[Report 1913] / Medical Officer of Health, Sunderland County Borough.

Contributors

Sunderland (Tyne and Wear, England). County Borough Council.

Publication/Creation

1913

Persistent URL

https://wellcomecollection.org/works/muhzhnz4

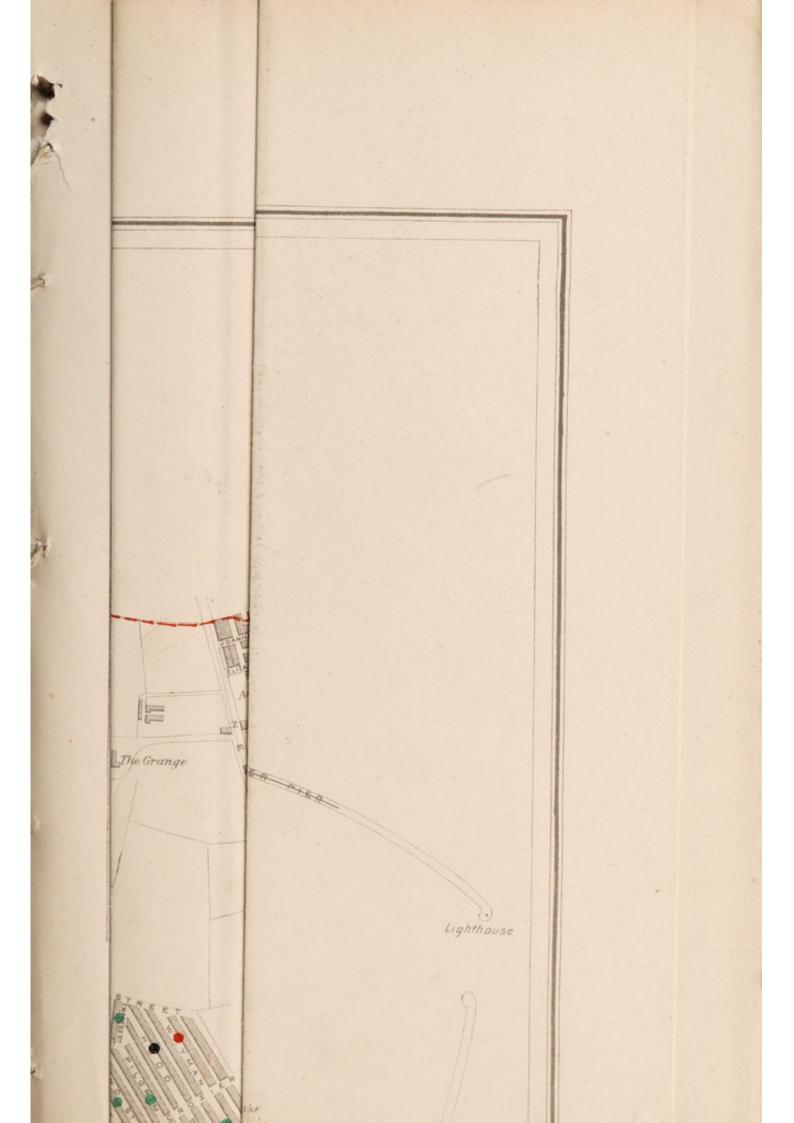
License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.









County Borough of Sunderland.

ANNUAL REPORT

ON THE

Health and Sanitary Condition of Sunderland,

FOR THE YEAR 1913.



HENRY RENNEY, D.Hy., D.P.H., M.D., B.S.,

Fellow of the Society of Medical Officers of Health.

Late President of the Northern Branch of the Society of Medical

Officers of Health.

Member of the Royal Sanitary Institute.

Medical Superintendent of the Borough Sanatorium,

Medical Officer of Health.



SUNDERLAND:

SUNDERLAND POST CO., LTD., WEST WEAR STREET.

OFFIT HOROTON OF BUSINESS AND

FIRALITE COMMITTEE.

PRESIDENT

The Mostle Burney and the St.

VICE-DVANESAND-

Annexes to result agreement

Marine of the second of the second

STATE OF THE STATE

AT MAX. II .

ALLE W. Desires

CONTRACTOR OF THE PROPERTY OF THE PARTY OF T

ROBERT DE ROBERT DE WES

EDERATE STREET

Markings over payments Transpay over spillank

and an electrical and an electrical

Officials of the Health Department.

MEDICAL OFFICER OF HEALTH AND MEDICAL SUPERINTENDENT OF THE BOROUGH SANATORIUM:

HENRY RENNEY, D.Hy., D.P.H., M.D., B.S. (Durh.)

DEPUTY MEDICAL OFFICER OF HEALTH:

ROBT. S. HUBBERSTY, M.D., C M. (Edin.), M.R.C.S. (Eng.).

PUBLIC ANALYST:

JOHN T. DUNN, D.Sc., F.I.C.

BACTERIOLOGIST:

H. J. HUTCHENS, D.S.O, M.A., M.R.C.S., L.R.C.P., D.P.H. (Oxon.)

OFFICIALS OF THE BOROUGH SANATORIUM:

MATRON - - - Miss E. O'KANE.

ENGINEER - - - W. S. OATES.

INSPECTOR OF NUISANCES:

JOHN PENNOCK (Cert. San. Inst.)

DEPUTY INSPECTOR OF NUISANCES AND INSPECTOR UNDER THE SHOPS' ACT:

JAMES S. WATSON (Cert. San. Inst.)

MEAT AND FOODS INSPECTOR:

THOS. H. DOWNES (Cert. San. Inst.).

ASSISTANT INSPECTORS OF NUISANCES:

ROGER LEE (Cert. San. Inst.)

CHAS. BROUGHTON, ,, FRED DYER, ,,

FRED OATES, ,, WM. ROBSON, ,,

Officials of the Health Department.-Contd

CLERK:

JAMES W. SOLLEY.

ASSISTANT CLERKS:

JAMES W. H. MILLER.

N. ADOLPHUS MARLEE.

NICHOL L. CLASPER.

ERNEST POWELL.

DISINFECTOR:

THOS. S. BLAND.

INSPECTOR OF DRAINS AND SANITARY FITTINGS FOR NEW HOUSES:

FRANK E. RAIN (Cert. San. Inst.)

HOUSING SUPERINTENDENT, HARRISON BUILDINGS AND ASSISTANT SANITARY INSPECTOR:

JOSEPH D. WARD (Cert. San. Inst.)

LADY HEALTH VISITORS:

Miss M. E. BARBER (Cert. San. Inst. and C.M.B.).

Miss N. RAINE (Cert. San. Inst. and C.M.B.).

Miss A. BROCK (Cert. San. Inst. and C.M.B.).

INDEX.

Abaton	nont	of 1	Nuisances	PAGE.
			Borough	1
			d and Drugs82-88, 108,	
Appene	dix	of V	ital and Sanitary Statistics	89-104
Bacteri	iolog	ical	Examinations	48-54
Births	and	Birt	th-Rate	2
Births,	No	tifica	tion of	58
Boroug	sh S	anate	orium Report	44-47
Babies	W	elcon	nes	62
Chart	No.	1	Showing the General Death-Rate in Sun- derland from 1866 to 1913 per 1,000 of the	
			population	3
,,	,,	2	Showing the principal causes of Death during the year 1913	7
,,	,,	3	Death Rate in Sunderland from Tuber- culous Disease per 1,000 of the population. 1885-1913	13
,,	,,	4	Pneumonia and Consumption, Death- Rate per 1,000 of the population in Sun- derland. 1873-1913	15
,,	,,	5	Death-Rate from Pneumonia and Consumption England and Wales per 1,000 of the population, from 1884 to 1911	17
,,	,,	6	Death-Rate from Pneumonia per 1,000 of the population in Sunderland, from 1873- 1913	19
,,	,,	7	Showing the Death-Rate from all Respiratory Diseases (except Consumption	***************************************
			and Croup) per 1,000 of the population for the years 1882 to 1913	21

		0	0 1 1 D 4 1000 of	PAGE.
Chart	No.	8	Scarlet Fever. Attack-Rate per 1,000 of the population. 1885-1913	25
,,	,,	9	Scarlet Fever. Fatality per cent. of Notified Cases. 1885-1913	27
,,	,,	10	Scarlet Fever. Percentage of Notified Cases admitted to Sanatorium or Hospital. 1885-1913	29
"	,,	11	Diphtheria and Membranous Croup Attack Rate per 1,000 of the population. 1885- 1919	31
,,,	,,	12	Diphtheria aud Membranous Croup Fatality Rate Per Cent. of Cases. 1885-1913	33
,,	,,	13	Whooping Cough Death-Rate per 1,000 of the Population. 1873-1913	35
,,	"	14	Measles. Death-Rate per 1,000 of the population. 1873-1913	37
,,	,,	15	Enteric and Continued Fever. Attack Rate per 1,000 of the population. 1886-1913	39
,,	,,	16	Enteric and Continued Fever Fatality per cent, of Cases Notified. 1886-1913	41
,,	,,	17	Cancer (all forms) Death-Rate per 1,000 of the population from 1874-1913	55
,,	,,	18	Death-Rate of Children under one year, per 1,000 Births, from 1885-1913	59
"	,,	19	Comparison of the Infantile Mortality in the East, West, and North Districts, from 1905-1913	67
,,	,,	20	Diseases of the Nervous System, from 1874-1913	69
Clean	sing	Sup	erintendent's Report	76-77
Comn	ion I	Codg	ing Houses	107
Consu	mpti	on S	Sanatoria	72
Consu	mpti	on 1	Notifications	92
Dairie	as, C	low !	Sheds and Milkshops	118
Death	is an	d D	eath-Rate	2-6
Densi	ty o	f Po	pulation	1
Diarr	hœa.	Des	aths from	43

Outworkers

108

STATISTICAL SUMMARY.

Area of the Boroug	gh			3,357 acres.
Population (Census	, 1911)	IV	EULAH	151,162
" (Estimat	ted, 1913)			152,380
Births Registered i	n 1913	.:.	·	4,792
Birth-rate per 1,000	Inhabitant	s		31.4
Deaths Registered	in 1913	Indexes (2,769
Death-rate per 1,00	0 Inhabitan	ts		181
" from Zy	motic Disea	ses*	lane inc	2.14
" from En	teric Fever			0.02
" from Sc	arlet Fever			0.12
" from Ph	thisis			1•13
" Infantile,	per 1,000	Births		135
,, ,,	96 Great	Towns		117

^{* &}quot;Zymotic Diseases" includes Smallpox, Measles, Typhus Fever, Scarlet Fever, Whooping-cough, Diphtheria, and Membranous Croup, Enteric Fever, all Diarrheeal Diseases and Dysentery.

County Borough of Sunderland.

HEALTH DEPARTMENT.

ANNUAL REPORT

FOR THE YEAR 1913.

POPULATION.

• The population estimated to the middle of 1913 was 152,380.

Table A shows the estimated population in each of the three registration sub-districts of the Borough, the area of these districts, and the number of people per acre.

TABLE A.

		Population.	Area in Acres.	Density of Population per Acre.
Sunderland	East	53,824	897	60.0
>>	West	63,629	1,724	36.9
,,	North	34,927	736	47.4
Bore	ough	152,380	3,357	45.4

CENSUS POPULATION.

The Census population of 1911 was 151,162; 72,564 being males, and 78,598 females,

The Census populations of the various Wards were as follows:-

Bishopwearmouth	9,519	Monkwearmouth-Shore	9,085
Bridge		Pallion	9,145
Central		Park	9,287
Colliery	7,332	Roker	9,965
Deptford	9,998	St. Michael's	7,723
East	8,698	Sunderland	9,336
Hendon	8,669	Thornhill	12,472
Monkwearmouth	7,928	West	11,327

BIRTHS.

The Births registered during the year 1913 numbered 4,792, the birth-rate per 1,000 of the population being 31.4. The illegitimate births numbered 159, and were 3.3 per cent, of the total births.

The rate for 1913 is a decimal point higher than that for 1912, and is 6'3 per 1,000 higher than the average birth-rate of the 96 great towns, the figure for the latter being 25'1.

TABLE B.

Showing the number of Births of Males and Females, together with the Birth-rates for the ten years, 1903 to 1912.

Year.	В	Birth-rate.		
1 car.	Males.	Females.	Total.	Direit-race
1904	2654	2540	5194	35.1
1905	2615	2608	5223	35.2
1906	2786	2589	5375	36.1
1907	2746	2584	5330	35.7
1908	2628	2552	5180	34.6
1909	2493	2272	4765	31.7
1910	2337	2245	4582	30.3
1911	2327	2192	4519	29.8
1912	2414	2335	4749	31.3
1913	2444	2348	4792	31.4

THE DEATH-RATE.

The death-rate for the year 1913 amounted to 18'1 per 1,000 of the estimated population. That for 1912 was 15'9, so that there has been an increase of 2'2. With the exception of Gateshead and Tynemouth, there has been an increased death-rate in all the neighbouring boroughs for the year now under revision. The principal factor in Sunderland's higher rate is diarrhæa, there having been 145 more deaths from this cause than in 1912. Diarrhæa was epidemic in the Borough from the beginning of August to the beginning of November, an unusually long period, the weather for the whole of this time being warmer than is generally the case, and the rainfall was below the

Number per 1,000 CHART Nº1. SHOWING THE GENERAL DEATH-RATE IN SUNDERLAND FROM 1866 TO 1913. PER 1,000 OF THE POPULATION. THE AVERAGE DEATH-RATE FOR THE LAST IOYEARS WAS 18.36. 128 เขอร์ เพนลงดบลอธิ เพนลงดบลอธิ เพนลงดบลอธิ เพนลงดบลอธิ เพน



average. These two factors always produce an increased mortality from diarrhoea. The Analysis of the Principal Causes of Death, on page 6 shows that there was a slightly increased mortality in respect of several other diseases, which, taken together, accounts for the higher figure for 1913.

That this figure is not quite reliable I am aware, for I am certain that the population of Sunderland is underestimated for the year 1913. The estimate is calculated on the census figures for the year 1911. In that year the population had very much decreased owing to the large exodus from the Borough on account of stagnation in trade. The most of these people have either returned, or their places have been taken by others, for nearly every house which was vacant in 1911 is now occupied. I am convinced that the population should amount to several thousands more than the estimate, and that therefore the death-rate should be lower than the above figure.

The death-rate for the 96 great towns was 14'3 in 1913, so that our death-rate is 3'8 higher.

The death-rates from 1873 to 1913 are given in the Table below, and are shown in graphic form on Chart No. 1, page 3 from 1886 to 1913. Here it will be seen what a great reduction in mortality has taken place during the greater part of this period.

The deaths registered during the year numbered 2,769.

The following Table gives the death-rate per 1,000 since 1873:-

Death-rates per 1,000 of the Population (1873-1913).

		Rate			Rate			Rate
Year.		per 1000.	Year.	1	per 1000.	Year.		per 1000,
1873	***	22.7	1887		20.3	1901		21:3
1874		23.6	1888		18.7	1902		19.8
1875		22.4	1889		23.9	1903		20.1
1876		20.8	1890		23.7	1904		19.8
1877		22:5	1891		24.8	1905		19.2
1878		25.5	1892		20.8	1906		19.2
1879		21.8	1893		22.4	1907		19.9
1880		24.4	1894		20.7	1908	-	18:3
1881		20.9	1895	-	21.7	1909		18:3
1882		26:4	1896		19.6	1910	-	16.9
1883		24.7	1897	***	19.7	1911		17.8
1884	***	23.3	1898		22.8	1912		15.9
1885		24.3	1899		21.7	1913		18.1
1886		20.0	1900	,,,	21.7			

The death-rates in the quarters during 1913 were as follows:-

1st q	uarter-	-Deaths	769	R	ate	20.2	per	1000
2nd	,,							
3rd	"	32					29	
4th	"	22	716	*********	11	18.8	- 13	

The death-rates for the year 1913 in the Registration Sub-Districts of the Borough were as follows:—

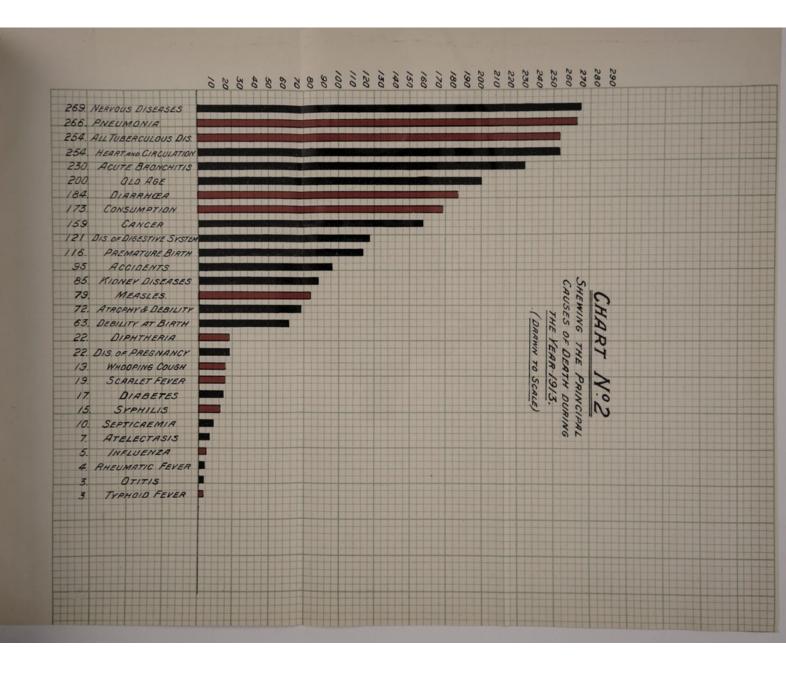
Sunderland	East	20.3	per 100	0.
Sunderland	West	16.7	,,	
Sunderland	North	17.4	33	

ANALYSIS OF THE PRINCIPAL CAUSES OF DEATH.

The following table shows the number of deaths and the deathrate per 1,000 from the Principal Causes, together with the increase or decrease in the death-rate of each compared with the previous year:—

CAUSE OF DEATH.	Number of Deaths in 1913.	Death-rate per 1,000 of the Population in 1913.	Increase or decrease of the Death-rate per 1,000 of the Population compared with that for the year 1912.
*Nervous Diseases	269	. 1.76	Increase 0.48.
Acute Bronchitis	230	1:50	0.09.
All Tuberculous Diseases	254	1.66	Decrease 0.18.
Heart and Circulation	254	1.66	0.08.
Pneumonia	266	1.74	Increase 0.36.
Diarrheeal Diseases	184	1.20	,, 0.94.
Old Age	200	1.31	,, 0.23.
Consumption	173	1.13	Decrease 0.09.
Cancer	159	1.04	Increase 0.20.
Premature Birth	116	0.76	Decrease 0.01.
Whooping Cough	19	0.15	,. 0.15.
Debility at Birth	63	0.41	Increase 0.08.
Atrophy, Debility & Marasmus.	72	0.47	,, 0.07.
Kidney Diseases	85	0.55	,, 0:11.
Measles	79	0.51	,, 0.06.
Chronic Bronchitis	43	0.28	Decrease 0 02.
Diphtheria	22	0.14	No Change
Other Diseases of Stomach, etc.	30	0.19	Increase 0.04.
Cirrhosis of Liver	21	0 14	,, 0 06.
Anæmia and Leucocythæmia	8	0.05	,, 0.02.
Rheumatic Fever and Rheu-			
matism of the Heart	6	0.04	Decrease 0.07.
Appendicitis	10	0.06	No Change.
Scarlet Fever	19	0.12	Increase 0.11.
Typhoid Fever	3 ···	0.02	No Change.
Ulcer of Stomach & Duodenum.		0.11	Decrease 0.03.
	11	0.07	No Change,
Obstruction of Intestine	14	0.09	Decrease 0.03.

^{* &}quot;Nervous Diseases" includes Convulsions, Simple Meningitis, Encephalitis, Apoplexy, Softening of the Brain, Hemiplegia, General Paralysis of the Insane, other forms of Insanity, Chorea, Cerebral Tumour, Epilepsy, Laryngismus Stridulus, Locomotor Ataxia, Paraplegia, and other ill-defined diseases of the Nervous System.



Particular and the second seco .

INFECTIOUS DISEASES.

Showing the number of NOTIFICATIONS of Infectious for the last ten years.

Year.	Smallpox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Typhus Fever.	Continued Fever.	Erysipelas.	Puerperal Fever.	Poliomyelitis.
1904	34	198	74	128		9	117	4	
1905	2	184	170	139		6	105	12	
1906		283	231	134		7	106	7	
1907	1	498	206	92		6	96	2	
1908	1	325	189	132		1	95	1	
1909	***	596	229	96		2	135	7	
1910		432	161	58		2	163	9	
1911		431	145	57		- 1	116	5	
1912		228	161	45	8	***	60	10	
1913		779	181	40		2	105	2	1
Average	4	395	175	92		4	110	6	

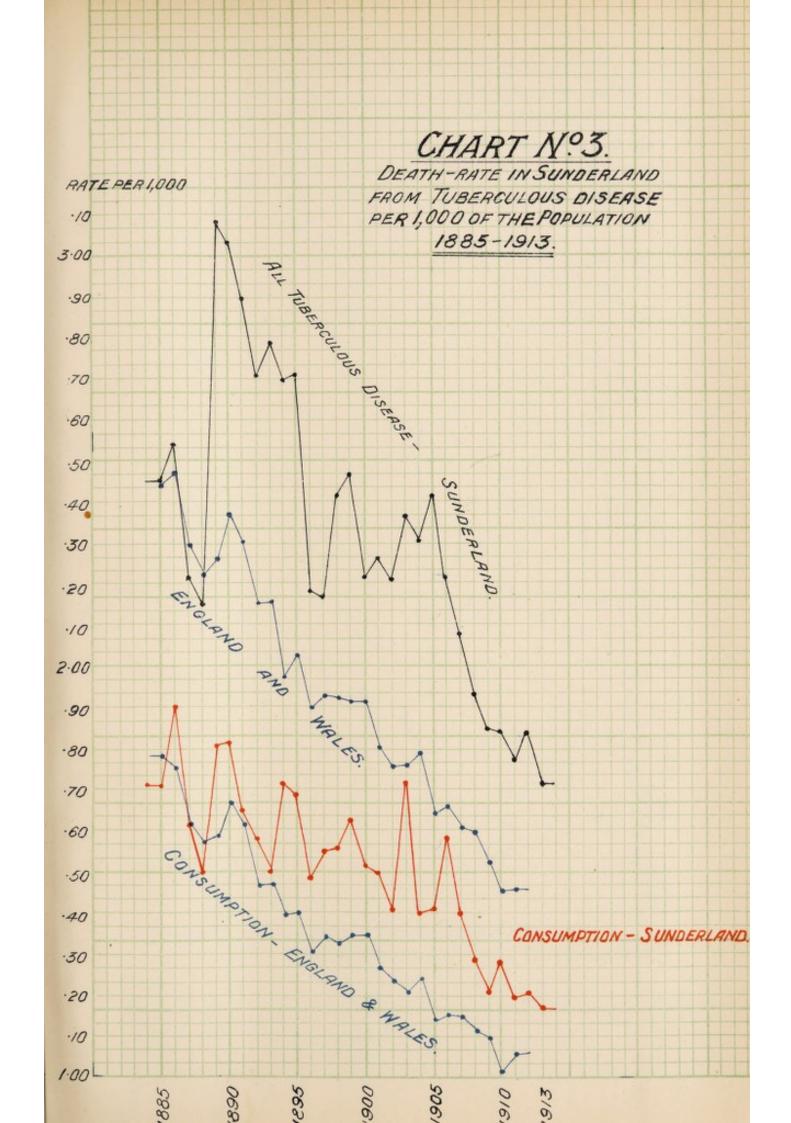
TABLE E.—The following Table shows the death rates per 1,000 of the also Birth Rates and Infantile Mortality in the

			368					
CAUSE OF DEATH.	Bishopwearmouth Ward.	Bridge Ward.	Central Ward.	Colliery Ward.	Deptford Ward.	East Ward.	Hendon Ward.	Monkwearmouth Ward,
Population (est. middle 1913)	9412	12148	8123	7129	9877	8500	9369	8421
Births	285	455	277	253	342	325	269	234
Birth-rate	30.3	37.4	34.1	35.5	34.6	38.2	28.7	27.8
Deaths-All Causes	170	252	229	129	188	201	132	151
Death-rate	18.05	20.74	28.19	18.10	19:02	23.64	14.08	17.92
Deaths under One year	40	65	48	41	48	58	31	31
Infantile Mortality	140	142	173	162	140	178	115	132
CAUSE OF DEATH :— Nervous Diseases	1.91	1.97	2.83	1.96	1.01	1:41	1.28	1.78
Bronchitis	2.12	1.65	3.14	1.40	1.72	2.82	1.70	1.30
Consumption	0.95	1.65	1.72	0.84	1.01	1.18	1.07	1.07
Other Tuberculous Diseases	0.21	0.66	0.00	0 84	0.30	0.82	0.43	0.28
Heart and Circulation	1.38	1.65	2.71	1 12	1.72	2.00	0.43	1.30
Pneumonia	1.06	2:30	2.95	1.12	2.43	3.88	0.96	1.90
Diarrhœa	1.27	0.99	2.21	3 08	1.62	2.00	1.07	1.78
Cancer	1.06	0.90	1:11	0.84	0.91	0.47	1.17	1.19
Premature Birth	1.27	1.48	0.86	0.70	0.91	1.06	0.11	0.47
Debility at Birth and Atrophy and Marasmus	0.42	0.85	1.60	1.40	1:21	0.28	0.43	0.83
Kidney Diseases	0.85	0.41	0.86	0.98	0.50	0.28	0.64	1.07
Diseases of Digestive System	0.23	0.99	1.23	0.28	1.01	0.94	0.75	0.28
Old Age	2.23	1.48	2.46	0.26	0.91	1.65	1.17	0.59
Measles	0.42	1.15	0.37	0.14	1.01	0.82	0.75	1.07
Scarlet Fever	0.35	0.08	0.00	0.14	0.10	0.53	0.21	0.12
Whooping Cough	0.35	0.08	0.12	0.00	0.30	0.00	0.43	0.00
Diphtheria	0.11	0.08	0.00	0.28	0.10	0.12	0.11	0.24
Typhoid Fever	0.00	0.00	0.12	0.00	0.00	0.00	0.11	0.00

population from ALL CAUSES and from the PRINCIPAL DISEASES

several Wards of the Borough, for the year 1913.

