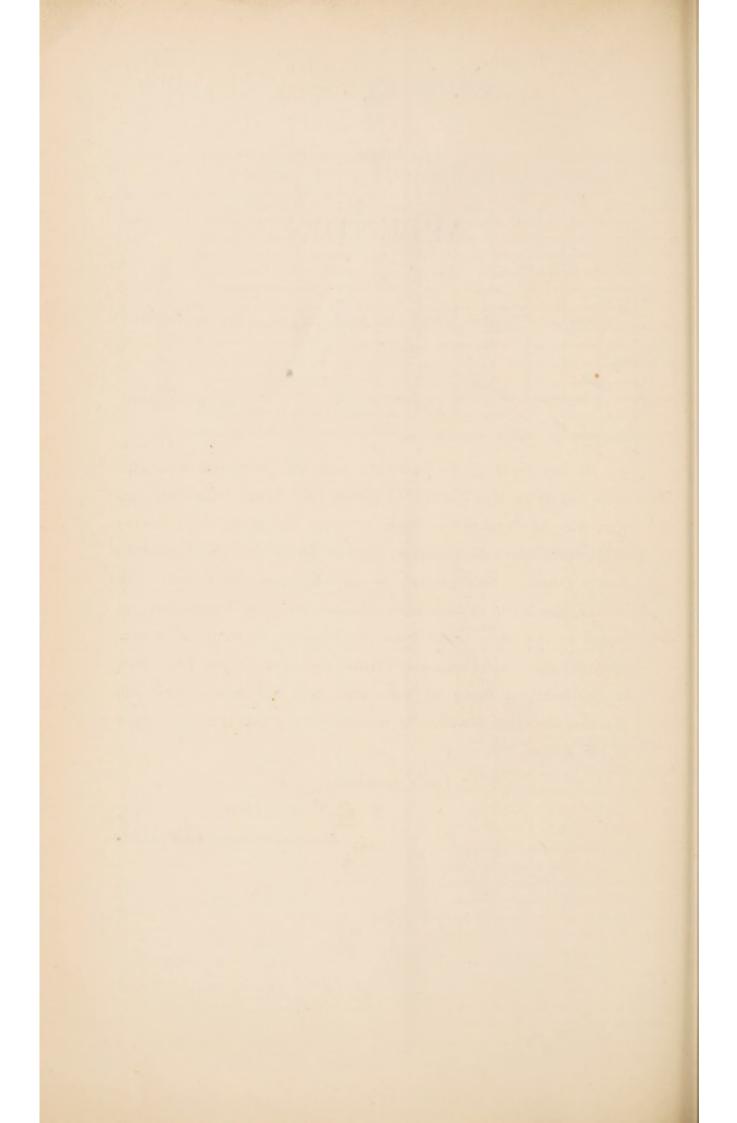
Dear Sir,

It has come to my knowledge that the practice obtains with some bakers in this district, of taking back bread from customers who may have taken too large a supply for their wants, giving them fresh bread in exchange, and re-selling the stale bread to poorer people. This practice is one which may be fraught with danger, inasmuch as infectious disease may be transmitted by means of this stale bread from one house to another. It is also open to other objections, and I trust that you (if you have been in the habit of doing it) will, after this intimation, cease the practice, and thus obviate the necessity of my taking further steps in the matter.

Yours faithfully,

T. W. N. BARLOW,

MEDICAL OFFICER OF HEALTH.



List of Streets in which Deaths have taken place in 1910.

Balmoral Road Beatrice Street Beaconsfield Road Beech Grove Belmont Road	Back King Street Back Water Street Back Willow Cottages Ball Avenue Balfour Road	Ashville Road Atherton Street Aylesbury Road Anglesey Road	Alexandra Road Annesley Road Apsley Avenue Arnold Street Ash Grove	Allsa Road Albemarle Road Albion Street Alverstone Road Alfred Road	Abbotsford Street Acacia Grove Adelaide Street Addington Street Agnes Grove	STREETS
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List of Streets in which Deaths have taken place in 1910 (continued).

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List of Streets in which Deaths have taken place in 1910 (continued).

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List of Streets in which Deaths have taken place in 1910 (continued)

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List of Streets in which Deaths have taken place in 1910 (continued).

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List of Streets in which Deaths have taken place in 1910 (continued).

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List of Streets in which Deaths have taken place in 1910 (continued).

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List of Streets in which Deaths have taken place in 1910 (continued).

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