0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.			i wards of the Borough, for the year 1015.						
359 354 291 240 193 379 242 294 Births.	Monkwearmouth- Shore Ward.	Pallion Ward.	Park Ward.	Roker Ward.	Saint Michael's Ward.	Sunderland Ward.	Thornhill Ward.	West Ward.	Cause of Death.
41:3 38:1 31:6 22:5 25:3 41:1 18:3 25:7 Birth-rate. 198 164 152 132 148 212 148 163 Deaths—All Causes. 22:77 17:66 16:52 12:35 19:39 23:00 11:17 14:25 Deaths under One year. 173 88 117 104 104 159 99 95 Infantile Mortality. CAUSE OF DEATH:—Nervous Diseases. 1:31 2:10 1:36 1:06 1:48 Nervous Diseases. 1:84 1:61 2:17 1:03 1:57 3:47 0:60 1:31 Bronchitis. 1:26 1:18 1:41 0:65 0:13 0:54 0:07 0:87 Other Tuberculous Diseases. 2:53 2:91 1:09 1:12 3:53 1:19 1:28 1:39 Heart and Circulation. 1:95 1:83 1:19 0:56 1:96 2:49 0:83 1:22 Pneumonia. 2:18 1:29 0:65 0:28 0:52 1:52 0:15	8696	9285	9202	10681	7633	9218	13249	11437	Population (est. middle 1913).
198 164 152 132 148 212 148 163 Deaths—All Causes. 22:77 17:66 16:52 12:35 19:39 23:00 11:17 14:25 Deaths under One year. 173 88 117 104 104 159 99 95 Infantile Mortality. 2:53 1:51 1:96 1:31 2:10 1:36 1:06 1:48 Nervous Diseases. 1:84 1:61 2:17 1:03 1:57 3:47 0:60 1:31 Bronchitis. 1:26 1:18 1:41 0:65 1:95 0:83 0:52 Consumption. 1:15 1:18 0:11 0:65 0:13 0:54 0:07 0:87 Other Tuberculous Diseases. 2:53 2:91 1:09 1:12 3:53 1:19 1:28 1:39 Heart and Circulation. 1:95 1:83 1:40 0:65 0:28 0:52 1:52 0:15 0:61 Diarr	359	354	291	240	193	379	242	294	Births.
22:77 17:66 16:52 12:35 19:39 23:00 11:17 14:25 Death-rate. 62 31 34 25 20 60 24 28 Deaths under One year. 173 88 117 104 104 159 99 95 Infantile Mortality. 2:53 1:51 1:96 1:31 2:10 1:36 1:06 1:48 Nervous Diseases. 1:84 1:61 2:17 1:03 1:57 3:47 0:60 1:31 Bronchitis. 1:26 1:18 1:41 0:65 1:95 0:83 0:52 Consumption. 1:15 1:18 0:11 0:65 0:13 0:54 0:07 0:87 Other Tuberculous Diseases. 2:53 2:91 1:09 1:12 3:53 1:19 1:28 1:39 Heart and Circulation. 1:95 1:83 1:19 0:55 1:96 2:49 0:83 1:22 Pneumonia.	41.3	38:1	31.6	22.5	25.3	41.1	18:3	25.7	Birth-rate.
62 31 34 25 20 60 24 28 Deaths under One year. 173 88 117 104 104 159 99 95 Infantile Mortality. 2-53 1·51 1·96 1·31 2·10 1·36 1·06 1·48 Nervous Diseases. 1·84 1·61 2·17 1·03 1·57 3·47 0·60 1·31 Bronchitis. 1·26 1·18 1·41 0·65 1·05 1·95 0·83 0·52 Consumption. 1·15 1·18 0·11 0·65 0·13 0·54 0·07 0·87 Other Tuberculous Diseases. 2·53 2·91 1·09 1·12 3·53 1·19 1·28 1·39 Heart and Circulation. 1·95 1·83 1·19 0·56 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrheea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 1·16 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 1·16 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	198	164	152	132	148	212	148	163	Deaths-All Causes.
173	22.77	17.66	16:52	12:35	19:39	23.00	11.17	14.25	Death-rate.
2·53	62	31	34	25	20	60	24	28	Deaths under One year.
2·53 1·51 1·96 1·31 2·10 1·36 1·06 1·48 Nervous Diseases. 1·84 1·61 2·17 1·03 1·57 3·47 0·60 1·31 Bronchitis. 1·26 1·18 1·41 0·65 1·05 1·95 0·83 0·52 Consumption. 1·15 1·18 0·11 0·65 0·13 0·54 0·07 0·87 Other Tuberculous Diseases. 2·53 2·91 1·09 1·12 3·53 1·19 1·28 1·39 Heart and Circulation. 1·95 1·83 1·19 0·56 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhoea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. <	173	88	117	104	104	159	99	95	Infantile Mortality.
1·26 1·18 1·41 0·65 1·05 1·95 0·83 0·52 Consumption. 1·15 1·18 0·11 0·65 0·13 0·54 0·07 0·87 Other Tuberculous Diseases. 2·53 2·91 1·09 1·12 3·53 1·19 1·28 1·39 Heart and Circulation. 1·95 1·83 1·19 0·55 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 <	2:53	1.21	1.96	1:31	2.10	1:36	1.06	1.48	
1·15 1·18 0·11 0·65 0·13 0·54 0·07 0·87 Other Tuberculous Diseases. 2·53 2·91 1·09 1·12 3·53 1·19 1·28 1·39 Heart and Circulation. 1·95 1·83 1·19 0·56 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhoea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05	1.84	1.61	2.17	1.03	1.57	3:47	0.60	1.31	Bronchitis.
2·53 2·91 1·09 1·12 3·53 1·19 1·28 1·39 Heart and Circulation. 1·95 1·83 1·19 0·56 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·41 1·28 1·05 Old Age.	1.26	1.18	1.41	0.65	1:05	1.95	0.83	0.52	Consumption.
1·95 1·83 1·19 0·56 1·96 2·49 0·83 1·22 Pneumonia. 2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	1.15	1.18	0.11	0.65	0.13	0.54	0.07	0.87	Other Tuberculous Diseases.
2·18 1·29 0·65 0·28 0·52 1·52 0·15 0·61 Diarrhea. 1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	2.53	2.91	1.09	1.12	3.23	1.19	1.28	1.39	Heart and Circulation.
1·38 1·40 0·65 0·94 1·96 0·65 1·13 1·05 Cancer. 1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. Kidney Diseases. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	1.95	1.83	1.19	0.56	1.96	2.49	0.83	1.22	Pneumonia.
1·15 0·54 0·54 0·37 0·39 1·29 0·38 0·61 Premature Birth. 1·61 0·97 1·19 0·47 0·78 1·08 0·45 0·79 Debility at Birth and Atrophy and Marasmus. Kidney Diseases. 0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	2.18	1.29	0.65	0.28	0.25	1.52	0.12	0.61	Diarrhœa.
1.61 0.97 1.19 0.47 0.78 1.08 0.45 0.79 Debility at Birth and Atrophy and Marasmus. Kidney Diseases. 0.46 0.21 0.76 0.75 0.78 0.65 0.45 0.44 Kidney Diseases. 0.34 0.43 0.87 0.94 0.78 1.19 0.60 1.05 Diseases of Digestive System. 1.15 1.29 1.09 1.31 1.31 1.41 1.28 1.05 Old Age. 0.69 0.21 0.43 0.19 0.26 0.22 0.15 0.17 Measles.	1.38	1.40	0.65	0.94	1.96	0.65	1.13	1.05	Cancer.
0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	1.15	0.54	0.54	0.37	0.39	1.29	0.38	0.61	Premature Birth.
0·46 0·21 0·76 0·75 0·78 0·65 0·45 0·44 Kidney Diseases. 0·34 0·43 0·87 0·94 0·78 1·19 0·60 1·05 Diseases of Digestive System. 1·15 1·29 1·09 1·31 1·31 1·41 1·28 1·05 Old Age. 0·69 0·21 0·43 0·19 0·26 0·22 0·15 0·17 Measles.	1.61	0.97	1.19	0.47	0.78	1.08	0.45	0.79	Debility at Birth and Atrophy and
1.15 1.29 1.09 1.31 1.31 1.41 1.28 1.05 Old Age. 0.69 0.21 0.43 0.19 0.26 0.22 0.15 0.17 Measles.	0.46	0.21	0.76	0.75	0.78	0.65	0.45	0.44	
0.69 0.21 0.43 0.19 0.26 0.22 0.15 0.17 Measles.	0.34	0.43	0.87	0.94	0.78	1.19	0.60	1.05	Diseases of Digestive System.
	1.15	1.29	1.09	1.31	1.31	1.41	1.28	1.05	Old Age.
	0.69	0.21	0.43	0.19	0.26	0.22	0.15	0.17	Measles.
0.11 0.00 0.00 0.00 0.13 0.22 0.15 0.17 Scarlet Fever.	0.11	0.00	0.00	0.00	0.13	0.22	0.12	0:17	Scarlet Fever.
0·11 0·00 0·22 0·09 0·13 0·22 0·00 0·00 Whooping Cough.	0.11	0.00	0.22	0.09	0.13	0.22	0.00	0.00	Whooping Cough.
0·11 0·43 0·00 0·75 0·00 0·00 0·07 0·35 Diphtheria.	0.11	0.43	0.00	0.75	0.00	0.00	0.07	0.35	Diphtheria.
0.00 0.00 0.00 0.00 0.13 0.00 0.00 Typhoid Fever.	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	Typhoid Fever.





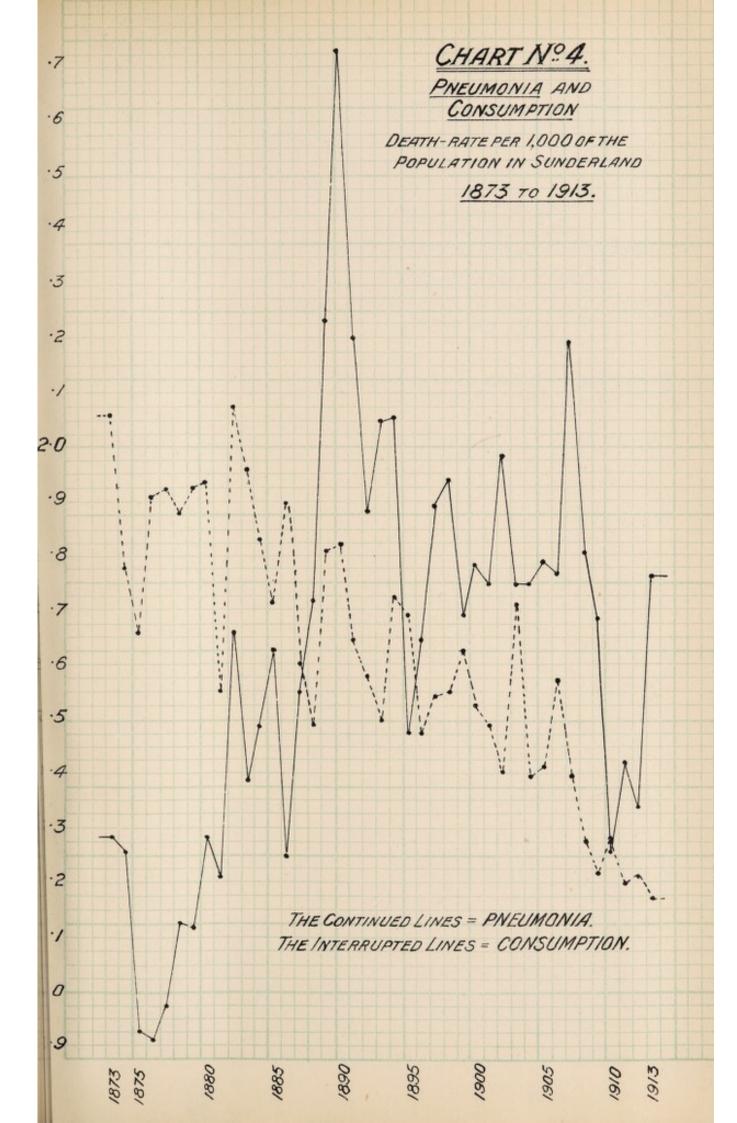


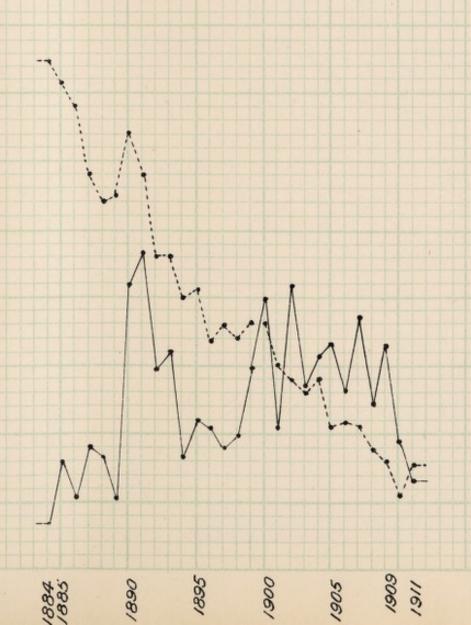


CHART Nº5.

DEATH-RATE FROM PNEUMONIA & CONSUMPTION. ENGLAND & WALES

PER 1,000 OF THE POPULATION FROM 1884 TO 1911.

THE CONTINUED LINES = PNEUMONIA.
THE INTERRUPTED LINES = CONSUMPTION.



.8

.7

.6

.5

.4

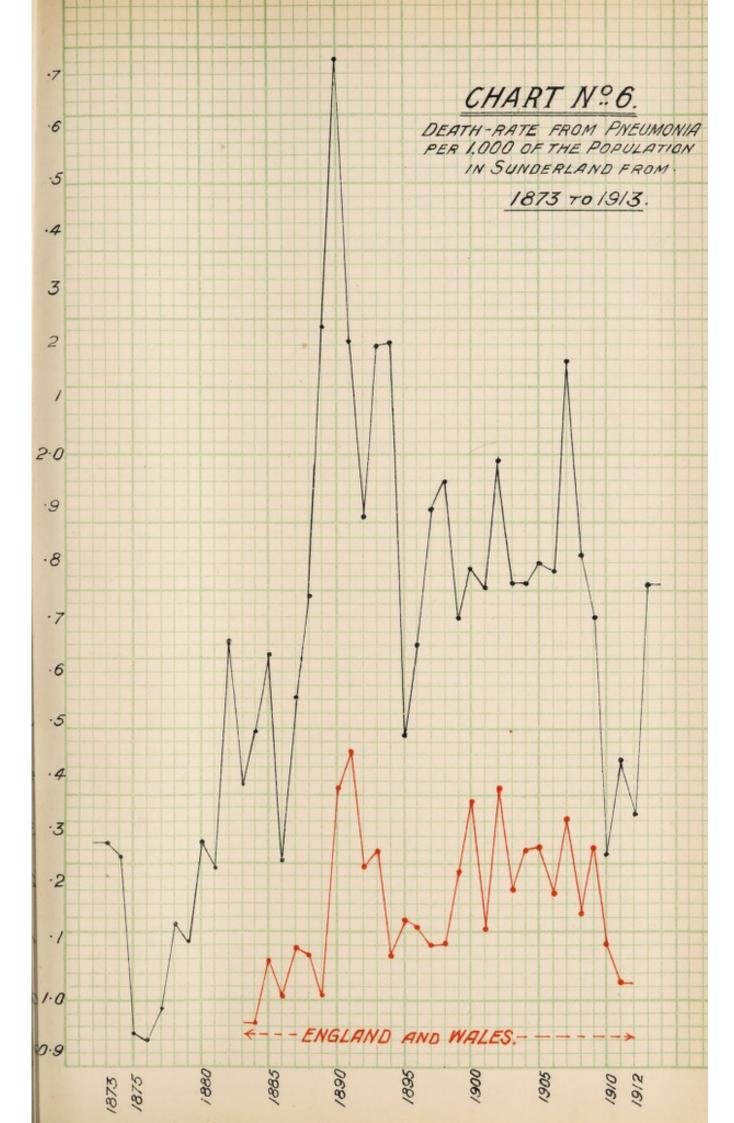
.3

.2

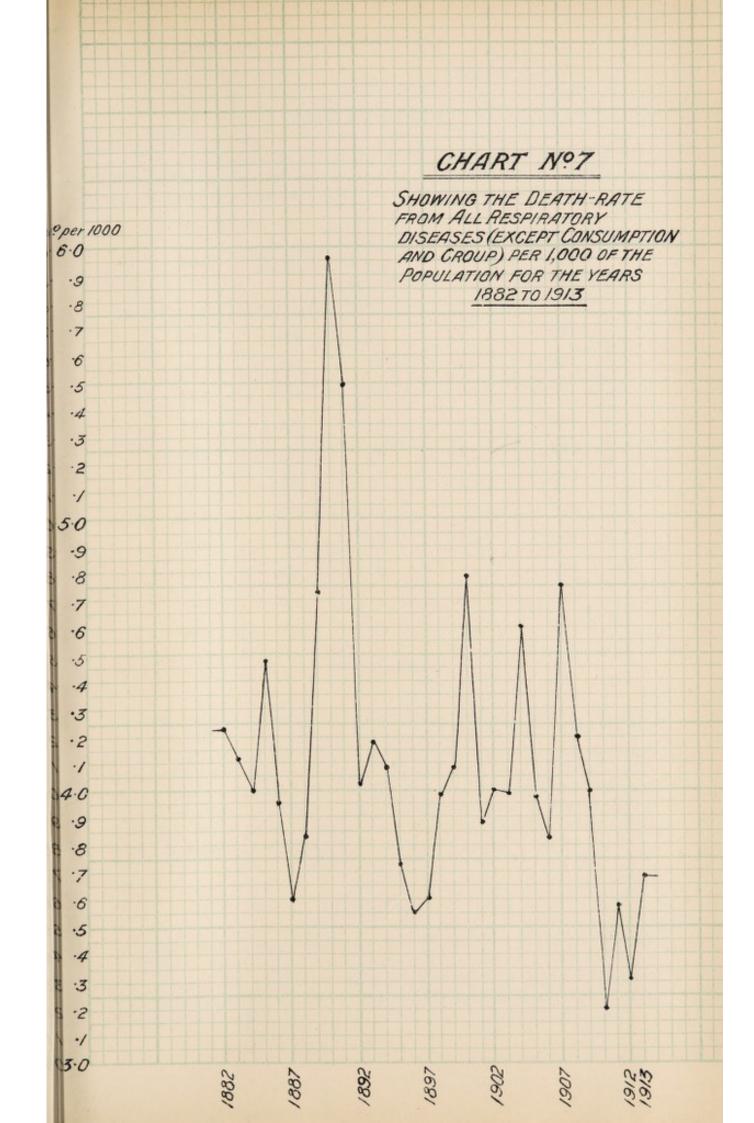
1.0

1.9











SCARLET FEVER.

The following Table shows the number of cases of Scarlet Fever notified during the last ten years, the attack-rate, the fatality per cent. of cases, and the death-rate per 1,000 of the population.

Year.	No. of Cases Notified.	Attack-rate per 1000 of the population.	Fatality per cent. of cases.	Death-rate per 1000 of the population.
1903	758*	5.1	4.7	0.24
1904	198	1.3	1.5	0.05
1905	184	1.2	0.2	0.01
1906	283	1.9	1.7	0.04
1907	498	3.3	3.8	0.12
1908	325	2.1	1.5	0.03
1909	596	3.9	2.6	0.10
1910	432	2.8	3.2	0.08
1911	431	2.8	1.6	0.04
1912	228	1.5	0.9	0.01
1913	779	5.1	2.4	0.12

* Milk epidemic.

The number of cases of Scarlet Fever notified during the year 1913 was 779, raising the attack rate per 1,000 to 5.1. Reference to the above Table will show that it is ten years since we had an epidemic approaching this figure. Happily the character of the disease was, on the whole, mild, and the fatality per cent. of cases only reached 2.4. There was an increase in the number of cases of Scarlet Fever in 1913 in many parts of the country, including London, many towns in the midlands, as well as neighbouring Boroughs.

DIPHTHERIA.

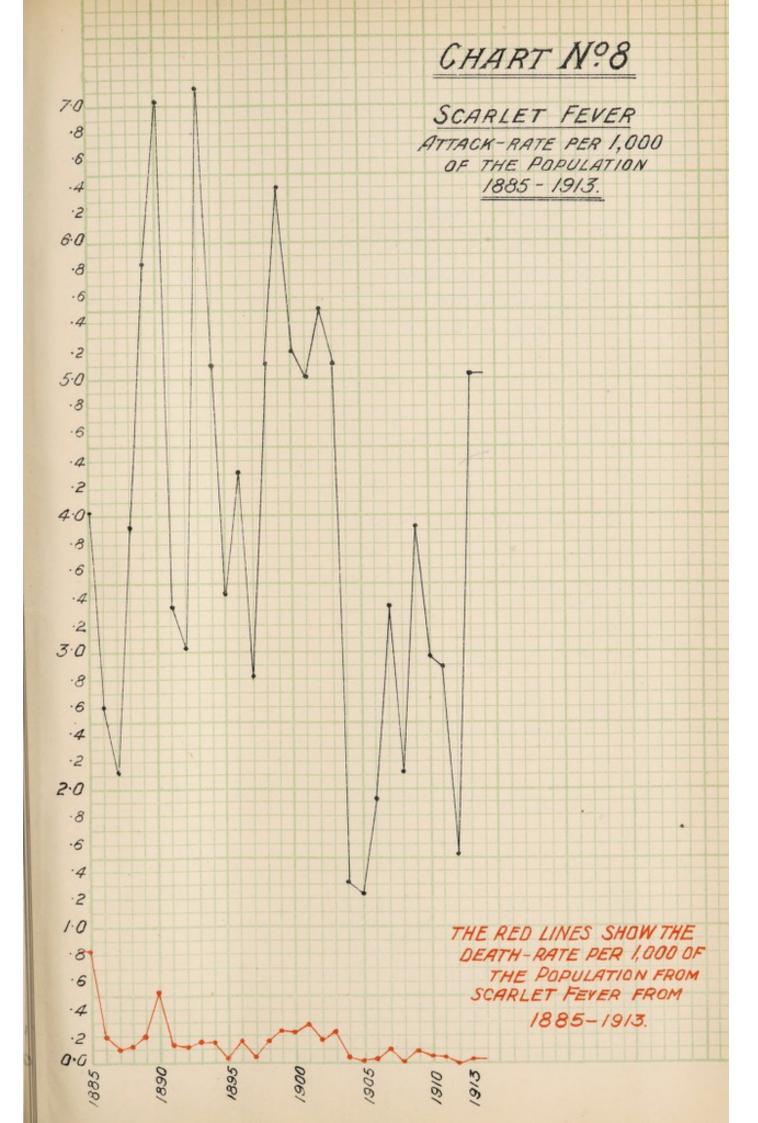
There were 181 notifications of Diphtheria in 1913, an increase of 20 over the previous year, representing an increased incidence of 0.12 per 1,000 of the population. The death-rate per 1,000 was the same as in 1912, viz., 0.14; the fatality-rate per cent. was 12.2 or 0.8 less than in 1912.

The following Table shows the case-mortality per cent., and death-rate per 1,000 of the population, for the last ten years from Diphtheria (including Membranous Croup).

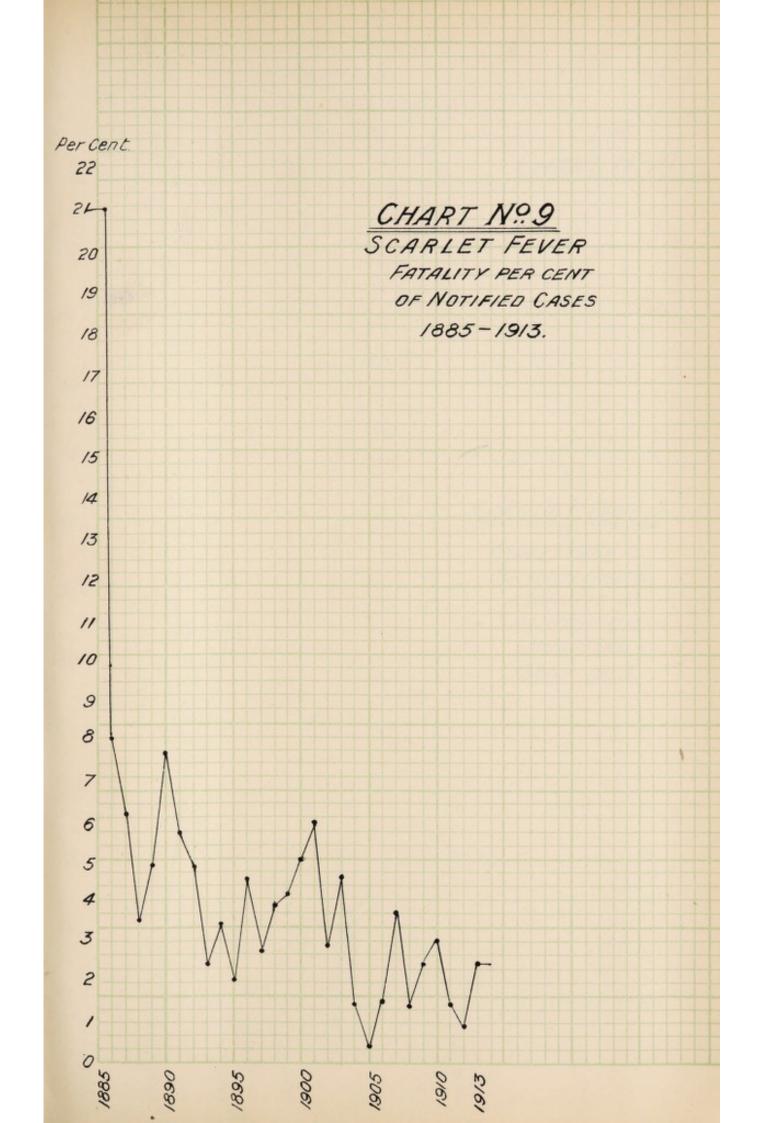
Year.	Case 1	Mortality.	Death-rate per 1,000 of the Population.
1904	37.8	per cent.	0.18
1905	18'8	,,	0°21
1906	17.3	,,	0.26
1907	23.3	,,	0.32
1908	15'3	,,	0.19
1909	14.0	,,	0.21
1910	14.2	,,	0'15
1911	14.5	,,	0.14
1912	13.0	,,	0.14
1913	12.2	,,	0'14

WHOOPING COUGH.

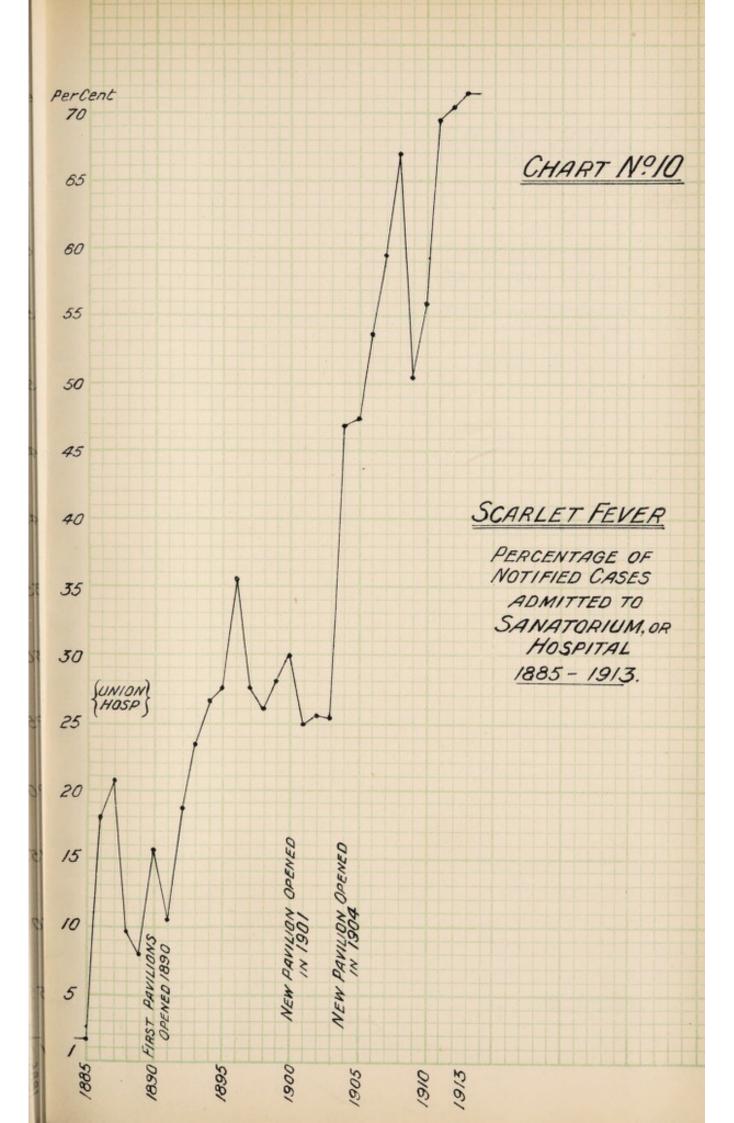
There were 19 deaths from Whooping Cough in 1913, the deathrate being 0.12 per 1,000 of the population.



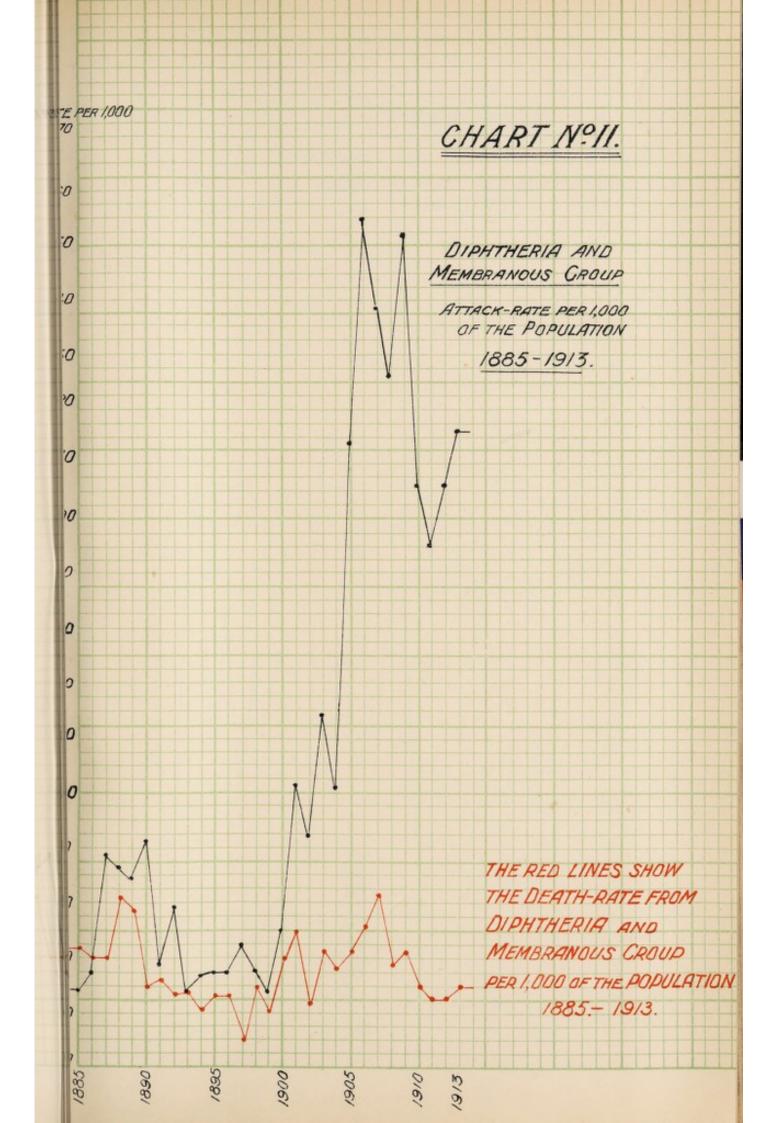






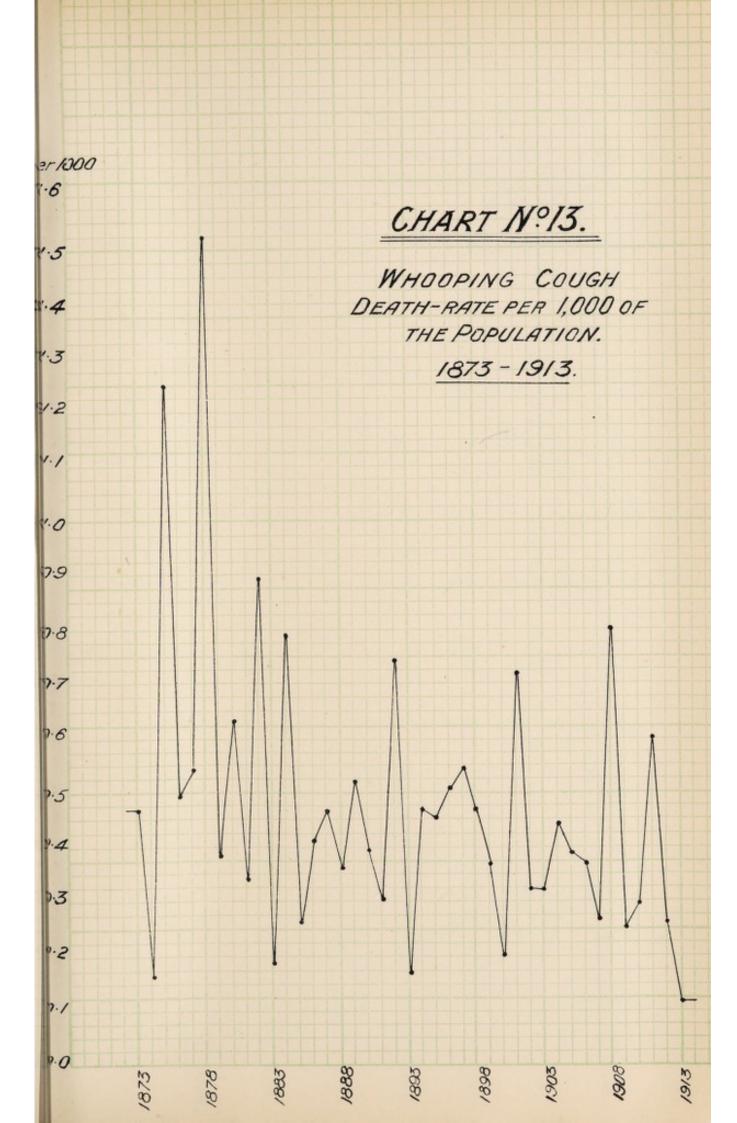




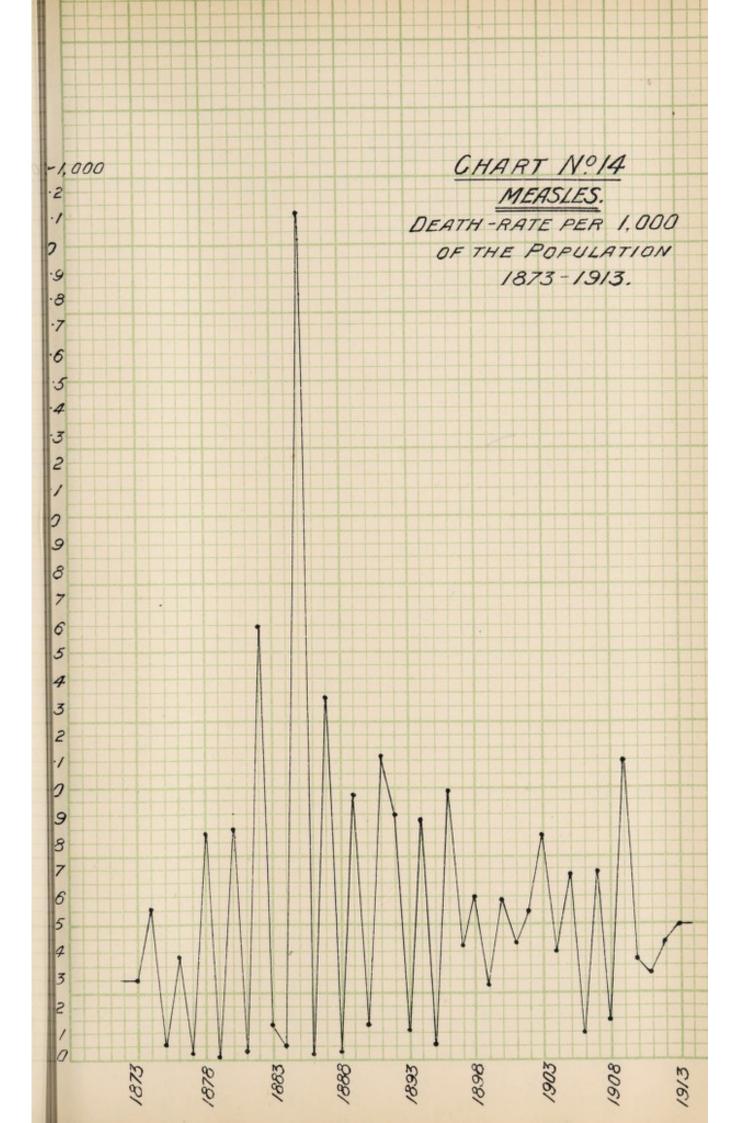




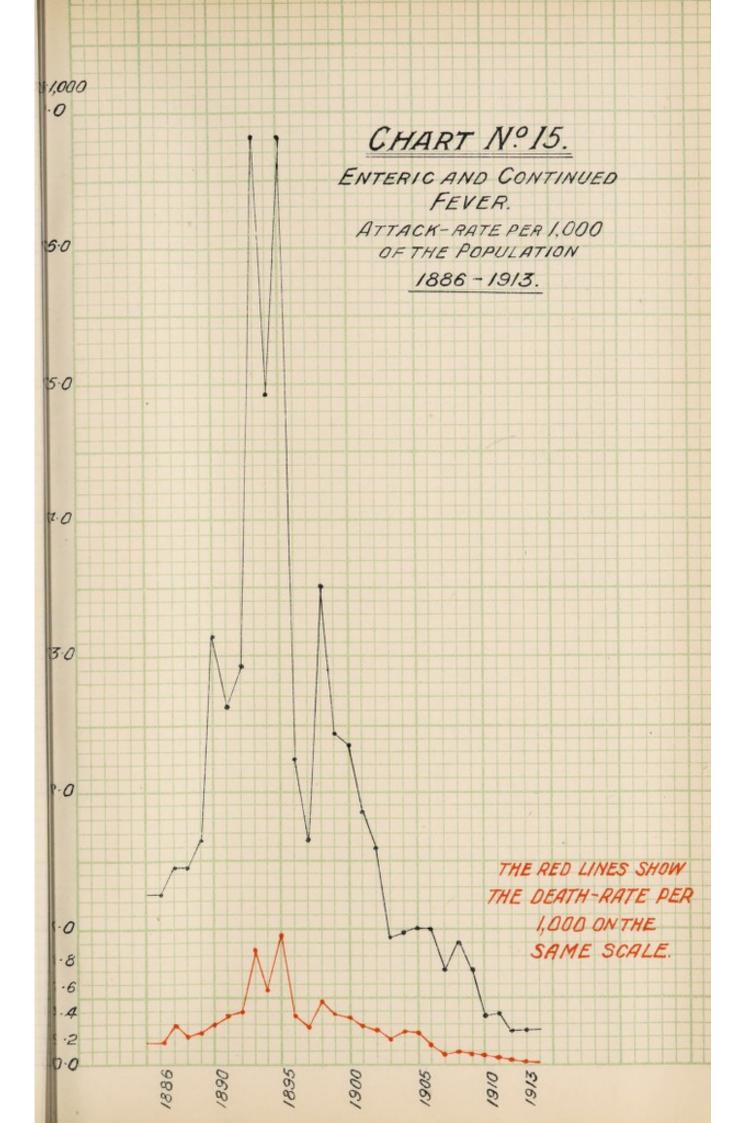




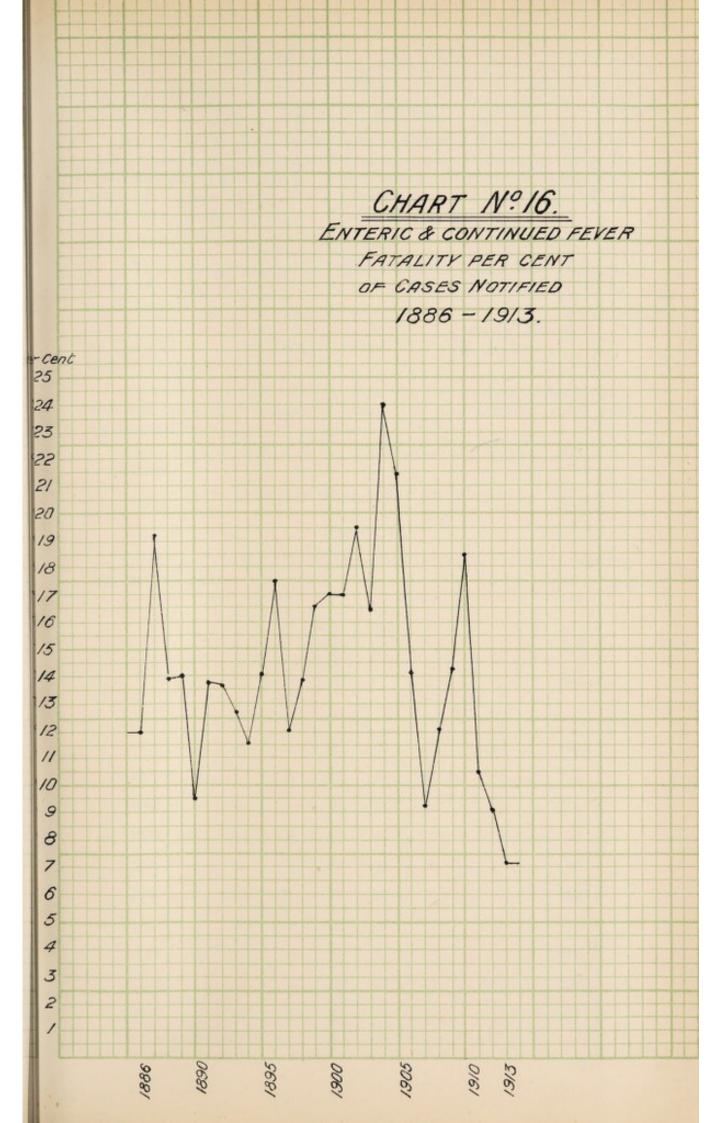














TYPHOID FEVER.

There were only 40 notifications of Typhoid Fever and 2 of Continued Fever received during the year, the lowest number on record for the Borough. There were 3 deaths, giving a death-rate of 0.019 per 1,000 of the population, and a fatality-rate of 7.1 per cent. These figures are also the lowest yet recorded in the Borough.

MEASLES.

354 cases were notified by School Teachers during 1913, compared with 614 during the previous year. The following schools were closed for 3 weeks:—

Deptford Terrace. St. Josephs. Diamond Hall. Redby. Simpson Street. St. Andrew's.

Hendon Valley.

No more cases were reported from the above schools after closure, with the exception of Simpson Street. At this school 2 cases were notified one month after re-opening.

There were 79 deaths, giving a death-rate of 0.52 per 1,000 of the population.

Chart No. 14 shows the death-rate from measles for the last 41 years.

TABLE G.

Table G. gives the DEATHS from Infectious Diseases during the last 10 years.

Years.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria, including Croup.	Whooping Cough.	Enteric Fever.	Typhus Fever.	Continued Fever.	Diarrhoeal Diseases.
1904	2	59	3	28	64	33			163
1905		102	1	32	58	31			122
1906		15	5	40	56	20			174
1907		104	19	48	42	9			65
1908		23	5	29	120	16			93
1909		166	16	32	38	14			53
1910		60	13	23	43	11			77
1911		49	7	21	91	6			211
1912		68	2	21	42	4	2		39
1913		79	19	22	19	3			184

SMALL-POX AND VACCINATION.

There have been 2,993 exemptions granted during the last five years, and a glance at the following table will show that the number of children totally unprotected against Small-pox is steadily increasing every year. I feel that I must continue year by year, in my Annual Report, to sound a note of warning. Many of these unprotected children will most surely suffer when Small-pox becomes epidemic again—as it no doubt will.

Year.	No. o	f Certificates
		granted.
1900	***************************************	49
1901	****	39
1902		40
1903		42
1904		32
1905		53
1906	***************************************	66
1907		175
1908		372
1909		510
1910	***************************************	606
1911		688
1912		817
	Total	.3,489

BOROUGH SANATORIUM REPORT, 1913.

The total number of patients admitted during the year 1913 was 672, of whom 18 died, giving a death-rate of 2.6 per cent.

Of the 672 cases admitted, 559 were notified as suffering from Scarlet Fever; one of these afterwards turned out to a case of Enteric Fever.

Among the 558 Scarlet Fever patients there were 15 deaths, giving a death-rate of 2'6 per cent. from this disease.

76 cases of Pulmonary Tuberculosis were admitted for educational and special treatment, the majority of which improved and afterwards attended as out-patients.

37 cases notified as Enteric or Continued Fever were admitted. On further observation it was found that 13 of these were not suffering from either of these diseases.

The diagnoses were as follows:-

	Number	Resu	LT.
Diseases.	of Cases.	Discharged.	Died.
Broncho Pneumonia	1	1	
Infective Endocarditis	1		1
Tuberculosis	2	2 {improved treat	under special ment.
Enteritis	1	1	
Simple Pyrexia	1	1	he legality
Tonsillitis	1	1	No. of Concession,
Gastro Enteritis	1	1	10000
Meningitis	1	1	
Intestinal Sepsis	1	1	
Diphtheria	1	1	
Gastric Catarrh	2	2	
Totals	13	12	1

Deducting these cases, there were thus 24 cases of Enteric Fever under treatment, of which 2 died, representing a death-rate of 8 per cent.

Out of 5 cases treated at home, one died.

Over 71 per cent. of the cases notified as Scarlet Fever, and 88 per cent. of those notified as Enteric and Continued Fever were admitted to the Sanatorium from the Borough during the year.

TABLE H.

Cases notified from the Borough, and number admitted to the Sanatorium during the year 1913:—

		1912.		1913.			
	ed.		ted to pital.	ed.	Admitted to Hospital.		
Disease.	Cases Notified.	Namber.	Percentage of Total Cases Notified.	Cases Notified.	Number.	Percentage of Total Cases Notified.	
Smallpox							
Enteric Fever	45	38	84.4	40	36	90.0	
Typhus Fever	8	7	87.5				
Continued Fever				2	1	50.0	
Scarlet Fever	228	161	70.6	779	559	71:7	
Diphtheria and Mem. Croup	161			181	***		
Pulmonary Tuberculosis	410	107	25.8	3 57	76	21.2	
Totals	852	313	36.6	1359	672	49.4	

Four cases admitted from the Sunderland Rural District and one from the Port, are not included in the above figures.

The following figures show the death-rate in the Sanatorium for the past ten years:—

1904-Patients admitted 219, of whom 22 died, or 10.0 per cent.

7.1 1905-182, 13 1906 -258, 22 8.2 373, 27 7.0 1907 -15 4.5 1908 -336, 23 6.1 1909-379, 22 7:3 1910-299, 33 348, 12 3.4 1911-315, 1912 --4 1.3

672,

1913-

18

2.6

"

TABLE I.

Shewing the number of cases of Infectious Diseases admitted to the Sanatorium for the last 10 years.

	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Smallpox	34	2		1	1					
Measles				1		1		1*		
Scarlet Fever	94	87	152	297	217	302	242	299	161	559
Diphtheria						2				
Typhus Fever									7	
Enteric and Continued Fever	92	95	106	73	117	74	57	48	38	37
Suspected Epidemic Cerebro-Spinal Meningitis				1						
Erysipelas					1					
Consumption		***							107	76
Totals	219	184	258	373	336	379	299	348	313	672

^{*} Notified as "Scarlet Fever."

BACTERIOLOGICAL REPORT.

The following is a Report of the Bacteriological examinations made by Professor Hutchens during the year 1912:—

DRINKING WATER.

	rter.	arter.	arter.	urter.	Percer	ntages.
CLASS.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter	1912.	1913.
I Containing no	%	%	%	%		
I. Containing no Bacillus Coli in 100 c.c.	34.1	63.3	14.5	25.0	42.0	34.2
II. B. Coli present in 100 c.c.	54.5	34.6	72.7	54:5	42.6	54.1
III. B. Coli present in 10 c.c.	11.4	2.1	12.8	20.5	14.9	11.7
IV. B. Coli present in 1 c.c.					0.2	

THE DURHAM COUNTY, SUNDERLAND AND SOUTH SHIELDS JOINT WATER COMMITTEE.

ANNUAL REPORT OF THE BACTERIOLOGIST.

The examination of the Sunderland and South Shields water supply on behalf of the Joint Committee was begun on the 10th June, 1912, and the present report is a review of the work carried out between that date and the 30th June, 1913.

Samples have been taken more or less regularly every fortnight, and in all 243 have been examined, including 150 from the wells, 88 from the reservoirs, and 5 from a tap in the Company's Offices in Sunderland.

The results are shown in tabular form on page 4.

As regards the total number of organisms present while the figures are not suitable for close analysis, the general result is such as to show quite clearly that the well waters contain far fewer organisms than the water in the reservoirs.

Most importance attaches, as explained in my first quarterly report, to the presence or absence of colon bacilli. Taking first the well waters. A reference to the table will show that "typical" colon bacilli have been isolated at one time or another from all the wells with the exception of Cleadon and Seaham (from each of which only one sample has been examined). Summarizing the figures it will appear that I have isolated colon bacilli from 18 per cent. of the well water samples-generally from not less than 100 cc. of water, but in some cases from 10 cc. (North Dalton, Ryhope, Shotton and Stonygate), and in one case from 1 cc. (Seaton). This is certainly an important fact and one which deserves the attention of the Committee. Mr. Wood, the Company's Bacteriologist, has gone into the question of the effect of rainfall, and has kindly supplied me with an elaborate series of figures. I agree with his conclusion that if rainfall has an effect that effect is very difficult to trace. It must, therefore, be assumed that under normal conditions the degree of filtration is insufficient to remove all the contamination which the rain gathers as it falls on the surface of the ground. It is clear that the amount at present passing the natural filter is not such as in any way to have a detrimental effect upon the public health. But it will not be denied that if the filtration process became materially less efficient a certain risk would occur. It would seem necessary therefore to determine whether as the result of continued pumping the water deteriorates in quality.

Attention has been drawn in the quarterly reports to the fact that the Water Company's results are not in agreement with those I have obtained. The Company have only found colon bacilli on three occasions (2 per cent.) in the well samples. This, however, does not seem to alter the position: it merely means that I have been able to detect the organisms when they have failed in parallel samples. And I believe it was stated by the Company a year ago that they had never found colon bacilli in the well waters. If I am correct in my recollection their present results clearly show that some deterioration of the water is now taking place.

Secondly, as regards the reservoir waters. "Typical" colon bacilli have been isolated from 50 per cent. of the samples. Here again they were not detected in most cases in less than 100 cc. but in some cases (Cleadon, Humbledon Low, Seaham North and Seaton) they were found on occasions in 10 cc. The larger number in the reservoirs as compared with the wells is to be attributed partly to dust partly to birds. The Committee has already decided to take what steps lie in their power to prevent contamination by dust, and it certainly is most desirable that refuse should not be deposited in the neighbourhood of the reservoirs. With a view to the bacterial purification of the water in the reservoir would it be possible for the Committee to suggest to the Company the use of some one or other of the chemical substances which have been advocated for water purification on a large scale?

Table shewing results of the examination of samples of water from June 10th, 1912, to June 30th, 1913:—

Wells.	No. of samples examined.	from which "typical" colon bacilli have been isolated.		Smallest volume of water from which "typical" colon bacilli were isolated.*	Average number of organisms per cc. in four days at 21° c.		
Burdon	14		3	Brufes Tracipales	25.5		
Cleadon	1		0		—		
Dalton	14		2		32.5		
Fulwell	13		1	-	11		
Humbledon	15	2 + +1+ + +	3		22		
North Dalton	15		2	10 cc. (once)	44.5		
Ryhope	17		3	10 cc. (once)	11.5		
Seaham	1		0	1 -/ \	4		
Seaton	14		3	1 cc. (once)	83		
Shotton	15 17	*****	5	10 cc. (twice)	94.5		
Stonygate	14	******	0	10 cc. (once)	16		
Thorpe	14		2		18		
Reservoirs.							
Cleadon	6		2	10 cc. (twice)	729		
Dalton	9		7	_	1140		
Downhill	6		3		681		
Fulwell	6		2		115		
Humbledon High	9		4		194		
Humbledon Low			3	10 cc. (once)	676		
Murton	6		2	-	312		
Ryhope	10		7		704		
Seaham North			2	. 10 cc. (once)	850		
Seaham South	400		1	_			
Seaton			5		444		
Stonygate		******	6	-	918		
Tap Waters	5		3	Total State	51		

*This was 100 cc. where not otherwise stated.

EXAMINATION OF MILK FOR TUBERCLE BACILLI.

makes "Unique" and are	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Positive (T. Bacilli present) Negative (T. Bacilli not found	The same	3 19	21	3 21	17 74
Totals	22	22	23	24	91

Thus Tubercle Bacilli (germs of Consumption) were found in 22'9 per cent, of the total number of samples examined during the year. In the previous year 5'5 per cent, of the total number of samples were Tuberculous.

ACTION TAKEN UNDER SECTION 33 OF THE SUNDERLAND CORPORATION ACT, 1907, PART V., MILK SUPPLY (TUBERCULOSIS).

Seventeen samples of milk taken by the Inspectors in the Borough were found to contain tubercle bacilli on examination by the Bacteriologist to the Corporation.

- 1. This sample was from a farm outside the Borough. Three cows exhibited signs which, in the opinion of Mr. R. S. Dudgeon, M.R.C.V.S., appeared to indicate the presence of Tuberculosis. The owner had the three cows tested with tuberculin, and two were found to react to that test. The farmer promised not to send any milk from the two cows which reacted, and to dispose of them at an early date.
- 2. From a farm outside the Borough. In this case there was only one cow in which there were suspicious signs indicative of tuberculosis. The owner promised not to send any milk from this cow into the Borough, and gave an undertaking to get rid of the animal within 14 days.
- 3. The milk was sent in by rail to a large Dairy Company in Sunderland, the sample having been taken at the Central Railway Station. The Medical Officer of the County in which the farm was situated was communicated with, and he promised to make all possible enquiry into the matter, but said that he was afraid in the case of such a large distributing Company it would be rather late to trace the origin of the tuberculous milk.
- 4. This sample was from a Dairy situated in the Borough; the milk from which the sample was taken had been mixed with milk from another Dairy situated outside the Borough. The cows were examined in both the dairies with the result that 4 in the town dairy and 1 in the dairy outside the Borough were found to exhibit signs which were suspicious of the animals being affected with tuberculosis. The owner of the 4 suspicious cows in the town dairy attended the meeting of the Health Committee and stated that all four cows had been sent out of the district. The farmer from outside the Borough also attended the meeting, and gave an undertaking not to supply within the Borough any milk from this cow.
- 5. From a farm outside the Borough. Four cows were found in this case exhibiting signs of Tuberculosis. An order was made upon the farmer requiring him not to supply within the Borough any milk from these six cows. The cows were ultimately removed from the farm—destination unknown.
- 6. This sample was taken at the Central Railway Station and was from a farm at a considerable distance from Sunderland. On writing to the Medical Officer of the County in which the farm was situated, it was ascertained that the supply of milk from this farm to Sunderland had been stopped.

- 7. From a farm within the Borough. There were two suspicious cows. An order was made upon the farmer requiring him not to supply milk within the Borough from these cows.
- 8. From a dairy within the Borough; the dairyman kept no cows, but was supplied by a farmer outside the Borough. The Veterinary Surgeon examined the cows at the latter place and found one with an indurated udder, but was informed that this cow was not in the milking on the day when the sample was taken. The carcase of a cow from this farm, however, had recently been slaughtered and found to be badly affected with tuberculosis. It is possible, therefore, that this cow's milk may have been the cause of the sample being tuberculous.
- Farm outside the Borough. Three cows appeared to be affected. The usual Order was made not to supply milk within the Borough.
- 10. Farm outside the Borough. The Veterinary Surgeon examined the udders of 22 cows, but found no definite symptoms of tuberculosis. The Committee passed a resolution that no action be taken.
- 11. Farm outside the Borough. There were two suspicious cows, and the owner agreed to have them tested. This was done and one re-acted. An order was made with respect to the re-acting cow.
- 12. From a dairy within the Borough, the milk of which was supplied from a farm outside the Borough. The County Medical Officer was informed, and he promised to take whatever steps he could to prevent the milk from any suspected animals being sent into Sunderland. The Medical Officer further reported two of the cows exhibited suspicious signs, and that the sale of milk from these cows had been stopped.
- 13. Farm outside the Borough. One suspicious cow was found on examination. The usual order was made in respect to this cow.
- 14. Farm outside the Borough. Two suspicious cows were found. The owner appeared before the Health Committee, and an order was made in respect to one of the cows.
- 15. Sample taken from the Railway Station from milk supplied by a farmer in Dumfries. The County Medical Officer of Dumfries was communicated with, and caused 32 cows at this farm to be tested with tuberculin, 15 of which re-acted. Samples of milk were taken from 9 of the 15 cows (the other 6 being dry) and one was found to give tuberculous milk. The animal was slaughtered and primary tuberculosis of the udder was found. The County Medical Officer intimated that the farmer would be warned not to send any milk from the 6 cows when they again came into the milking until samples had been taken and examined.

- 16. From a dairy in the Borough, the milk being supplied from a farm outside the Borough. The Veterinary Surgeon went to this farm and examined the udders of 20 cows, 18 of which were in the milking when the sample was taken. One exhibited signs suspicious of tuberculosis. The Committee made no order, but instructed the Town Clerk to inform the Durham County Council of the facts.
- 17. From a dairy outside the Borough. This dairyman kept no cows, but was supplied by a farmer outside the Borough. One cow was found which had a very bad induration of the right hind quarter of the udder. It was alleged, however, that the milk from this cow was not included in the sample. In view of the fact that no other suspicious cows were found an order could not be made. The County authorities were notified and acquainted with the facts of the case. The above cow was slaughtered and found to have a tuberculosis udder.

EXAMINATION OF SWABS FOR DIPHTHERIA.

Summers of Valencians of at the Health Cales of	lst Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Diphtheria Bacilli found	50 67	52 12 5	41 232	56 342	199 768
Totals	117	177	273	398	965

4'8 per cent. of the Scarlet Fever cases admitted to the Borough Sanatorium were "Positive," i.e., were Diphtheria "Carriers."

EXAMINATION OF BLOOD FROM PATIENTS SUSPECTED TO BE SUFFERING FROM ENTERIC FEVER (GRUBER-WIDAL REACTION).

	lst Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Positive Negative	14 12	1 16	4 12	10	29 48
Totals	26	17	16	18	77

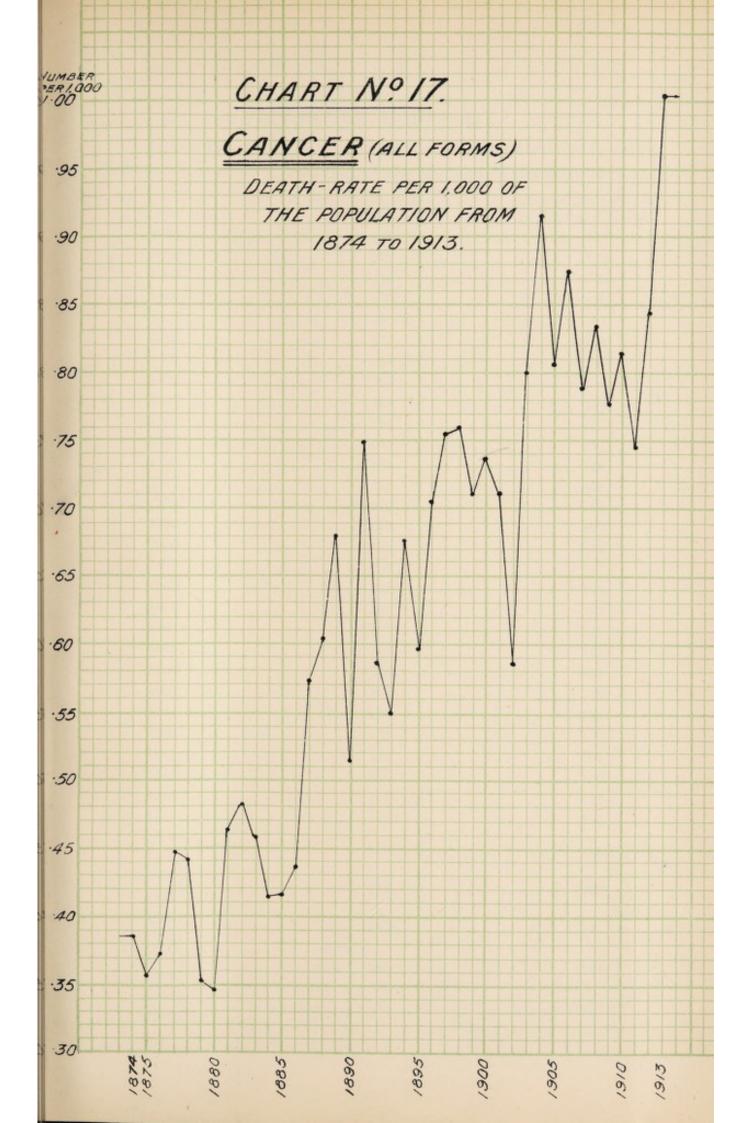
EXAMINATION OF SPUTUM IN SUSPECTED CONSUMPTION.

betometone trail retorns one of	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Totals.
Tubercle Bacilli present Tubercle Bacilli not found	19	32 50	17 44	18 65	86 245
Totals	105	82	61	83	331

THE RAINFALL IN 1913.

On page 78 will be found the Summary of Meteorological Observations, a record of which is kept at the Health Office. The readings of atmospheric pressure are taken at the office; the othedata are obtained from the various instruments in Mowbray Park.

The total amount of rain which fell during the year amounted to 21 53 inches, being 4 05 inches below the average.





INFANTILE MORTALITY.

The following Table indicates the Infantile Mortality figure in Sunderland contrasted with that of England and Wales from 1885 :—

	Infantile Sun	Mort		Mortality in and Wales.
1885	******************* *****	156		138
1886	***************************************	152		149
1887		152		145
1888		135		136
1889		182		144
1890		175		151
1891		178		149
1892		159		148
1893		189		159
1894		168		137
1895		191		161
1896		161		148
1897		168		156
1898		202		160
1899		175		163
1900		169		154
1901		179		151
1902		153		133
1963		159		132
1904		165		145
1905		143		126
1906		140		132
1907		130		115
1908		144		121
1909		136		109
1910		128		106
1911		151		130
1912		115		95
1913		135		
1889)				
1893	Average	177		150
1894)		100		1.50
1898	,,	178		152
1899)		167		147
1903	. ,,	107	***************************************	147
1904)		144		128
1908	,,	144		120
1909)		133		110
1913)	,,	200		

PRINCIPAL CAUSES OF INFANTILE DEATHS:— WHOLE BOROUGH.

CAUSE OF DEATH.	Number of Deaths.	Death-rate per 1,000 Births.
Measles	12	2.5
Diarrhoeal Diseases	115	24.0
Congenital Defects	12	2.5
Atrophy, Debility, and Marasmus and Debility at Birth	119	24.8
All Tuberculous Diseases	13	2.7
Premature Birth	116	24.2
Simple Meningitis	14	2.9
Convulsions	21	4.3
Bronchitis	76	15.8
Pneumonia	65	13.5
Suffocation (over-laying)	6	1.2
Syphilis	11	2.3
Whooping Cough	11	2.3
Gastritis	14	2:9

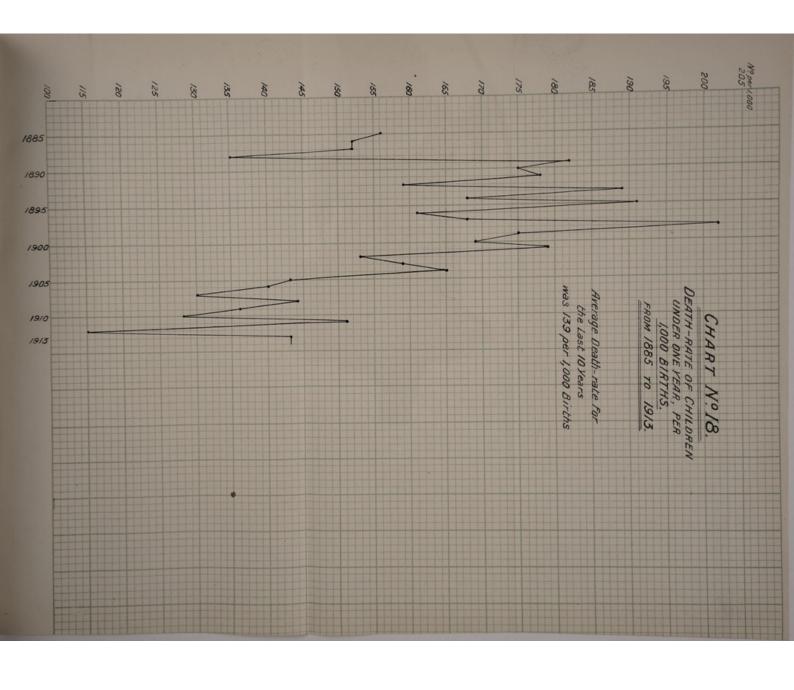
SUNDERLAND CORPORATION ACT, 1907. NOTIFICATION OF BIRTHS.

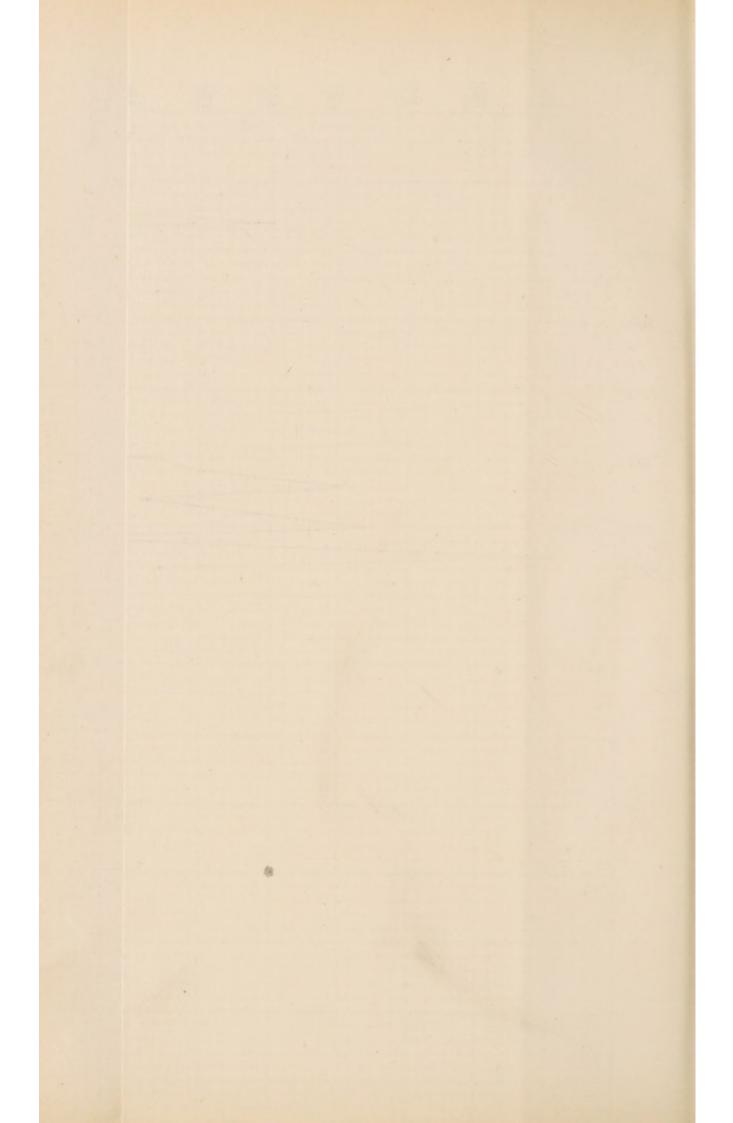
The Births which took place during the year amounted to 4,792; of these, 4,518 were notified to me under the provisions of the above Act, the number so notified being at the rate of 94'3 per cent.

In the East District 1,826 births occurred, of which 1,737 were notified = 95'1 per cent.

In the West District 1,880 births occurred, of which 1,794 were notified = 95'4 per cent.

In the North District 1,086 births occurred, of which 987 were notified = 90'9 per cent.





HEALTH VISITORS' REPORT.

The following is a summary of the work done by the Health Visitors during the year, compared with the previous year:—

	Year 1913.	Year 1912.
Visits to Premises where children suffered from Infectious Diseases	928	675
Cases of Puerperal Fever visited	2	10
Number of Visits to Consumptive Cases	484	396
Number of Re-visits to Consumptive Cases	1682	1262
Visits to Infants immediately after Birth	4137	4260
Number of Re-visits to Infants	7512	7811
Visits to houses where Infants had died under the age of one year	337	413
Visits to Boarded-out children, undertaken at the request of the Board of Guardians	219	265
Visits to Midwives	146	234
Total	15447	15326

REPORT OF THE HEALTH VISITORS.

To the Medical Officer of Health.

I beg to submit the following report of work done by the Health Visitors during the year 1913.

BIRTHS.

During the year 4,518 births were notified in the Borough. Of these 4,137 were visited by the Health Visitors and advice given, also printed instructions left as to the care and nutrition of the child.

Breast feeding is always advised as paramount and feeding at regular intervals as of great importance. Should the mother's supply of milk appear inadequate she is recommended a suitable diet for herself before resorting to hand-feeding. Should hand-feeding be necessary, cow's milk—boiled—is always advised. Advice is also given as to the care of the milk, the kind of bottle to be used, importance of the daily bath, a separate cot for the child, fresh air and clothing.

RE-VISITS.

7,512 re-visits were made to children under one year, this being the period a supervision is kept over the child to watch its progress and reiterate the advice already given. In cases of overcrowding, uncleanliness or wilful neglect of the child—when the influence of the Health Visitor failed—these cases were reported to the Inspectors for this work and dealt with accordingly.

BABIES' WELCOMES.

There are three Babies' Welcomes in the Borough, which are doing excellent work in the interest of child life:—

The Pioneer, Pottery Buildings.—From January, 1912, to December, 1913 (two years), there were 170 babies weighed. Of these only three have died. One had a congenital defect, and two were premature twins. These lived for six and nine months respectively and were hand-fed owing to the debility of the mother.

I attend this Babies' Welcome on the third Monday afternoon in each month, weigh the babies, give advice to any who request it, and afterwards speak at the Women's Meeting. Often there is an attendance of over 200 women. I cannot speak too highly of the good work being done among the women and children of the East end of the town by Miss Mounsey and her staff of willing helpers.

Durham Road Babies' Welcome I visit on the second Monday afternoon in each month, and render the same service there. The number here is not so large, the attendance at the Meeting being from 70 to 100.

Guild of Help Babies' Welcome.—Miss Lee and myself have occasionally attended this Babies' Welcome and assisted in its work. Arrangements have now been made whereby one of the Health Visitors will be present at each weekly meeting and render any service that lies within her province.

Addresses have been given during the year at the following places:—

Pottery Buildings	Women's	Meetin
Durham Road	,,	,,
Whitburn Street	,,	,,
Southwick Cong.	23	,,
Cleveland Road	,,	"
Dock Street	>>	>>
Ewesley Road	,,	,,,
Crescent Row	,,	,,
Sans Street	,,	33.
Prospect Row	"	"
Guild of Help	>>	,,

The subject taken being as follows:-

Preservation of Infant Life.

Hygiene of Pregnancy.
Care of the Newly-Born.
Infant Feeding.
Infantile Diarrhoea.
Prevention of Bronchitis.
Suitable Clothing for Infants.
Rickets, Cause, Symptoms and Prevention.
Infectious Diseases.
Cause and Danger of Mouth Breathing.

Prevention of Consumption.
Hygiene and Temperance.
Care of Milk and Other Foods.
Cancer, its Early Recognition.

SUPERVISION OF MIDWIVES.

There were 32 midwives who notified their intention to practice in the Borough during 1913. The qualification of these midwives is as follows:—

Central Midwi Glasgow Mate Bona-fide*	ernity	Hospi	ital	 1
East District				 18
West ,,				
North "				 3

Of the 4,137 births visited by the Health Visitors 2,613 were attended by midwives:—

East District													1,299
West ,,	,												803
North "						 							511

A strict supervision has been kept over the work of the midwife, and any neglect of duties has been dealt with.

During the year there have been received from the midwives 148 notifications of calling in medical aid, the causes being the following:—

Prolonged Labour 49	Lacerated Perinæum 4
Still Birth 26	Placenta Prævia 3
Premature Birth 14	Hæmorrhage 3
Weakness of Mother 11	Transverse Presentation 3
Weakness of Child 11	Eclampsia 2
Adherent Placenta 8	Cord Presentation 1
Ophthalmia Neonatorum 7	
Breech Presentation 4	Deformity of Child 1

* Only a very few of the bona fide midwives are able to keep a satisfactory record of the pulse and temperature. This often necessitates frequent re-visits by the Health Visitors during the puerperium.

There were 146 visits paid to midwives during the year for the reasons given:—Inspection, enquiries in connection with puerperal fever, still-births, ophthalmia neonatorum, illness of mother of child.

INSPECTION.

The homes of all the midwives were found to be clean and tidy.

All the midwives wear washing dresses, and on the whole are considered satisfactory in this respect.

Bags and appliances in three cases were found unsatisfactory. These, however, were greatly improved before the notification of intention to practice for 1914 was accepted.

In two cases the registers were found not entered up to date. One was that of an aged midwife, over 70 years of age, who can neither read nor write. The other was wilful neglect; for this and other evidences of slackness in her work she was called before the Local Supervising Authority, and censured.

Since the coming of the maternity benefit, there has been very little trouble on account of "Handy Women" attending confinements. There have been a few cases at the East end of the town and Low Pallion, both districts lamentably short of medical and midwifery aid.

The mode of procedure has been:—After the completion of the case a doctor was sent for, a plea of emergency put in, and he for a small fee signed the maternity benefit form, and held himself nominally responsible for the period of the puerperium. Unfortunately this covered the uncertified midwife. Before the end of the year, however, the practice virtually ceased.

TUBERCULOSIS.

At the end of the year there were 519 cases of tuberculosis being visited by the Health Visitors, distributed as follows:—

East District	 194
West ,,	 176
North	 149

During the visit instructions were given verbally and by leaflet on the prevention of infection.

Insanitary conditions and structural defects were noticed and reported to the Medical Officer of Health.

Where possible a history of the disease was obtained and an effort made to find out the probable source of infection. Contacts were noticed, and where there appeared to be symptoms of tuberculosis, persuasion was used to seek medical aid. In cases among the very poor the help of the Relieving Officer was sought.

Sputum flasks and disinfectant were also supplied.

Of the cases notified during 1913, 137 died before December 31st.

The occupation of the sufferers notified during the year is as follows:—

Children under Five Years 6:	Painters 4
Shipyard Workers and	Glassmakers 4
Labourers 7	Hawkers 4
Housewives 60	Ropery Workers 4
Shop Assistants 28	
Domestic Servants 1-	
Enginemen 18	
Laundry Workers	
Miners	
	Blacksmiths 2
Clerks	7 Sweep 1
	Bricklayer 1
Agents	Gardener 1
Coal Trimmers	5 Plumber 1
School Teachers	Paper Mill Worker 1
Dressmakers	French Polisher 1
School Children19	All others of no stated occupation.

I am, Sir,

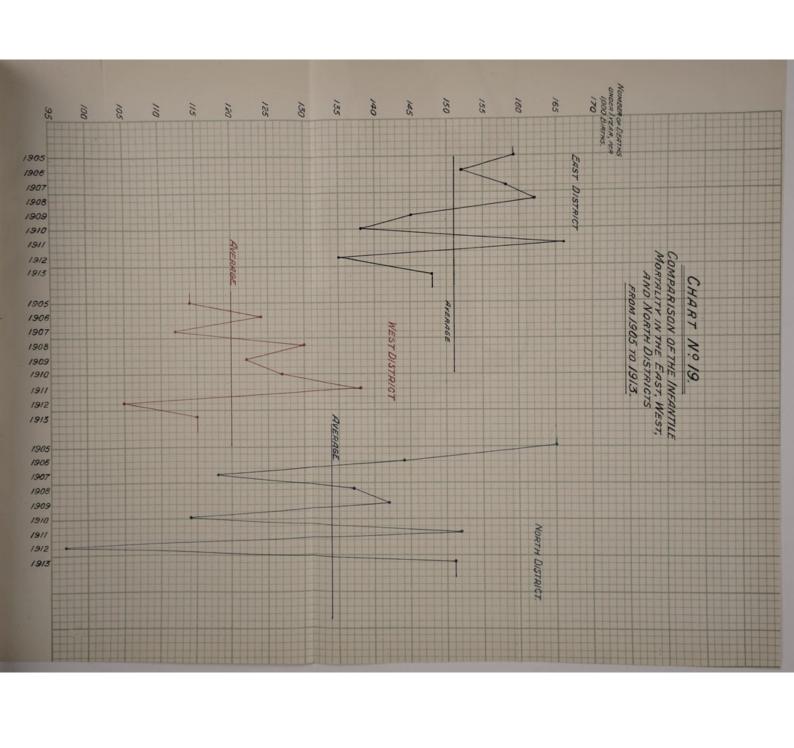
Your obedient Servant,

MARY E. BARBER.

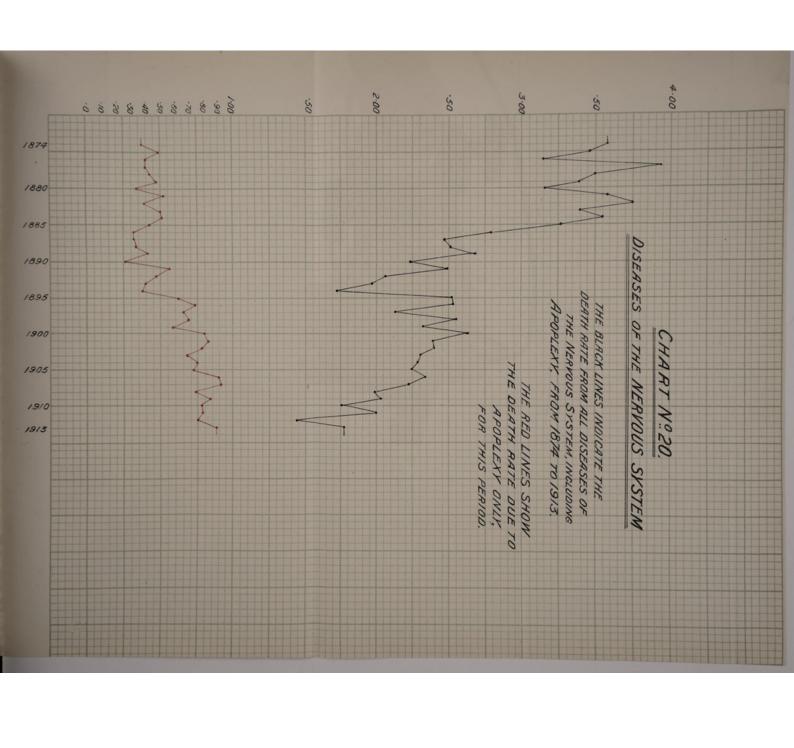
DISTRICTS COMPARED.

The following Table shows, for the East, West, and North Districts, the death rate from the principal causes in children under the age of one year per 1,000 births.

Cause of Death.	East District.	West District.	North District.
Measles	2.2	2.6	2.8
Diarrhoeal Diseases	26.8	16.9	31.2
Congenital Defects	3.3	2.1	1.8
Gastritis	3.8	2 6	1.8
Atrophy, Debility and Marasmus and Debility at Birth	21.9	24.4	30.3
All Tubercular Diseases	3.8	0.5	4.6
Premature Birth	25-2	24:9	21.1
Syphilis	3.8	1.5	0.9
Simple Meningitis	3.8	0.0	6.4
Convulsions	4.9	1.5	8.2
Bronchitis	22.9	11.6	11.0
Pneumonia	13.7	13.2	13.8
Suffocation (over-laying)	16	1.5	0.0
Whooping Cough	3.8	1:1	1.8
All Causes	148	140	146









The following Table shows the Drath-rate of children under the age of 1 year per 1,000 births, from all causes and from the Principal causes of Death in the several Wards of the Borough.

West Ward.	0.0	13.6	3.4	23.8	0.0	23.8	0.0	0.0	8.9	10-2	0.0	0.0	62.5
Thornhill Ward.	Ç1 80	8 5	8.0	24.7	0.0	50.6	0.0	1.4	0.0	19.4	0.0	0.0	2-66
Sunderland Ward.	0.0	13-2	5.3	26.4	10.5	31.6	5.3	65.00	56.4	15.8	5.6	5.3	155.7
Saint Michael's Ward.	0.0	15.5	0.0	31:1	0.0	15.5	0.0	5.5	10.4	5.5	0.0	5.5	9.201
Roker Ward.	4:1	4:1	0.0	12:3	Ç1 90	16.4	8.5	8.5	4:1	12.3	0.0	8.5	104.1
Park Ward.	6.9	17-2	6.9	30.8	0.0	17-2	3.4	3.4	24.0	0.0	0.0	3.4	120.3
Pallion Ward.	8.7	16.9	0.0	25-3	0.0	14.1	0.0	0.0	2.8	14:1	8.5	0.0	87.5
Monkwearmouth- Shore Ward.	8.7	33.4	8.5	36-2	8 61	8.12	8.4	8.4	20.2	19.4	0.0	8.7	172.4
Monkwearmouth Ward.	65.45	38.2	0.0	29.9	0.0	17:1	4.3	12.8	4.3	12.8	0.0	0.0	132.5
Hendon Ward.	0.0	29.7	3.7	14-9	7.0	3.7	0.0	7.4	9.81	11.1	3.7	4.7	2.111
East Ward.	3.1	40.0	0.0	15.4	3.1	27.7	6.5	0.0	24.6	43.1	0.0	0.0	2.841
Deptiord Ward.	6.6	29-2	5.8	26-2	5.9	26.2	0.0	0.0	9.11	20.4	0.0	0.0	140.3
Colliery Ward.	0.0	47.4	3.0	39.5	7.9	19-7	3.9	3.9	6.1	7.9	0.0	0.0	162.0
Central Ward.	0.0	46.9	0.0	36.1	0.0	25.3	3.6	0.0	21.7	3.6	36	0.0	173.3
Bridge Ward.	2.5	15.4	0.0	19.8	0.0	39.6	0.0	61	22.0	13-2	4.4	2-5	142.8
Bishopwearmouth Ward.	9.9	17.5	3.5	2.0	3.5	45.0	3.5	14.0	910	3.2	0.0	2.0	1438
Cause of Death.	Measles	Diarrhoeal Diseases	Congenital Defects	Atrophy, Debility and Marasmus and De-	All Tuberculous Diseases.	Premature Birth	Simple Meningitis	Convulsions	Bronchitis	Pneumonia	Suffocation (overlaying)	Whooping Cough	All Causes143 8

NEW HOUSES.

The following is the Report of the work performed by the Inspector of Drains and Sanitary Fittings in New Houses during the year:—

Number of visits made	4,596
Number of Tests applied to Drains and Sanitary Fittings:—	
Water Tests	1,847
Smoke Tests	229
Total	2,076
Number of Certificates sent to the Borough Engineer	18
Number of cases where it was found necessary to order concrete foundations	
for drains	447
Approximate length of drains laid	18,276 feet.

REPORT ON CORPORATION PATIENTS SENT TO THE STANHOPE AND WOLSINGHAM SANATORIA.

Since June, 1901, 109 patients have been treated in the Stanhope and Wolsingham Sanatoria as Corporation Patients.

Of these, 61 are dead, 10 are well, 11 fairly well, 3 are ill, and 24 cannot be traced.

Of those who died, the average duration of life after discharge from the Sanatoria was $1\frac{3}{4}$ years.

Of the 24 still under observation:-

One has be	en at	work for	124	years.
One	,,	**	$11\frac{1}{2}$	"
One	,,	,,	82	,,
One	,,	,,	73	,,
Three have		,,	71	"
Two have		,,	5	,,
Two have		1,	41	,,
Three have		,,	$2\frac{1}{2}$,,
Three have		,,	21	,,
One has	,,	,,	$1\frac{1}{2}$,,
One has	92	59	1	"
Two have		,,	6 I	nonths.

The remaining 3 are too ill to work,

HOUSING (INSPECTION OF DISTRICTS) REGULATIONS, 1910.

Number of dwelling-houses inspected under and for	
the purpose of Section 17 of the Act of 1909	1,018
Number of dwelling-houses which on inspection were	
considered to be in a state so dangerous or injurious	
to health as to be unfit for human habitation	123
Number of Representations made to the Local Author-	
ity with a view to the making of Closing Orders	123
The number of Closing Orders made was	121
Number of dwelling-houses in which defects were	
remedied without making Closing Orders	2
Number of dwelling-houses which, after the making	
of Closing Orders were put into a fit state for human	
habitation	46
Under consideration, or repair	75

The general character of the defects found consisted of obstructive outbuildings, faulty roofs, damp walls, dilapidated floors and ceilings, windows which were without sash-cords and which could not be opened, want of proper air-space at the rear of the house, insufficient lighting, and defective yard pavements.

The administration of the Act has been generally effected without friction and has been productive of great improvements from a Public Health point of view in the localities where it has been necessary to put it in force.

THE HARRISON BUILDINGS.

The Tenth Annual Report of the Harrison Buildings, made by the Superintendent, Mr. Joseph D. Ward.

On December 31st, 1912, there were 80 houses occupied, viz., 34 consisting of three rooms, and 46 consisting of two rooms each. Four houses were unoccupied, viz., 2 of three rooms and 2 of two rooms each, as against 10 at the end of 1912.

The rent collected during the year amounts to £906 2s. 5d., compared with £695 19s. 3d. in 1912, an increase of £210 3s. 2d., making the total amount of rent collected since the houses were opened to be £6,299 11s. 8d.

The arrears of rent amounted to £11 12s. 10d., as against £10 2s. 4d. for last year, an increase of £1 10s. 6d.

The following Table shows the amount of rent collected for each year, and the arrears of rent:—

Year.	Rent Collected.	Arrears.
*1903	£ s. d. 65 0 11	£ s. d.
1904	492 6 7	0 17 6
1905	709 4 3	3 9 3
1906	889 15 0	1 13 0
1907	867 16 3	8 14 8
1908	726 17 5	33 9 1
1909	403 5 0	20 6 10
1910	289 7 8	19 15 6
1911	253 17 4	10 1 10
1912	695 19 3	10 2 4
1913	906 2 5	11 12 10
Total	£6299 11 8	

^{*} The buildings were opened in September, 1903.

Of the 74 tenants at present occupying houses :-

4 have been in for 10 years.

2 ,, ,, 8 ,,
1 has ,, ,, 7 ,,
4 have ,, ,, 6 ,,
25 ,, ,, 2 ,,
16 ,, over 1 year.
28 ,, under 1 ,,

There have been 19 births and 7 deaths during the year 1913, and 2 cases of Infectious Diseases (Scarlet Fever).

The population of the houses at the end of 1913 numbered 333 persons, an average of 17 persons to every occupied room.

The following Table shows the population, number of Births, Deaths and cases of Infectious Disease occurring since the opening of the Buildings.

Year.	Population.	Births.	Deaths.	Infectious Diseases.
1904	234	10	4	Nil.
1905	305	15	4	Nil.
1906	335	17	7	12
1907	286	20	4	4
1908	190	14	2	Nil.
1909	182	11	3	1
1910	84	3	2	2
1911	195	3	1	Nil.
1912	316	16	5	Nil.
1913	333	19	7	2

The Medical Officer of Health wishes to add that the Superintendent has performed his duties in his usual conscientious and efficient manner.

CLEANSING DEPARTMENT, 1913.

SUPERINTENDENT'S REPORT.

RETURN shewing the number of HOUSE SCAVENGING LOADS REMOVED, INHABITED HOUSES, Etc., for ten years (1904—13):—

Year.	No. of Inhabited Houses.	No. of Horses' days' work for each year.	Average number of Horses employed per working day.	No. of Cart Loads of Refuse removed.
1904	22,798	13,034	41:78	68,036
1905	23,105	13,196	42.30	68,692
1906	23,455	13,170	42 21	67,234
1907	23,694	13,154	42.16	66,915
1908	23,899	13,077	41:12	66,305
1909	No record.	12,590	40:35	(53 weeks) 63,812
1910	de.	12,320	39-49	61,933
1911	do.	12,602	39-63	63,066
1912	do.	12,259	39 29	(53 weeks) 61,906
1913	do.	12,191	39:07	61,113

The Department was responsible for the cleansing of, approximately, 4,730 ashpits and privy pans, 17,320 moveable bins, 2,870 fixed bins, and the pails, tubs, etc., of 330 houses at the East End.

The ashpit work is dealt with by a night staff, and the ashbins by a day staff.

In addition to the above, a special day collection is made from shops, warehouses, and offices of waste paper and other easily combustible refuse, in sacks. 14,727 loads of street sweepings were removed during the year under review. 17,045 van loads of water were distributed on the streets and roads, in addition to the watering of the tram routes by the electric tram tank. For the latter service 5s. per hour is paid to the Tramways Department.

55,086 cart loads of refuse were sent to sea by hoppers. The carcases of 512 dogs were removed from the Police Station, East Cross Street, and destroyed by fire.

In addition to the loads of house scavenging refuse referred to in the Table, 67,583 sacks of waste paper were collected and burnt or otherwise disposed of, and 1,162 mattresses were collected and burnt.

During the year, 372 ashpits were specially cleansed prior to their abolition.

4,461 loads were removed from street gullies and screen chambers. The daily average number of horses employed on this work was at the rate of $4\frac{1}{2}$.

The daily average number of horses employed in cleansing, watering, and sanding paved streets and macadam roads was at the rate of 16.

393 loads of grit were distributed on the wood block pavements during frosty or "greasy" weather.

In addition to the work above enumerated, the Department is responsible for the efficient daily cleansing of the 51 Public Urinals and 9 Public Water Closets in the Borough.

SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1913.

-			
Salver of	N.W.		1 :
		4 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	The state of
/ind.	8. W.	01-50040000040	lasi
of M	oć.	ο πο κο κο κο κο κο κο φ	1 :
Direction of Wind Number of Days.	2d 00	01 02 22 72 4 23 4 20 9 21 : 03	1 :
Direc	pi pi	: :- : 4 - 4 - 8 & - : 8	:
poli baa	N.E.	-ro: 440000ro:: 80	1:
Soling In	ż	:::400000	lan ist
.[[s]nis	H latoT	3.94 2.43 3.24 3.24 3.39 3.24 3.39 3.24 1.16 1.16 1.17 1.17	:
.llel nisr a	No. of days	138 138 138 138 138 138 138 138 138 138	1
.Vribian	Иевъ И	8888 8888 7777 7777 845 855 855 855 855 855 855 855 855 855	85.4
perature eet.	nean TeaM t t to	424.44.45.25.45.45.45.45.45.45.45.45.45.45.45.45.45	48-5
	mean Ten f f fo	38.5 39.0 39.6 47.6 54.3 56.2 4.7 51.1 42.1 42.1	47.5
.anmiail	Mean of M	35.9 35.9 36.1 49.6 49.9 51.1 51.5 46.5 46.5 46.5 46.5 46.5 46.5 46.5 46	43.1
.anmixel	Mean of A	44619 5074 5075 5075 5077 5077 5077 5077 5077	52.4
perature.	Меап Теп	28. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4	48.9
neter.	norsa	29.762 30.107 29.762 29.843 30.013 30.055 30.055 30.055 30.055 30.055 30.055 30.055 30.055 30.055	29.918
	Months.	January February March April May June July August September October November December	Averages

* The average rainfall for the last 39 years is 25.58 inches.

Annual Report of the Medical Officer of Health for the Year 1913 for the *County Borough of Sunderland on the administration of the Factory and Workshop Act, 1901, in connection with Factories, Workshops, Workplaces, and Homework.

1.—Inspection of Factories, Workshops, and Workplaces.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

	Number of			
Premises.	Inspections	Written Notices.	Prosecu-	
(1)	(2)	(3)	(4)	
Factories (Including Factory Laundries)	376	30		
Workshops(Including Workshop Laundries)	1508	95		
Workplaces	214	29		
Total	2098	154		

2-Defects found in Factories, Workshops, & Workplaces.

		ber of De	fects.	Number	
Particulars.	Found.	Re- medied.	Referred to H.M. Inspec- tor.		
(1)	(2)	(3)	(4)	(5)	
Nuisances under the Public Health Acts:—* Want of cleanliness Want of ventilation Overcrowding Want of drainage of floors Other nuisances Sanitary Accommodation. Unsuitable or defective not separate for sexes Offences under the Factory and Workshop Acts:—	55 2 3 6 65 9 5	55 2 3 6 6 65 8 5			
Illegal occupation of underground bake-					
houses (s. 101) Breach of special sanitary requirements for bakehouses (ss. 97 to 100) Other offences:— (Excluding offences relating to outwork which are included in Part 3 of this	40	40	5		
Report).	23	23			
Total	209	208			

Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act,
 1901, as remediable under the Public Health Acts.

Nature of Work. Nature of Work. Making, etc. Cleaning and Washing File Making Fursts and Grapuels Courtains and furn, hangings File Making Furst, and Chains Barss and Brass articles Furst, bulling Court Gear Courtains and Grapuels Furst, and Chains Courtains and Grapuels Furst, and Chains Bars and Grapuels Courtains and Grapuels Furst, and Chains Courtains and Grapuels Furst, bulling Courtains and Grapuels Courtains and Grapuels Courtains and Grapuels Courtains Courtai

The state of the s	153	-	113			1111					-		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	1000
The state of the s					1000			411	1111						
Stuffed Toys			***			****	***	***							
Basket Making		:		***		:			:		:			:	
Chocolates and Sweetmeats	****	****		:		:				:	:	:	:	:	:
Cosaques, Christmas crockers, Christmas														10	
stockings, &c.	****	::	::		::	:	:		:	:	:			:	:
Textile Weaving	:	:		:	:	-	-	:	:	:	:	:	:	:	:
		-	-			-	-		-	1	1	1			
Total	138	129	143	::		:	138			C)	07		-	-	

"If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class only, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

**FThe figures required in columns 2, 3 and 4 are the total number of the lists received from those employers who comply strictly with the statu ory duty of sending two lists each year and of the entries of numes of outworkers in those lists. The entries in column 2 must necessarily be even numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworkers' name will often be repeated

	01					
1516	No.	8	53	19	:	4
5-OTHER MATTERS.	Class: (1)	Matters notified to H.M. Inspector of Factories— Failure to affix Abstract of the Factory & Workshop Acts (s. 133, 1901)	NE	Workshop Acts (s. 5, 1901) J to H.M. Inspector Other	Underground Bakehouses (s. 101) :- Certificates granted during the year	In use at the end of the year
	(2) No.	151	120	62	585	1005
4REGISTERED WORKSHOPS.	Workshops on the Register (s. 131) at the end of the year. (1)	Bakehouses Blacksmiths	Boot and Shoe Makers and Repairers	Tailors Other Workshops, including (Factories 262) Domestic Work-	shops and Workplaces	Total number of Workshops on Register

SALE OF FOOD AND DRUGS ACTS.

Report of the Public Analyst appointed for the County Borough of Sunderland upon the articles analysed by him under the above Acts.

I.—THE QUARTER ENDED 31st MARCH, 1913.

	Oliner Eller	3	1.1.1.1.011, 1	3-3
Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	whether t Genuine or A if Adultera the nature	nalysis: Showing the sample was adulterated, and, ted, what were and extent of dulteration.	Observations.
Milk 48	By an Officer acting under direction of the Boro' Council.	Genuine		All milk, but- ter, and margarine samples ex- amined for preserva- tives
No. 34		non-fatt	20 per cent; in y solids 12.4 per	
,, 42		Def. in fat,	11 6 per cent	
. ,, 47	10 E 50	do.	3.3 per cent	J. P. L.
,, 49		do.	13.3 per cent	
" 54 " 57			3.3 per cent -fatty solids, 2.3	
" 59		Def. in non	-fatty solids, 5.9	10
,, 60		per cent Def. in fat,	13.3 per cent	
" 61 " 63 " 69		do. do. do. in non- per cent	21.7 per cent 5.0 per cent 8.3 per cent.; fatty solids, 4.6	
., 72	2 1 1 1 1	Def in fat	3.3 per cent	1
" 73 " 81		do. in non-	16.6 per cent 10.0 per cent; fatty solids, 13.2	
,, 84 ,, 85		Def. in fat,	6.6 per cent 5.0 per cent	

QUARTER ENDING 31st MARCH, 1913.—(Continued.)

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
No. 110 ", 113 Butter		Def. in non-fatty solids, 7.6 per cent. Def. in fat, 3.3 per cent; in non-fatty solids, 12.7 per cent. Genuine All contained boric acid, under 0.5 per cent. doubtful Genuine Genuine, contained 0.21 per cent. boric acid (under de- clared percentage, but above limit of 0.25 per cent. suggested by De- partmental Commission on preservatives) Contained 0.43 per cent. boric acid (under de- clared percentage, but above limit of 0.25 per cent. suggested by De- partmental Commission on preservatives)	Informal do. do. do. Doubtful Informal
Compound Liquorice		Genuine Genuine Contained 3 pts. calc. and 2 pts. carb. Magnesia Genuine Genuine Contained Mineral Oil instead of Olive Oil Contained Mineral Oil and def. in Camphor, 50 per cent. Genuine Genuine Genuine Genuine, free from lead and arsenic Genuine, free from lead and arsenic	Doubtful Informal Informal do.

QUARTER ENDING 31st MARCH, 1913.-Continued.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Borax 1 Tartaric Acid 1 Carbonate of Magnesia 1 1 Cod Liver Oil 1 Castor Oil 2 Saffron 1		Genuine Genuine, free from lead and arsenic Genuine do. do. do.	Informal do. do. do. do. do. do. do.

 Genuine Samples
 86

 Non-Genuine Samples
 21

 Doubtful
 do.
 7

 —
 114

2.—QUARTER ENDED 30th JUNE, 1913.

Article submitted for Analysis.	sample was sub- mitted to the Ana- lyst by an Officer acting under direc- tion of a Local Authority, under Section 13 of Act,	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
	and if so, the name of such Authority.		
Milk42	By an Officer acting under direction of the Boro' Council.	Genuine	All milk and butter sam- ples exam- ined for pre-
No. 121	arramakisans t	Def. in fat, 5.0 per cent	servatives
" 122 " 200		do. 8.3 per cent Def. in non-fatty solids, 4.9 per cent	
" 218 " 221		Def. in fat, 3.3 per cent do. 13.3 per cent	
Skim Milk		Genuine	10 of these informal
Nos. 156, 170, 177		Contained below 0.5 per cent. of boric acid, hence doubtful genuineness	Informal
Nos. 191 195, 196		Contained respectively 0.06, 0.05, 0.06, per cent of boric acid, sold as "fresh"	da
Lard		Genuine Genuine	do. do. do.
162	7 - 3 - 3	Contained respectively 10.5, 3.1, 5.1 per cent. of fat; far below what cheese	
Baking Powder5		should contain	do.
' Fruit Wine," No. 190 Sausage		Contained no fruit juice Genuine Contained respectively 48, 29, 18, 21, 32, 19 grains per lb of boric acid; non-	do. do.
0 - 1 - 100		genuine because of this	do.
Camphorated Oil 6		Genuine	do. do.

QUARTER ENDING 30th JUNE, 1913.-Continued.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations
Gregory Powder5 Seidlitz Powder3 Liquorice Powder3 " Magnesia "1 No. 180		Genuine	Informal do. do.
	Genuine Samples Of Doubtful Gen	being Carbonate and moisture	do

Non-genuine...... 16

116

3.—QUARTER ENDED 30th SEPTEMBER, 1913.

Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observations.
Milk	By an Officer acting under direction of the Boro' Council.	Def. in fat, 6.6 per cent Def. in non-fatty solids, 2.3 per cent Genuine	All milk and butter sam- ples exam- ined for pre- servatives
Nos. 265 and 280	A TATTA	Contained boric acid 0.5 per cent.	Doubtful : preserva- tive not declared.
Lard		Genuine Contained chicory, 37.4 per cent , 40 per cent , 49 per cent , 56 per cent , 30 per cent , 76 per cent Genuine Genuine Contained 30.40 per cent of cotton seed stearine	All of these samples except those of Milk were informal.
Baking Powder 9 Mustard 6 Pepper 6	denomina Generalia	Genuine Genuine Genuine	la nizera

Genuine Sampl	es	 66
Non-Genuine S	amples	 9
Doubtful	do.	 2

4.—QUARTER ENDED 31st DECEMBER, 1913.

terrane and the same and the sa			1000
Article submitted for Analysis.	State whether the sample was submitted to the Analyst by an Officer acting under direction of a Local Authority, under Section 13 of Act, and if so, the name of such Authority.	Result of Analysis: Showing whether the sample was Genuine or Adulterated, and, if Adulterated, what were the nature and extent of the Adulteration.	Observation
Milk11	By an Officer acting under direction of the Boro' Council,	Genuine	All milk, buter, and margarine samples e amined fo preservatives.
Butter1 No. 328 No. 313		Def. in fat, 3.3 per cent Genuine Contained 0.25 per cent. of boric acid	Informal
	Acad Laurence	borre acre	doubtful genuinene ascontaine preserva- tive not d
Dripping No. 310		Contained at least 40 per cent. of cotton seed oil or stearine	clared
Coffee		Contained 79 per cent. of chicory Genuine	Informal
Jam3		Genuine	Informal, 2 declared "Improve with fruit
Syrup 1		Genuine	jelly" Informal
Citric Acid1 Tartaric Acid1		Genuine	do. do. do.
Magnesia		Genuine (Carbonate)	do.
No. 314		Contained under 4 per cent. magnesium sulphate: rest sodium bicarbonate, citric acid and sugar	Informal
Seidlitz Powder1 Gregory's Powder2 Castor Oil1		Genuine	do. do. do.
Genuine Samples Non-Genuine Sample Doubtful Samples	's 5	SUMMARY FOR THE Y Genuine Samples examine Non-Genuine ,, Doubtful ,,	
	31	J. T. DUNN, Public Analy	338 rst,

APPENDIX.

VITAL AND SANITARY STATISTICS,

TOGETHER WITH

Tables required by the Local Government Board.

1913.

APPENDIX.

VITAL AND SANITARY

Tables required by the Local

616

LOCAL GOVERNMENT BOARD TABLE I.

Vital Statistics of Whole District during 1913 and previous Years.

	T.									
ne	Ages.		Rate.	13	:	:	:	18.0	15.9	18:1
Nett Deaths belonging to the District.	At all Ages.		Number.	12	:	:		2738	2425	2769
t Deaths belong District.	Under I Year of	Raro non	1.000 Nett	Births, 11	:	:	:	151	115	135
Net	Under 1		Number.	10	:	;	:	684	549	949
Transferable	Deaths.	of Resi-	registered in the	District	:	:	:	82	19	08
Transf	Dea	of Non-	registered in the	District.		:	:	126	124	157
eaths I in the	ict.		Rate.	1-	18.3	18.3	6-91	18.3	16.3	18.6
Total Deaths Registered in the	District.		Number.	9	2754	2763	2548	2782	2482	2846
		t	Rate.	5	:	:	:	29 8	31.3	31.4
Births.		Nett	Number.	4		:	:	4512	4749	4792
		Un- corrected	Number.	00	5180	4765	4582	4519	4754	4798
	Population estimated	Middle of each year.		64	149,746	150,259	150,774	151,291	151,835	152,380
		Year.		1	1908	1909	1910	1161	1912	1913

Area of District in acres, 3,357.

Total population at all ages, 151,162, at Census of 1911.

LOCAL GOVERNMENT BOARD TABLE II.

Cases of Infectious Disease notified during the year 1913.

Deve		Total Cases to Hosp		:	1	1	699	:	98	1	:	:	į.	-1.6	:	672
-		North Sub- District.			-	. 9	19		6			-:-		7.	14	231
		Monkwearmon Shore Ward	:		Ç1	-	97	-	01		1	-	-	00	12	09
		Roker Ward		-	901	+	050	:	60	:	1	-	-	13	15	81
ry.	d.	Colliery War			0	:	10	:	00	-	-	:	1	12	=	9
LOCALITY rict.	чэт	Monkwearmor Ward.	- :	:	-1	-	16	1	-	:	:	:	****	26	¢.	60
LOC.		West Sub- District.		1	106	54	272	-	13	01	-	-	1	124	101	673
3	.bi	Thornhill War	- :	-	33	9	7.3	-	60	-	-		-	21	18	160
EACH the Dis		West Ward.	-	:	21 25	16	7.0	1	1	-	-	:	:	17	827	165
N'o	8,1	Saint Michael		1	10	7	22		-	1	1	:	1	=	4	48
ED (ard)	-	Bridge Ward	:	:	6:	17	30	:	4	:	1	:	:	38	21	120
NOTIFIED ish or Ward	d.	Deptiord War	:	:	12	61	85	:	च	1	:	:	:	21	16	80
SS NO Parish	1	Pallion Ward		1	6	6	47	-	1	1	:	:	-	16	14	97
Ba. Pa		East Sub- District.	:	-	31	45	456	-	18	-	1		-	159	8	791
CASES (c.g. Pa	T	Hendon War		-	==	9	119	-	91		-	1	-	30	101	190
AL	- uan	Bishopwearmon Ward.	:	:	30	1-	110	:	0.3	:	:		1	16	10	153
TOTAL	_	Park Ward.		:	60	4	76	1	4	:	-	:	:	24	15	126
		East Ward.		:	1	6	24	-	-	:	1		:	19	0	59
1		Sunderland Ward.		:	6.3	11	75	:	4	:	-	:	-	35	21	150
	7	Central Ward	:	:	10	00	50	:	WG .	:	:	-	:	35	90	113
		65 and sbrawqu		-	-	-	:	-		-	-	-		-		
ES		45 and under 65 years.	:	:	01	:	-	:	64	:	:	i.	-	52	10	
CO.	Years	25 and under 45 years.	:	:	10	:	12	:	10	1	:	-	:	134	83	1
IED IED		15 and under 25 years.	-	-	15	:	42	1	122		-	-	:	88	4.7	1
NUMBER OF CA NOTIFIED.	Ages	5 and under 15 years.	:		113	:	540	:	14	:	:	:	:	58	109	:
MBI	At	I and under 5 years.	- 1	-	38	:	181	-	0.1	-	-	-	1	13	101	
NU		Under I.		1	6/3	-	83		:	-	-		1	-	12	
		All all Ages		:	181	105	779	:	9	0.1	64	1	Н	357	877	9691
		NOTIFIABLE DISEASE.	Smallpox	Cholera	Diphtheria (including Membranous Croup	Erysipelas	Scarlet Fever	Typhus Fever	Enteric Fever	Continued Fever	Puerperal Fever	Cerebro-spinal Meningitis	Poliomyelitis	Pulmonary Tuberculosis	Other forms of Tuberculosis	Totals1695

ISOLATION HOSPITAL: - Borough Sanatorium for Infectious Diseases, Ford, provided by the Corporation of the County Borough of Sunderland.

TABLE III.
Causes of, and Ages at Death during the Year 1913.

	" F	Nett Reside	ents"	whet	the s	ceuri	ing v	ges ovithin	of n or	whether of or " or " Non- in Institu
CAUSES OF DEATH.	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under	45 and under 65 years.	65 and upwards.	Total Deaths whether "Residents" or "No Residents" in Institutions in the District
1	2	3	4	5	6	7	8	9	10	11
All Causes { Certified	2728 41	632 14	229	150	136	94	322	571 14	594 9	630
Enteric Fever Smallpox Measles Scarlet Fever Whooping Cough Diphtheria and Croup Influenza Erysipelas Phthisis (Pulmonary Tuberculosis) Tuberculous Meningitis Other Tuberculous Diseases Cancer (Malignant Disease) Rheumatic Fever Meningitis Organic Heart Disease Bronchitis Pneumonia (all forms) Other Diseases of Respiratory Organs Diarrhoea and Enteritis Appendicitis and Typhlitis Cirrhosis of Liver Alcoholism Nephritis and Bright's Disease Puerperal Fever Other Accidents and Diseases of Pregnancy and Parturition Congenital Debility and Malformation, including Premature Birth Violent Deaths, excluding Suicide Suicide Other Defined Diseases Diseases ill-defined or unknown	79 19 19 22 5 1 173 30 51 159 4 40 254 273 266 20 187 10 21 1 85 2 22 247 96 17 661 2	11 2 11 2 2 5 6 14 1 76 65 118 1 1 247 11 74 74	35 1 1 1 3 6 11 5 1 24 43 57 4 4	26 8 6 9 1 4 10 9 1 12 29 3 3 10 18 151	1 6 9 1 10 19 11 10 7 8 4 13 3 3 3 9 136					
	2769	646	229	151	136	94	325	585	603	632
Sub-entries (included in above)— Lobar Croupous Pneumonia Pneumonia, form not stated	45 103	1 10	2 11	2 7	3 5	3 12	12 14	15 30	7 14	

TABLE IV.

WHOLE BOROUGH.

INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of of Age.

Causes of Death.	Under 1 week.	1-2 Weeks.	2.3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes { Certified	155 6	23	37	15	230 6	97	121 2	90 2	94 4	632 14
Smallpox Chickenpox Measles					 1	1	2	3	5	12
Scarlet Fever Whooping Cough Diphtheria and Croup						3	3	3	2 2	11 2
Erysipelas Tuberculous Meningitis Abdominal Tuberculosis							1 1	2	2	5 3
Other Tuberculous Diseases					11	1 2	6 4	2 4 1	3 3	5 14 21
Laryngitis Bronchitis Pneumonia (all forms) Diarrhœa	1	4	4 1 1	3	12 3 1	21 6 5	17 11 19	17 16 12	9 29 10	76 65 47
77			1 2		1 2 1	15 5 5	24 5 4	13	15	68 14 11
Rickets Suffocation, overlying Injury at Birth	2		1		3 6	1	2		2	6 6
Atelectasis Congenital Malformations Premature Birth	6	1 6	1 2 10	3	7 9 112	4	2	1		7 12 116
Atrophy, Debility and Marasmus Other Causes		8	13	3	61	24	16 5	10 5	8 4	119 24
Totals	161	23	37	15	236	97	123	92	98	646

Nett Births in {Legitimate...4633. Nett Deaths in {Legitimate Infants... 611. the year. {Illegitimate...159. the year of {Illegitimate ... 35.

TABLE IV. (A.)

SUNDERLAND EAST SUB-DISTRICT.

INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

Causes of Death.	Under 1 Week.	1.2 Weeks.	2-3 Weeks.	3.4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes { Certified	58 2	13	13	4	88 2	38	57 1	42	43	268 3
Smallpox										
Chickenpox Measles							1		3	4
Scarlet Fever						2	2	2	1	7
Diphtheria and Croup Erysipelas										
Tuberculous Meningitis								1	1	2
Other Tuberculous Diseases							1	2	2	5
Convulsions	-	2			6	1	1	1	2	7 9
Laryngitis	100	3	2	2	8	9	10	11	4	42
Pneumonia (all forms)						4	4	3	14	25
Diarrhœa					•••••	1 4	10 9	9	5 7	25 24
200000000000000000000000000000000000000		1	1		1	3	2 2	1		7
Syphilis									1	7
Suffocation, overlying					3	1	2			3 3
Atelectasis	1				1					1
Congenital Malformations Premature birth	36	4	4	1	45	1	1	1		6
Atrophy, Debility and Marasmus Other Causes	11	3	5	1	20	8	7 2	4	1 2	40 7
Totals	60	13	13	4	90	38	58	42	43	271

Nett Births in { Legitimate...1744. Nett Deaths { Legitimate Infants ...257. the year { Illegitimate 82. in the year of { Illegitimate Infants...14.

TABDE IV. (B.)

SUNDERLAND WEST SUB-DISTRICT.

INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under 1 Year.
All causes { Certified	65 2	4	16	6	91 2	32	34	25 1	28 2	210 6
Smallpox										
Measles Scarlet Fever				1	1		1	3		5
Whooping Cough Diphtheria and Croup							1		1 2	2 2
Erysipeias Tuberculous Meningitis							1			1
Abdominal Tuberculosis Other Tuberculous Diseases										
Convulsions	3				3					3
Laryngitis		1	1		2 1	6	5	5	4	22
Pneumonia (all forms)			1		1	2 4	3 7	9 1 3	10	25 14
Enteritis Gastritis Syphilis			1		1	4 2 9	6 1 1		4	18 5
Rickets			1		3				i	1 3
Injury at Birth					2 5					3 1 3 2 5
Congenital Malformations Premature Birth	2 38	1	2 4	2	4 45	2				4 47
Atrophy, Debility and Marasmus Other Causes		2	5	2	21 3	9	6 3	4	6	46 8
Totals	67	4	16	6	93	32	35	26	30	216

Nett Births in { Legitimate...1831. Nett Deaths in { Legitimate Infants... 205. the year of Illegitimate... 49. the year of Illegitimate ,, ... 11.

TABLE IV. (C.)

SUNDERLAND NORTH SUB-DISTRICT.

INFANT MORTALITY DURING THE YEAR 1913.

Nett Deaths from stated causes at various Ages under ! Year of Age.

Causes of Death.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks.	4 Weeks and under 3 Months.	3 Months and under 6 Months.	6 Months and under 9 Months.	9 Months and under 12 Months.	Total Deaths under
All causes { Certified	32 2	6	8	5	51 2	27	30	23	23	154 5
Smallpox										
Chickenpox						ï			2	3
Scarlet Fever										
Whooping Cough						1		1		2
Diphtheria and Croup										
Erysipelas			E STATE OF THE STATE OF							
Tuberculous Meningitis							····i	1	1	2 3
Abdominal Tuberculosis Other Tuberculous Diseases							1	1	1	3
Meningitis (not Tuberculous)						1	2	3	1	7
Convulsions	1			1	2	î	3		3	9
Laryngitis										
Bronchitis			1	1	2 2	6	2	1	1	12
Pneumonia (all forms)	1		1		2		4	4	5	15
Diarrhœa							2 9	2	4	8
Enteritis						7	2	6	4	26
Syphilis.							1			2
Rickets		100 mm	*****				1			1
Suffocation, Overlying										
Injury at Birth					1					1
Atelectasis			1		1					1
Congenital Malformations		1			1		1			2
Premature Birth	19	1	2 3		22	1				23
Atrophy, Debility and Marasmus	12	3	77.01	2	20	7	3	2]	33
Other Čauses		1	•••••	1	2	2		3	2	9
Totals	34	6	8	5	53	27	30	24	25	159
Totals	0.3	0	0	U	00	41	90	44	40	103

Nett Births in { Legitimate...1058 Nett Deaths in { Legitimate Infants ...149. the year of { Illegitimate Infants ...10.

TABLE V.
SHOWING DEATHS FROM ALL CAUSES DURING THE YEAR 1913.

			1			100	1.0	1.01		1.0	1.0	1.	1	1.0	00	
CAUSES OF	DEATH.			1 01	10	115	25	355	45	99	65	22 0	98	96	95 and upwards	77
				1 50	2	5 to	o to	5 to	2	to to	to to	o to	to	o to	15 a	Total.
					01		=	25	355	45	99	65	75	88	3 11	-
(Vaccinated																
Smallpox Unvaccinated No statemen																
Measles		11	1	2 35	26	6										79
Scarlet Fever	4.5			1	8	9		1								19
Typhus Fever Epidemic Influenza					1		1			2	2	1				5
Whooping Cough			1	1 1	6	1										19
Diphtheria, Membranous Enteric Fever	Croup	11		2 1	9	10	1::::	1	1							22
Asiatic Cholera																
Diarrhoea, Dysentery			0	7 24		2			1			1				79
Epidemic or Zymotic Ent Gastro-Enteritis	errus			7 6	1	1	9		1			1				91
Chickenpox						1			1000							1
Hydrophobia													1	200	1000	
Glanders, Farcy									1							
Tetanus Anthrax, Splenic Fever	- "					1										1
Cowpox, Accidents of Vac	cination															
Syphilis			. 1	,						0						
Syphilis Gonnorrhea				1												15
											1000000					-
Phagedœna Erysipelas																i
Puerperal Fever		1. 1							1							0
Pyæmia, Septicæmia			-	1		2	1	4	1			1				10
Other Allied Diseases																
Malarial Fever						1000										
Rheumatic Fever							i				1					4
Rheumatism of the Heart									1	1						2
Tuberculosis of Brain o	r Menin	ges.	1				-									
Acute Hydroceph	alus		-	5 6	4	11	2	1		1						30
Tuberculosis of Larynx Tuberculosis of Lungs				2 3	1	19	27	48	32	29	9	3				172
Tuberculosis of Intestines	, Tabes	-			1											
Mesenterica General Tuberculosis, Tul	percular	Disease		3 8	8	4		2		1		1				27
of Undefined Posit	ion				1	4	1	1	3							12
Other forms of Tuberculo	sis, Scrof	ula .	-	3 1	1	2			5		1		1			11
Other Infective Diseases																
Though																
Thrush																
Hydatid Diseases																
Scurvy			1]										1
Other Diseases due to alte	ered Food	1 .														
Acute Alcoholism, Deliriu Chronic Alcoholism																
		1	1.			1			****							
Other Chronic Poisoning	-													0.0000000000000000000000000000000000000		
Other Chronic Poisoning			1						****							
Osteo-arthritis, Rheuma		thritis.									1					3
Gout								8	16	36	53	34		2		159
Diabetes Mellitus						1		2	1	3	6	3				17
Purpura Hæmorrhagica			1000	The same of			9							10000	The same of	
Hæmophilia Anæmia, Leucocythæmia						1	1	1	1	1	3					8
Hæmophilia						1	1	1	1	1	3					8 2

TABLE V .- CONTINUED.

				-	01	10	15	25	198	45	55	99	75	58	95	nd de.	
- CAUSES OF DE	ATH.			20	to	to	to	to	20	000	to	50	03	20	2	PRI	
				0	-	01	10	15	25	- 85	45	55	65	7.5	50	95 and upwards.	
remature Birth				116				_		-	-						11
jury at Birth		33		- 10												0.0000000000000000000000000000000000000	100
ebility at Birth				an.													1
telectasis				7													
engenital Defects		1.1		12													
ant of Breast Milk trophy, Debility, Marasn	0.00	**	-	56	11												
entition	Ins	11		3	4												
ickets				2	3	3											L
ld Age, Senile Decay												9	59	100	30	2	2
onvulsions			-	21	3	2											1
eningitis				14	5	9											
ncephalitis		4411	4.0				2		1								
poplexy oftening of Brain		**				1	1		2	3	21	34	55	18	1		13
emiplegia, Brain Paraly	eie .							13			1		5		1.72		
eneral Paralysis of the I	nsane								4	3	2	1	2				1
ther Forms of Insanity								1	1		1	1	1				
horea																	
erebal Tumour									1	1							
pilepsy			**					*	3	2	1				1		
ocomotor Ataxy		**									1	9					
araplegia, Diseases of St		ord											2	1			1
ther and Ill-defined Di	seases	of											-		- 3	1	1
Brain or Nervous S	ystem	* *	**	1					1	2	3	8	7				1
titis, Ottorrhœa		Y 40			1												
iseases of Nose, Epistax																	
iseases of Eye, Ophthaln	nia																
ndocarditis, Valvular D	license	e of t	he														
Heart	/iscase	5011	116		0000	10000	6	4	4	7	17	23	14	12			1
ericarditis									1								П
ypertrophy of Heart	++																
ngina Pectoris												1		1		****	
neurism		**								3	2		3				
mbolism, Thrombosis				1								i	0				
hlebitis							1111						-				
aricose Veins																	
ther and Ill-defined Dise							-					-					
and Circulatory Sy	stem			1	1	1	2	5	3	8	39	38	36	15	3		1:
aryngitis						10.000		\$ 00.00 miles				1	10000				
roup ther Diseases of of Laryn	v and	Frach															
cute Bronchitis				76	24		4	2	1	4	15	27	41	22	3		
hrenic Bronchitis						1	100		1	7	3	10	14	7			
obar Croupous Pneumon				1	2	2	3	3	7	5	7	8	5	2			
obular Broncho-Pneumor				4 15	30		5			1	1	1	2	4			
neumonia, form not state		**			11	7	5	12	5	9 2	16	14	12	2			10
mphysema, Asthma									2	1	2	2	3				100
ther and Ill-defined Disc	ases of	the	15			777		10000		-	-						1
Respiratory System												1	1	1			
seases of Mouth and A	nnexa																
iseases of Pharynx	danum																1
iseases of Pharynx iseases (Esophagus			**		5				1 3								1
iseases of Pharynx iseases (Esophagus lcer of Stomach and Duo		4.4		14								200					1119
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach					Paris in		3	9	2	5	1						í
iseases of Pharynx iseases (Esophagus lcer of Stomach and Duo ther Diseases of Stomach nteritis												4		10000	10000	100000	i
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine	1			1					2			-1	1			* * * * *	
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine ther Diseases of Intestin	0			1				****	1000		1		,				
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine ther Diseases of Intestine irrhosis of Liver	0 0							****	i	4	1 7	5	3	1			2
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine ther Diseases of Intestine irrhosis of Liver ther Diseases of Liver	1 								1 1	4	1 7 1	1	3 2	i			2
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine ther Diseases of Intestine irrhosis of Liver ther Diseases of Liver eritonitis	1 	::							1 1	4	1 7	1	3 2	i			2
iseases of Pharynx iseases (Esophagus leer of Stomach and Duo ther Diseases of Stomach nteritis ppendicitis bstruction of Intestine ther Diseases of Intestine irrhosis of Liver ther Diseases of Liver	ases of						1		1 1	4	1 7 1	1	3 2	i			2

TABLE V.—CONTINUED.

CAUSES OF DE	HTAS			to 1	to 2	to 5	to 15	to 25	to 35	to 45	to 55	to 65	to 75	to 85	to 95	und urds.	
CACSES OF DI				0 \$	1 t	2 t	5 5	15 t	25 5	300 \$	45 t	2 gg	65 t	75 t	1 98	95 and	-
iseases of Lymphatic								_	-								-
Ductless Glands ddison's Diseases									1		1						- 100
cute Nephritis				1	3	2	9		1	4 6	6	6	1	2			1
right's Disease		4.4				100		2	5	6	7	16	15	3			
iseases of Bladder and P	rostate	11								1	1	i	1	2			
ther and Ill-defined Disc System		Urina							1	1		3		1			
iseases of Testis and I						10000	-			100	1						
iseases of Ovaries									2					1			
iseases of Uterus and Ap iseases of Vagina and Ex	pendag ternal	es Genita								1							
Organs :						E. Contract of the Contract of											
iseases of Breast				-											-		
bortion, Miscarriage nerperal Mania	::	**						1	1								
uerperal Convulsions									8	1	1						
lacenta Prævia, Flooding nerperal Thrombosis																	
ther and Ill-defined Accidenses of Pregnancy								5-	5	2							1
						10000			1000	1					0.000	2000	
rthritis, Ostitis, Perios ther and Ill-defined Dise		**	**														
Osseous System							2		1								
lcer, Bedsore																	
czema emphigus	11	::	::	1													1
ther and Ill-defined Dises Integumentary Syst				1							1	1	1				
											ist.						1
ccident or Negligence- n Mines and Quarries.								2	9								
n Vehicular Traffic						1	3	1	····	3	1						
on Ships, Boats and Dock	s (exclu	iding	- 1													1000	
Drowning) n Building Operations									3								
By Machinery	ents									1							
Surns and Scalds					6												
Poisons, Poisonous Vapou Jurgical Narcosis	rs																
ffects of Electric Shock Forrosion by Chemicals			0.														
Prowning							1	3	1	2		1					
uffocation, Overlaid in B uffocation, otherwise	ea			4			1			1		2	2				
Veather Agencies							1	1	1	4	1	1	2				
therwise, and not stated							1		2	1	1	3	1	****			
ound Drowned						COOLE			1	1	1	1		1			
uicides—	**	••	**					****			1			****			
By Poison									2		1	2					1
y Asphyxia Y Hanging and Strangul	ation							i	2	2	3	1					
by Drowning																	
y Cut or Stab											1						1
by Precipitation from Ele	vated I	Inces	**														
y Other and Unspecified	Metho	ds															
ecution				0000000													
idden Death (Cause not her Ill-defined and not S			ses										9				
THE RESERVE AND ADDRESS OF THE PERSON ASSESSED. TO	The second second		1000		10000								- 100		0 1 4 4		

TABLE VA.

SHOWING THE DEATHS FROM ALL CAUSES REGISTERED IN EACH DISTRICT, 1913.

	EACH	0.0			,	,								
		St	unde Ea	rland st.	1	St	We	rland st.		8		erlar	nd	ls
CAUSES OF DEATH.		Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Totals
(Vaccinated														
Smallpox Unvaccinated No Statement		****										****		
Measles		4	20	3	27	5	26	3	34	3	15		18	79
Scarlet Fever			6	3	9		3		7			3	3	19
Epidemic Influenza				2	2			3	3					5
Whooping Cough Diphtheria, Membranous Croup		7	5 2	1	12	2 2	2 4	1 5	5 11	2	4	4	8	19 22
Enteric Fever				2	2			1	1					3
Asiatic Cholera Diarrhea, Dysentery		25	12	2	39	14	5	1	20	8	11	i	20	79
Epidemic or Zymotic Enteritis		22	8		30	18			28	94	9		33	91
Gastro-Enteritis			6	1	8	3			3	2	1	3	6	17
		1	1000			27.00		10000		1				
Hydrophobia Glanders, Farcy														
regulars								1	1					1
Anthrax, Splenic Fever Cowpox, Accidents of Vaccination	on													****
							1000							
Syphilis		1.7		3	10			1	4	1			1	15
Dhaaadaaa	- 27	1			Parties.					10000				
Phagedœna							****	1	1					1
Puerperal Fever					4			2	2					2
Pyæmia, Septicæmia Infective Endocarditis		1		3	1			3	3			3	3	10
Other Allied diseases														
Malarial Fever			50,000							100				
Rheumatic Fever					1			1	1			2	2	4
Rheumatism of the Heart				2	2									2
Tuberculosis of Brain or Me	ninges,	1			_									-00
Acute Hydrocephalus Tuberculosis of Larynx		2	1	4	7	1	7	5	13	2	2	6	10	30
Tuberculosis of Lungs	2.0 4.0	2	2	70	74		1	65	66		1	32	33	173
Tuberculosis of Intestines, Tal Mesenterica			3	1	4		6	4	10	3	7	3	13	27
General Tuberculosis, Tubercula of Undefined Position				0	9			9			,	0		10
Other Forms of Tuberculosis, Sc	rofula .	3		2	5			3	5		1	3	1	12
Other Infective Diseases								1					-	
			10000		10000	1	10000	1000	200	200000	-	1		
Thrush														
Hydatid Diseases														
Scurvy	100							0000				1	1	1
Other Diseases due to Altered I	food .													
Acute Alcoholism, Delirium Tre														
		1 99			1	1			1111	100000		2000	1000	
Other Chronic Poisonings														
										1			177.3	
Osteo-arthritis, Rheumatoid												1		3
Cancer				46	46			75	75			38	38	159
Diabetes Mellitus												5	5	17
Hæmophilia Anæmia, Leucocythæmia				1	1			1	1					2
Anæmia, Leucocythæmia Lymphadenoma, Hodgkin's Dise	ase			5	5			3	3				i	8
Lymphatenoma, Lougam's Disc			Leeve-	1	1 1							1	1	1 2

TABLE VA .- CONTINUED.

			1		erlan ast.	d	S		erlan est.	d	5		erlan rth.	ıd	1
CAUSES OF	DEATH	1.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	TAMOUR T
			46			46	47			47	23			23	11
N. L. Hilliam . A. Philade			3			23	24			24	16			16	1
			1			1	5			5	1			10	1
			. 6	11111		6	4			4	2			2	
Vant of Breast Milk .															
trophy, Debillty, Mar			17	7		24	22	5	1	28	17	3		20	1
M. Arriva			1	1 2		2 3	1				2	3		5 3	
old Age, Senile Decay.	1 11			1	89	89			78	78			33	33	2
convulsions			. 9	2		11	3	2		5	9	1		10	
			7	6	6	19			3	6	7	5	3	15	
		**			2	2			!	1			00	07	
poplexy					48	48			61	61		1	26	27	1:
lemiplegia, Brain Para	alvsis				1 2	4			2	2			****		
eneral Paralysis of th	he Insane			100000000000000000000000000000000000000		5			4	4			3	3	3
ther Forms of Insani	ty				1	1			4	4					
horea											****		2		
pilepsy					4	4			3	3			3	3	1
aryngismus Stridulus					1 7 1										13
ocomo or Ataxy .					100.00	1			1	1			1	1	
araplegia, Diseases of				1		1			2	2			2	2	
ther and Ill-defined Di Nervous System					7	8			7	7			2	2	1
titis, Ottorrhœa .								2		2			1	1	
iseases of Nose, Epis	taxis													201	
piseases of Eye, Ophth	nalmia			4 0000	1										
ndocarditis, Valvular	Disease	s of the	9	H											
Heart					23	23			46	46		1	17	18	1
ericarditis					1					1					
Typertrophy of Heart angina Pectoris										9			1111		
neurism									3	3					
enile Gangrene .									1	1					
mbolism, Thrombosis					1	1			1	1			1	1	
hlebitis aricose Veins															
aricose Veins ther and Ill-defined I				100											-
and Circulatory					48	48	1	1	68	70		1	33	34	1:
aryngitis															
roup		Paralla a													
ther Diseases of Larry	ny and T									****	***		200	40	2:
ther Diseases of Lary	nx and T					115	22	11	42	75	12	0	25.5	917	
ther Diseases of Lary cute Bronchitis hronic Bronchitis	nx and T	- 11	. 42	18	55	23	22		12	75 12		6	8	8	13
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum	nx and T		. 42	18	55	23			12 21	12	1	1	8	8	4
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum	nx and T ionia monia		42	18	55 22 10 5	23 10 45	21	3 22	12 21 4	12	1	1	8	8 11 26	1
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneu neumonia, form not s	nx and T nonia monia stated		21	18 1 19 8	55 22 10 5 43	23 10 45 55	21 4	3 22 9	12 21 4 25	12 24 47 38	1 12 2	1 9 1	8 9 5 7	8 11 26 10	111
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy	nx and T		42	18 1 19 8	55 22 10 5 43	23 10 45 55	21	3 22 9	12 21 4	12 24 47 38	1 12 2	1 9 1	8 9 5 7 1	8 11 26	11
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s mphysema, Asthma leurisy	nx and T	of the	21 4	18 1 19 8	55 22 10 5 43	23 10 45 55	21 4	3 22 9	12 21 4 25 4 2	12 24 47 38 4 2	1 12 2	1 9 1	8 9 5 7 1 4	8 11 26 10 1 4	111111
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy	nx and T	of the	21 4	18 1 19 8	55 22 10 5 43	23 10 45 55	21 4	3 22 9	12 21 4 25 4	12 24 47 38 4	1 12 2 	1 9 1	8 9 5 7 1	8 11 26 10 1	10
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy ther and Ill-defined Respiratory Syst	nx and T nonia monia stated Diseases tem	of the	21 4	18 1 19 8	55 22 10 5 43 	23 10 45 55 4	21 4	3 22 9	12 21 4 25 4 2 2	12 24 47 38 4 2	1 12 2 2	1 9 1	8 9 5 7 1 4	8 11 26 10 1 4	111111111111111111111111111111111111111
ther Diseases of Lary cute Bronchitis hronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy ther and Ill-defined Respiratory Syst	nx and T	of the	21 4	18 1 19 8 	55 22 10 5 43 	23 10 45 55 4	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2	1 12 2	1 9 1	8 9 5 7 1 4	8 11 26 10 1 4 2	111111111111111111111111111111111111111
ther Diseases of Lary cute Bronchitis dronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy other and Ill-defined Respiratory Syst diseases of Mouth ar diseases of Pharynx diseases of CEsophagus	nx and T	of the	21 4	18 1 19 8 	55 22 10 5 43 4	23 10 45 55 4	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2	1 12 2 2	1 9 1 · · · · · · · · · · · · · · · · ·	8 9 5 7 1 4 2	8 11 26 10 1 4 2 2	111110
other Diseases of Lary cute Bronchitis chronic Bronchitis obar Croupous Pneum obular Broncho-Pneum neumonia, form not s imphysema, Asthma leurisy other and Ill-defined Respiratory Syst diseases of Mouth ar diseases of Pharynx diseases of Esophagus dicer of Stomach and	nx and T	of the	21 4	18 1 19 8 	55 22 10 5 43 4	23 10 45 55 4	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1	1 12 2 2	1 9 1	8 9 5 7 1 4 2	8 11 26 10 1 4 2 2	111111111111111111111111111111111111111
other Diseases of Lary cute Bronchitis chronic Bronchitis obar Croupous Pneum obular Broncho-Pneum cheumonia, form not s imphysema, Asthma cleurisy other and Ill-defined Respiratory Syst diseases of Mouth ar diseases of Pharynx diseases of Casophagus filcer of Stomach and other Diseases of Ston	nx and T nonia monia stated Diseases tem nd Annex	of the	21 4	18 1 19 8 	55 22 10 5 43 4	23 10 45 55 4	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 	1 12 2 2	1 9 1	8 9 5 7 1 4 2	8 11 26 10 1 4 2 2 	111111111111111111111111111111111111111
other Diseases of Lary cute Bronchitis chronic Bronchitis chronic Bronchitis cobar Croupous Pneum cobular Broncho-Pneur Pneumonia, form not s Emphysema, Asthma Pleurisy Other and Ill-defined Respiratory Syst Diseases of Mouth ar Diseases of Esophagus Diseases of Esophagus Diseases of Stomach and Other Diseases of Ston Chteritis	nx and Tomonia monia monia stated Diseases tem nd Annex	of the	21 4	18 1 19 8 1	55 22 10 5 43 4 2	23 10 45 55 4 1 3 5 17	21 4 1 	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 3 11 8	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2	8 11 26 10 1 4 2 2 2	111111111111111111111111111111111111111
other Diseases of Lary cute Bronchitis chronic Bronchitis cobar Croupous Pneum cobular Broncho-Pneur cheumonia, form not s imphysema, Asthma cleurisy other and Ill-defined Respiratory Syst diseases of Mouth ar diseases of Pharynx diseases of CEsophagus dicer of Stomach and other Diseases of Ston cheritis	nx and T	of the	21 4	18 1 19 8 1 3 1	55 22 10 5 43 4 2 	23 10 45 55 4 5 17 1	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 3 11 8 5 4	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2 3 2 4 1	8 11 26 10 1 4 2 2 2 	111111111111111111111111111111111111111
Other Diseases of Larysteute Bronchitis Chronic Broncho Pneum Cheurisy Cher and Ill-defined Respiratory Syst Cliseases of Mouth ar Cliseases of Pharynx Cliseases of Pharynx Cliseases of Casophagus Clicer of Stomach and Cher Diseases of Stom Chronic Bronchitis	nx and T	of the	42 21 4	18 1 19 8 1 3 1	55 22 10 5 43 4 5 7	23 10 45 55 4 1 3 17 11 8	21 4	3 22 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 3 11 8 5 4	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2 3 2 4 1	8 11 26 10 1 4 2 2 2 	111111111111111111111111111111111111111
Other Diseases of Larynette Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Broncholitis Chronic Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Broncholitis Chronic Broncholitis Chronic Broncholitis Chronic Broncholitis Chronic Broncholitis Chronic Bronchitis Chronic Broncholitis Chro	nx and T	of the	42 21 4	18 1 19 8 1	55 92 10 5 43 4 2 5 7	23 10 45 55 4 1 3 5 17 1 1 8 	21 4 1 5	3 22 9 4 3	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 3 11 8 5 4	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2 3 2 4 1	8 11 26 10 1 4 2 2 2 	111111111111111111111111111111111111111
Other Diseases of Larynette Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Bronchitis Chronic Bronchotis Chronic Bronchotis Chronic Bronchotis Chronic Bronchotis Chronic Bronchotis Chronic Bronchot Pneum Cheurisy Cher and Ill-defined Respiratory Syst Ciseases of Mouth ar Ciseases of Mouth ar Ciseases of Pharynx Ciseases of Casophagus Clicer of Stomach and Cher Diseases of Stom Chteritis Chronic Bronchitis Chronic Broncho Chronic Br	nx and T	of the	21 4 4	18 1 19 8 1 3 1	55 22 10 5 43 4 2 1 8 10 2	23 10 45 55 4 1 3 17 1 1 1 8	21 4	3 222 9	12 21 4 25 4 2 1 2 1 2 3 2 5 5 4 1 9 1	12 24 47 38 4 2 1 1 2 3 11 8 5 4	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2 3 2 4 1	8 11 26 10 1 4 2 2 2 	111111111111111111111111111111111111111
other Diseases of Lary cute Bronchitis chronic Bronchitis chronic Bronchitis cobar Croupous Pneum cobular Broncho-Pneu rneumonia, form not s comphysema, Asthma cleurisy other and Ill-defined Respiratory Syst diseases of Mouth ar diseases of Pharynx diseases of Esophagus clicer of Stomach and other Diseases of Stom cateritis dispendicitis dispendicitis distruction of Intestin other Diseases of Inte	nx and T	of the	21 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	18 1 19 8 1 3 1	55 22 10 5 43 4 2 1 8 10 2	23 10 45 55 4 1 3 17 1 1 1 8	21 4	3 222 9	12 21 4 25 4 2 1	12 24 47 38 4 2 1 1 2 3 11 8 5 4	1 12 2 2 2	1 9 1	8 9 5 7 1 4 2 3 2 4 1	8 11 26 10 1 4 2 2 2 	111111111111111111111111111111111111111

TABLE VA.—CONTINUED.

						nder Eas	rland t.	1	s	unde We	rlane st.	1	S		erland rth.	i	T.
	CAUSE OF	DEATH.		Under	1 40 %	Over	5.	Total.	Under 1.	1 to 5	Over 5.	Total.	Under 1.	1 to 5.	Over 5.	Total.	TOTAL.
Diseas	ses of Lympha	tic Syst						-		-		-				_	-
ddise	Ductless Gland on's Disease	is									1	i					1
							7										
Bright	Nephritis 's Discase						23	8 23		2	16	18	1		16	12 16	28
alcul	us			1			1	1									1
	ses of Bladder as and Ill-defined D	diseases of	f Urinary					4			2	2					1
	System						3	3			1	1	1		2	3	1
isea	ses of Testis ar	nd Penis															
)iseas	ses of Ovaries										3	3			1	1	1
)iseas	ses of Uterus and ses of Vagina and	Externa	ages l Genital				***			••••			****		1	1	
	Organs																
	ses of Breast								- 5				****				
bort	tion, Miscarriag	е					1	1			1	- 1			2	2	
merp	eral Mania eral Convulsions						10.00		** * *		44.45			22.22	24.00		
lace	nta Prævia, Floo	ding						0				2			1	i	
nern	eral Thrombosis									***							
ner	and Ill-defined eases of Pregna	ncy and (Child Birt	h			5	5			2	2			5	5	1
												1					
ther	ritis, Ostitis, Pe	ses of th	e Osseous			***	2	2									
,	System						1	1							2	2	
licer	, Bedsore																
Eczen	nahigus										1	1					
emp	higus and Ill-defined	Diseases	of			***			1	13.55		1					
	Integumentary	System			1 .		1	2			2	2					
Accid	lent or Negliger lines and Quarri	nce-					1	1							3	2	18
In V	ehicular Traffic Railways						1 3	3		1	1	2			3 2	2	
On I	Railways Ships, Boats and	Docks (e	velnding				4	4			3	3	80		1		
	Drowning)																
In B	Building Operation Machinery Weapons and Im	ns	1.11														
By i	Weapons and Im	plements										1					
Burr	ns and Scalds					9	1	10		4		4		1		1 1	1
	ons, Poisonous V		100		:::	111					1	1				1	
Effe	cts of Electric S.	hock															
	osion by Chemic	2.18			1	***	4	4	1	1111	3	4			1	i	1
	ocation, Overlaid				3 .			3	3			3					
	ocation, otherwises, not specified		11		1 .	1	3 4	4 5	1		3	4	2	i	3	4	1
Wea	ther Agencies															1	
	erwise, and not s nd Drowned		*:				6	6			2 9	2			1	1	
Hom	icide						1	1									
By	des Poison																
By .	des— Poison Asphixia Hanging and Str. Drowning						ĩ	1			1	1					
By	Hanging and Str. Drowning	angulatio	n				7	7			1	1			1	1	
200 1 1	*** ** ** ** * * * * * * * * * * * * *						* * * * *	20 20 20 20		- E - E - W - W				F 7 1 1 1 1			1985
By	Shooting Cut or Stab Precipitation from	n Elevate	d Places												1	1	
By (Crushing																
By e	other and Unspe	cified Me	thods														
	ution ien Death (Cause	not Asce	ertained)		1												1
Othe	r Ill-defined and	not speci	fied cause	18.			1	1			. 1	1					
Conc																	

TABLE VI.

Showing the STATE OF VACCINATION in the entire Districts of the Sunderland Union for the Year ending December, 1912, and for the Ten preceding Years.

(AS FURNISHED BY THE VACCINATION OFFICERS).

		Tot Vacen		Postponed	Died	Removal	Certificates
Year.	Births Regis- tered.	Succ.	Insus- ceptible.	by Medical Authority.	previous to Vaccin- ation.	to places unknown or other Unions.	of (Con- scientious Objection) Exemption.
1902	6700	5008	30	160	747	715	40
1903	6743	5508	22	102	802	267	42
1904	6737	5551	28	93	834	189	32
1905	6784	5725	26	82	730	163	53
1906	6996	5831	97	97	767	195	66
1907	6913	5613	35	94	709	287	175
1908	6793	5339	39	104	680	239	372
1909	6171	4702	32	107	612	208	510
1910	6001	4505	17	94	595	183	606
1911	5924	4078	30	212	642	223	688
Average for 10 years, 1902-11.	6576	5186	36	114	712	267	258
1912	6182	4363	34	129	562	277	817

ANNUAL REPORT

OF THE

Chief Sanitary Inspector.

HEALTH OFFICE,

TOWN HALL.

SUNDERLAND.

To the Chairman, Vice-Chairman, and Members of the Health Committee.

GENTLEMEN,

I have the honour of submitting to you my Nineteenth Annual Report of the work performed by the Inspectorial staff of the Health Department for the year ending December 31st, 1913.

In detailing the work of the Department it is difficult to convey by tables and figures anything like an adequate impression of the sanitary improvements accomplished, yet the information given in the various tables will to some extent show the nature and variety of the work accomplished.

The number of inspections made during the year by the District Inspectors was 55,302, Workshops Inspector 7,754, Foods Inspector 13,461, a total of 76,517. There were 793 appointments and advisory visits by the Inspectors with owners, agents, or trades-people, advising as to official requirements respecting sanitary matters, viz., alterations, renewals and repairs, and the number of inspections and re-inspections of premises during the progress of work was 8,178. The nuisances dealt with under the various Public Health Acts, Local Acts and Byelaws, etc., necessitated the serving of 10,512 notices. Of those 1,838 were statutory notices and 8,674 preliminary notices. There was also a number of nuisances abated and other sanitary work undertaken on the advice of or the verbal instructions of the District Inspectors.

DRAIN TESTING.

The number of tests applied to drains was 1,941, of these 1,713 were water and 228 smoke or chemicals. The number of tests made on the application of prospective occupiers or purchasers, or on the suspicion of nuisances was 171, and in 60 cases defects were found. In accordance with our usual practice all house drains where cases of Enteric Fever or Diphtheria are notified are tested, and last year 97 tests were so made and 14 found to be more or less defective (Table 5).

There were 287 complaints received at the office, as compared with 288 in 1912. (Table 8.)

ALTERATIONS AND IMPROVEMENTS.

It will be noted that the abolition of insanitary privies and ashpits is being steadily proceeded with, 867 privies and ashpits having been replaced by washdown water-closets and approved ashbins. 323 broken or otherwise defective w.c. basins were replaced with new washdown pedestal basins.

The drains of 448 premises were either relaid or repaired. (Table 4.)

INFECTIOUS DISEASES.

It is with satisfaction that no case of smallpox was reported during the year. Also the cases of Enteric Fever notified were less than in the previous year. The increased notifications of Scarlet Fever, 779 cases as against 228 in 1912, necessitated considerably more visiting by the District Inspectors for the purpose of enquiring as to the cause or origin of the disease, and to leave printed instructions where the cases were treated at home, the number of visits made being 1,489. (Table 1.)

The work performed by the Disinfector is given in Table 24.

HOUSING, TOWN PLANNING, ETC., ACT.

There were 79 notices outstanding at the end of 1912; of these 58 have been complied with, the houses having been altered and repaired rendering them fit for habitation. 12 houses have been voluntarily demolished, and 9 Demolition Orders have been made.

The Corporation has demolished two houses, the owners having failed to comply with Demolition Orders made in 1911.

During the year 1913, 121 houses have been reported and Closing Orders made against them. Forty-six have been altered, repaired and made fit for habitation and the Closing Orders withdrawn, and 21 are in course of repair, etc. In two cases the owners have voluntarily demolished the houses.

A list of the properties dealt with, giving a brief summary of the principal items of work carried out, are given in Table 28.

House-to-house inspections have been carried out by Inspectors as work would permit, 1,018 tenements, comprising 1,854 rooms, having been inspected and records kept for future use.

COMMON LODGING HOUSES.

These houses have been regularly inspected, and found to be fairly well conducted, no breach of bye-laws having been observed.

Two houses have been closed, one being pulled down to make improvements for adjoining premises; the other house was considered to be unsuitable, and the Corporation refused to re-register. (Table 6.)

FOOD AND PROVISION INSPECTION.

The Slaughter-houses, Butchers, Fish and Fruit Shops have been systematically inspected. (See Table 11.)

Although a large quantity of different kinds of food was condemned and destroyed, it is pleasing to note that in all cases the food was surrendered by the owners without having to obtain any legal order for its destruction.

The Cowsheds, Dairies, and Milkshops have been frequently and carefully inspected, the number of inspections made was 1,728. (See Table 13.)

The premises whereon offensive trades are being carried on number 165, including 114 fried fish shops. These premises are regularly visited and every effort is made to see that the business is so conducted as to prevent or mitigate, as far as is practicable, any nuisance arising from such business.

Sixty-two notices were served in respect to fried fish shops, requiring the provision of suitable stoves and covers to prevent a nuisance from the steam and vapour given off during the process of frying. Fifty-four of these have been complied with, five have discontinued, and three are under consideration. It was found necessary to serve one notice each in respect of slaughter-houses—to repair yard, to remove fish offal, to remove manure.

Three notices were served to abate nuisances arising from the slaughtering of fowls (according to the Hebrew custom) in yards of dwelling-houses. These were complied with, suitable buildings, pens, etc., having been obtained where the business can be carried on without causing a nuisance.

WORKSHOPS AND SHOPS INSPECTION.

The inspections made by the Workshops, etc., Inspector are given in Table 15, and the notices, etc., in Table 16.

OUTWORKERS.

138 blank forms were despatched to firms employing outworkers, requesting them to fill in the same and return to this office.

In compliance with Section 107 of the Factory and Workshop Act, 1901, 22 outworkers employed outside the Borough were reported to other Authorities, and 72 reports relating to non-display of Abstract of Factory Act, and other matters were sent to H.M. Inspector of Factories. (See Table 16.)

RAG FLOCK ACT, 1911.

Samples of rag flock have been taken resulting in one prosecution, the case being dismissed on payment of costs amounting to £1 15s. 4d.

SHOPS ACTS, 1912 AND 1913.

Under the above Acts no fewer than 907 irregularities have been discovered during the year. In 168 cases it was necessary to circularise the persons responsible for the defaults with a view to taking further proceedings in order to enforce compliance with the provisions infringed. (See Tables 16 and 22.)

Two prosecutions were ordered by the Committee, resulting in one fine of 20/- and costs, and one of 5/- and costs being imposed. (See Table 27.)

It will be seen on reference to Table 15 that out of 7,754 inspections made by the Inspector 5,173 were made under the Shops Acts. 23 shops have been added and 41 withdrawn from the register, leaving a total of 3,085. (See Table 17.)

ANALYSIS OF FOOD AND DRUGS.

The number of samples purchased and submitted to the Public Analyst were 338, 156 being formal samples and 182 informal. Of these 126 formal and 161 informal were certified to be genuine. (For particulars see Tables 25 and 26.)

MILK AND CREAM REGULATIONS.

Three samples of cream were purchased and submitted to the Public Analyst, who certified them to be genuine and to comply with the requirements of the Regulations, There was also purchased 91 samples of milk for Bacteriological examination, and 185 samples of water were submitted for a like purpose. The result of these is given in the Medical Officer's report.

It was found necessary to report to the Health Committee 166 persons who had failed to comply with notices served upon them for the abatement of nuisances, and the Committee gave authority to institute proceedings against them. These persons were then informed of this by letter, with the result that it was found necessary to take out 10 summonses only. (For result of magisterial proceedings, see Table 27.)

The clerical work of the office, viz., the keeping and compiling of records and statistics, the ever increasing demands for returns, etc., from various Government departments, is constantly increasing the work in the department. In addition to the work enumerated in the various tables, 613 letters and 728 circular letters with respect to various matters in connection with the department were sent out, and in addition to the above the following institutions, laundries, etc., were notified of infectious diseases in dwelling houses, viz.:—

To th	e Royal Infirmary	104
,,	Eye Infirmary	52
,,	Monkwearmouth Hospital	52
,,	Public Libraries	208
,,	Private Lending Libraries	312
,,	Laundries	
,,	Day Schools	1,330
,,	Sunday Schools	

In conclusion I beg to tender my grateful thanks to the Chairman and Members of the Committee for their uniform kindness and consideration, and to acknowledge the loyal and hearty co-operation with which Mr. Watson, my Deputy, and every member of the staff has assisted me. It is only by such co-operation and mutual assistance that the responsible and ever increasing demands on the Department by legislative and other enactments respecting public health can be successfully dealt with.

I am, Gentlemen,

Your obedient Servant,

JOHN PENNOCK,

Chief Sanitary Inspector.

July, 1914.

TABLE 1.
Showing Visits made by District Inspectors.

INSPECTIONS.	No. 1 District.	No. 1A District.	No. 2 District.	No. 3 District.	No. 4 District.	No. 5 District.	No. 6 District.	Totals.
FACTORY AND WORKSHOP ACTS:-								
Factories				6			1	7
Workshops			***	1				2 2
Laundries				***	6		***	6
Workplaces :			***		0	***	***	U
Stables, etc.	68	21	1	61	83	87	52	373
Other					1	1 0003		1
Dairies, &c.	-	1	1	1	1	1	1000	
Cowsheds							1	1
Dairies and Milk Stores					2			2
SAMPLES:-		1	-			N.		
Sale of Food and Drugs		***	18	55	4		18	224
Bacteriological	40		41	50	45	52	48	276
Provisions:			1					
Fruit and Provision Stores			***				11	11
Fish Shops		***		1		***	11	1 36
Butcher Shops					25 21		11	21
Inspections:	***	***	***	444	21		***	21
Dwelling Houses	915	28	1080	3971	1058	2503	335	9190
Business Premises	47	49	2				15	133
Tenemented Houses	1914	1290				2506		13580
,, Rooms	4170		4530	***		2212	324	12250
Infectious Diseases	316	9	89	113	204		89	1007
" " "Contacts"	57	6	***	19	49	339	12	482
Common Lodging Houses	38	48						230
Work in progress.	336	365			2190		1132	8178
Appointment and Advice re work	32	84	186		237	103	83	793
Information (Ownerships, &c.)	515	332		466			1078	4301
Smoke Observations				1	994	50	***	384
OFFENSIVE TRADES:—			***	***	334	30		904
Marine Stores					5			5
Fried Fish and Fish Curing							4	4
Hide and Skin Warehouses					3	***	***	3
HOUSING OF WORKING CLASSES AND		00000		11333				
TOWN PLANNING ACTS :-								
Number of Tenements Inspected								
and re-inspected	517	126	75	2	23	228	47	1018
Number of Rooms Inspected and	1000	3.40	100			0.10	0.0	1071
re-inspected	1053	146	196	11	44	316	88	1854
Number Inspections re work	257	67	39		15	72	207	657
Shops Act Visits	112		151	***	***		***	112 151
Other Inspections	***		101		***	***	***	101
Total Inspections	10105	0001	10193	chen	8592	0040	coon	55302

TABLE 2.

SUMMARY OF NOTICES SERVED for the Abatement of Nuisances.

DE SE SE SE SE	Prelin	minary.	Stat	utory.	
Nature of Notice,	Owner.	Occupier.	Owner,	Occupier.	Totals.
To cleanse and Disinfect Premises after Infectious Disease		863		89	952
"Abate Nuisance arising from :— Drains	290	5	167	18	480
Water Closets	284 376	16	124 135	5	429 511
Yard Pavements	122 345	4	62 123		188 468
Defective Spouts, &c Animals and Fowls Overcrowding	315 33 44	2 36	97 1 16	1 7	412 37 103
Dirty Dwelling Rooms Manure and Refuse	26	27		22	49 40
Other Nuisances	187		14		201
Provide Domestic Water Supply	33		3		36
To Lime Wash Dwelling Houses Common Lodging Houses		2659 3			4694
", Staircases and Passages ", Yards and Conveniences	114 114	166 574	11		291 688
Under H. W.C. and Town Planning Acts, &c.			222	77	299
,, Provisional Order			489		489
" P.H.A. Section 36			142		142
Totals	4318	4356	1619	219	10512

TABLE 3.
Showing Notices Served in each District.

Notices Served.	No. 1.	No. 1A.	No 2.	No. 3.	No. 4.	No. 5.	No. 6.	Totals.
To Cleanse and Disinfect Premises after Infectious Disease	304		89	113	179	177	90	95 2
To abate Nuisance arising from -								
Drains	127	67	55	31	52	74	74	480
Water Closets	88	52	45	35	58	42	109	429
Privies and Ash-pits	22	16	6	182	48	87	150	511
Yard Pavements	33	3	32	15	27	24	54	188
Dilapidated Houses	81	33	90	7	65	180	12	468
Defective Spouts, &c	52	32	77	16	53	122	60	412
Animals and Fowls		**	1		3		33	37
Overcrowding	35	14	38		4	10	2	103
Dirty Dwelling Rooms, &c	2		8		29	7	3	49
Manure and Refuse	16	7	8		2	2	5	40
Other Nuisances	126		55	3		8	9	201
To Provide Domestic Water Supply	3	2	10	2	2	4	13	36
To Lime-wash Dwelling Houses	2035	194	519		553	1068	325	4694
" Common Lodging Houses		3						3
., Staircases and Passages	40	38	27		109		77	291
,, Yards and Conveniences	40	38			166		444	688
Under H., W. C. & Town Planning,		LES!					-	
etc., Acts	187		19		13	34	46	299
" Provisional Order	23		61	61	144	131	69	489
,, P.H.A., Section 36	48		19	13	16	16	30	142
Totals	3262	499	1159	478	1523	1986	1605	10512

TABLE 4.

WORK DONE.

Waterclosets:— Cleansed or Unstopped	Animals kept as a Nuisance 15 Dwelling Houses:— Repaired Internally
W.C. Cisterns: New Cisterns fixed	Spouts Renewed or Repaired 444 Overcrowding Abated 56 Water Supply (domestic pur-
Soil or Vent Pipes :— New Pipes fixed—length, feet, 2601	poses
Drains:— Cleansed or Repaired	Dwelling Houses
Stoneware Pipes laid (4 in) ft. 17027 " (6 in.) ft. 444 Heavy Metal Pipes (4 in.) ft. 510	Yard Pavements:— Cleansed
Urinals:— Cleansed or Repaired 18	Accumulation of Manure or other Refuse:—
Privies:— Abolished and W.C.'s substi-	Removed
Ashpits:— Repaired (Brick Structures) 2	Samples:— Food and Drugs
Abolished—Dust Bins provided	Dacteriological 270

TABLE 5.

DRAINS TESTED.

	Nat	ure of '	Test.			
	Water.	Chemi- cal.	Smoke.	Total.	Defective.	
On Complaint or Request	29	1	34	64	18	
On Suspicion of Nuisance	30	46	31	107	42	
On Account of Infectious Disease	26	58	13	97	14	
Work in progress	1450	3	37	1490	53	
Retested	178		5	183	14	
Totals	1713	108	120	1941	141	

TABLE 6.

REGISTERED COMMON LODGING HOUSES.

Locality of House.	No. of Rooms.	No. of Lodgers.
		Dougot of
4 and 5, Bedford Street	13	83
3 and 4, Charles Street	11	37
41, 42, and 43, Spring Garden Lane	11	35
38, Spring Garden Lane	6	21
6, Maud's Lane	8	37
1, Horn's Lane	8	31
10, Church Street East	8	36
2, Queen Street East	6	47
2, Arras Lane	5	42
3 and 4, Queen Street East	6	46
14 and 15, George Street East	17	47
29, High Street East	14	81
5 and 6, High Street East	14	185
170, High Street East	2	5
195½, High Street East	2	15
22, Lambton Street	6	25
The second second	land the	1

TABLE 7.
REPORTS FROM INSPECTORS.

District.	To Chief Inspector.	To Cleansing Superin- tendent.	To Borough Surveyor.	To Water Company,
1	12	8	3	
la			4	
2	9	21	12	11
3			59	
4	19	28	6	
5	3	40	16	
6	9	17	11	1
Total	52	114	111	12

TABLE 8
COMPLAINTS RECEIVED AT THE HEALTH OFFICE, and attended to during the year 1913.

NATURE OF COMPLAINTS.	Totals.
Roof, Spouts, etc., out of Repair	41
Waterclosets out of Repair	39
Overcrowding	21
Drains out of Repair	89
Dampness	8
Offensive Smell	12
Pavement out of Repair	3
Dilapidated Houses	15
Animals kept as a Nuisance	13
Accumulations of Rubbish	10
Dirth Houses	4
Dirty Houses	1
Ashpits Insanitary	4
Miscellaneous	31
Totals	297

Of the total complaints 47 were unfounded.

TABLE 9.

Showing the number of Dwelling Houses in the Borough, and the Closet accommodation provided therewith, viz:-

Houses wit	th Water-Closets and Movable Ash Receptacles	19981	
,,	" "Fixed" "	260	
,,	Slop or Waste Water-Closets	39	
			20280
"	Water-Closets and Privies and Open Ashpits	25	
"	" Covered "		
	(Ashclosets)	476	
	D		501
"	Privies and Open Ashpits	145	
20	" Covered " (Ashclosets)	3046	
,,	Pans	103	
			3294
	Total		24075

TABLE 10.

Showing the kind of Conveniences in use at the FACTORIES, WORKSHOPS and WORKPLACES within the BOROUGH.

Wate	er Carri	age-Ordinary Water-Closets	 855
		Trough Closets	 45
Privi	es with	Covered Ashpits	 46
	"	" and also Water Closets	 13
	,,	Open Ashpits	 2
	**	Over Manure Pits	 9
	,,	" River on Quay Side	 7
Pan	Closets		 3
		W . 0 . 1 1	980

Seven Water-Closets have been provided at Factories and Seven for Workshops.

TABLE 11. INSPECTION OF PROVISIONS.

The following Work has been performed by the Inspector appointed for this purpose.

Visits of Inspection	No. of Premises Inspected.
MEAT TRADE— Butchers' Shops (retail) Slaughter Houses Game, Poultry, and Rabbit Shops	4973 1592 201
Fish— Fish Shops (retail) "Frying "Curing "Hawkers' Barrows or Baskets	50 342 20 29
FRUIT TRADE— Fruit Shops (retail)	1836 493 758 75
MILK REGULATIONS— Cowsheds Milk Shops or Stores Ice Cream Stores, Shops, or Stalls	120 1728 476
Provisions. Market Stalls	30
OFFENSIVE TRADES— Tripe Preparing Skin Preparing Hide and Skin Warehouses Marine Stores Other Visits (Piggeries, etc.)	174 87 118 72
Total Inspections.	13461

TABLE 12.
FOOD CONDEMNED AND DESTROYED.

N	ATURE OF UNSOUND FOOD.	Quan	tity.
Carcases	of Cows (23)	14,888	lbs.
,,	Heifers (13)	6496	lbs.
**	Bullocks (2)	1416	lbs.
,,	Sheep (1)	70	lbs.
,,	Pigs (9)	1004	lbs.
Viscera o	f Animals	62	
Tripe		160	lbs.
Mussels		168	lbs.
Frozen R	abbits	375	
Strawber	ries	1176	lbs.
Apples		20	lbs.
Pears		50	lbs.
Vegetable	28	128	lbs.

TABLE 13.

DAIRIES, COWSHEDS, AND MILKSHOPS.

Dairymen,	Cowkeepers Registered	10
Number of	Cowsheds	17
"	Cows (approximate)	144
,,	Milkshops on Register	485
nspection	of Dairies, Cowsheds, and Milkshops	1728
etters Dr	awing Attention to Contravention of Regulations	5
nspection	of Ice-cream Stores, Shops, or Stalls	476

TABLE 14.

OFFENSIVE TRADES.

The Offensive Trades carried on in the Town are as follows :-

Chemical Works	1
Fish Curing Houses	4
Fish Frying	114
Gut Scraping Houses	2
Marine Stores	26
Oil and Grease Works	4
Paint Works	2
Skin Warehouses	3
Tallow Melting Works	1
Tripe Preparers	8
Total	165

TABLE 15.

FACTORIES, SHOPS, AND WORKSHOPS.

The following work has been performed by the Inspector appointed for this purpose.

Inspections and Enquiries.	
Factories	36
Workshops	92
Workplaces	16
Restaurant Kitchens.	4
Domestic Workshops	5
Laundrie	1
Outworkers, Home	34
" Employers of	4
Bakehouses :	
Wholesale	1
Retail	43
Domestic	7
Shop Hours' Act, 1912, Visits	320
" Enquiries from Proprietors	65
" Enquiries from Assistants	130
Under Housing, Town Planning, etc	3
Rag Flock Act, 1911, Samples	
Other Visits	6
Total Inspections	778

TABLE 16.

Shewing the Notices, &c., served by the Inspector of Shops and Workshops.

To Cleanse or Limewash Factories	2
Workshops	30
Workplaces	3
Rakehouses	32
Restaurant Kitchens	3
Sanitary Corveniences	12
To abate Nuisances from :-	12
Defective Senitary Conveniences	13
Vard Payament	1
Ratahansa Floore	4
" Yard Drains	8
", Walls, Floors, Ceilings,	0
	-
Roofs, Spouts, etc	6
,, Gas Stoves	7 2 5
" ,, from Dirty Yards	9
,, ,, ,, Accumulations of Trade Refuse	-
	5
" , " Accumulations of	
Manure	6
" Overcrowding	3
To provide Suitable and sufficient Sanitary	2.2
Conveniences	12
" Separate Sanitary Conveniences for	
Sexes	3
" Partitions to Trough Closets	3
" Additional Light to Conveniences	4
" Screens to Sanitary Conveniences	9
" Intervening Spaces to Sanitary	
Conveniences	3
" Ventilation to Bakehouses	2
,, Proper Drainage for Workshop floors	2 2 1
" Proper Manure Receptacle	1
" Lists of Outworkers	138
To Display Abstract, Factory and Workshop	
Act	23
Notices re Irregularities under the Shops Act,	
1912	168
Reports to H.M. Inspector of Defects Remedied	72
" Other Authorities (Outworkers)	22
" Chief Inspector	15
" Borough Surveyor	12
", Cleansing Superintendent	4
Totals	629

TABLE 17.

GIVING THE NUMBER OF SHOPS IN THE BOROUGH
WHICH ARE SUBJECT TO THE SHOPS

ACT, 1912.

Manager Mile of remo	Shops.	Male. Females. Male. Number of Persons. Number of Persons. Number of Persons. Number of Shops. Males. Males.						ftha	umber of ops.	
TRADE.	No. of	Male.	Female.	Young Persons.	Number n	No. of Shops.	Males.	Females.	Young Persons.	Total Num Shops.
Bakers and Pastry Cooks Booksellers and Stationers Boots and Shoes Butchers Chemists and Druggists Coal Landsales Confectioners Costumier and Mantles Drapers Fancy and Smallwares Fishmongers Fried Fish Shops Fruiterers and Florists Furniture Dealers Glass and China Grocers and Provisions Hairdressers and Barbers Herbalists Ice Cream Dealers Ironmongers and Hardware Jewellers and Opticians Licensed Victuallers Milliners Motors and Bicycles Music & Musical Instruments Newsagents Pawnbrokers Refreshment Houses Saddler and Leather Cutters Second-hand Clothes Ship Store Merchants Tobacconists Sundry	55 148 26 13 114 4 99 38 7 31 69 46 5 191 60 2 6 35 26 137 14 10 9 14 10 9 14 15 16 16 16 16 16 16 16 16 16 16	8 18 60 157 36 13 12 1 296 14 9 4 17 68 7 290 43 1 6 41 34 287 1 9 1 16 15 2 16 15 16 16 16 16 16 16 16 16 16 16	25 23 46 15 16 122 24 428 70 5 22 100 43 8 86 12 23 13 102 29 6 12 11 23 75 6 14 3 75 6 14 3 75 6 6 14 75 75 75 75 75 75 75 75 75 75 75 75 75	8 10 40 95 18 1 37 11 178 33 3 8 37 23 2 85 42 16 5 8 20 2 1 7 32 2 2 2 7 20	63 8 64 42 14 16 272 34 7 9 20 48 15 6 148 39 3 8 22 9 143 25 36 7 64 49 19 64	17 7 14 29 5 4 122 10 3 7 23 48 19 1 95 7 2 8 13 4 57 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	16 7 6 6 3 4 128 9 5 6 28 48 14 4 99 2 2 4 11 11 57 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 1	96 39 132 221 46 33 508 4 143 48 23 74 175 82 12 436 106 7 22 72 38 337 17 17 15 65 40 23 12 77 15 34 134 3085

TABLE 18.

FACTORY AND WORKSHOPS ACTS

Showing the Number of Registered Factories in the Borough.

FACTORIES	No.	FACTORIES.	No
Ale Bottlers	6	Joiners	26
Artificial Stone Makers	1	Laundries	8
Bakers	5	Lead Glazing	1
Bicvcle Maker	1	Millers	3
Block and Mast Maker		Mineral Water Manufacturers	6
Boat Builder		Metal Broker	1
Bookbinders	3	Model Makers	2
Boot and Shoe Makers	11	Motor Car Builder	1
Bottle Maker		Organ Builder	1
Box Maker	1	Paint Manufacturers	2
Brass Founders	7	Paper Bag Makers	2
Brewers		Patternmaker	1
Brick Makers	2	Picture Frame Maker	1
Brush Maker	1	Potters	2
Cabinet Makers	7	Plumbers	5
Carriage Builders		Preserve Makers	2
Carver		Printers	32
Cattle Spice Maker	1	Rope Manufacturers	6
Cement Block Maker	1	Sail and Flag Makers	3
Cement Manufacturer		Sausage Makers	9
Compass Makers		Sculptor	ī
Coppersmith		Shipbuilders and Repairers	12
Dry Docks		Ships' Lamp Makers	2
Dyer		Steel Manufacturers	3
Electrical Engineers		Steering Wheel Maker	1
Electricity Works		Stocking Knitter	1
Engineers		Stone Dressers	3
Electro Plating	1	Sugar Boiling	1
File Maker	1	Tent Maker	î
Finings Manufacturer	1	Test Works	1
Firewood Factories	9	Timber Sawyers	8
Galvanizer		Tobacco Manufacturer	1
Gas Manufacturers	9	Whiting Manufacturer	1
Glass Manufacturers		Window Blind Maker	1
Glass Marker	1	Wood Turners	9
Ironfounders	8	Titou Turners	-
110mounders	0	The second secon	265

Showing the Number of Registered Workshops, Nature of Trades, and Number of Employees.

TABLE 19.

	ot	Ploy	m- ring		ot	En	
Trades.	Number of	Males.	Females.	TRADES.	Number each.	Males.	Females.
Bakers and Confectioners Bicycle Makers Blacksmiths Block and Mast Makers Boat Builders Botanical Brewers Boot and Shoe Makers Brush Makers Cabinet Makers Cartwrights Coach Builders Coopers Dentists Disinfectant Maker Electrical Engineers Engravers French Polishers Harness Makers Horse Shoers Joiners Mattress Makers Milliners and Dressmakers Model Makers Motor Repairers	89 6 16 3 2 1 51 2 19 8 2 4 2 1 1 2 7 8 9 45 2 108 7 108 108 108 108 108 108 108 108 108 108	40 12 50 3 12 4 76 5 73 32 16 13 26 4 3 12 17 23 20 180 32 8 2	198	Paper Bag Makers Piano Repairers Pickle and Sauce Manufacturers Picture Frame Makers Pipe Makers Plasterers Plumbers Rope Maker Sculptors Stocking Knitters Sugar Boilers Tailors Tinsmiths Umbrella Makers Upholsterers Watchmakers Water Proof Manufacturer Weighing Machine Maker Window Blind Maker Wire Workers Wood Carver		4 13 5 16 170 8 25 10 210 11 1 50 30 2 5 1 3 8	2 20 1 4 10 5 170 1 28
				Totals	564	1235	1631

TABLE 20.
SHOWING THE NUMBER OF DOMESTIC WORKSHOPS.

Nature of Business,	Number of each.
Bakers and Confectioners	57
Bicycle Makers	1
Boot and Shoe Repairers	20
Cloggers	2
Coopers	1
Dressmakers	12
French Polishers	2
Joiners	6
Laundries	1
Locksmith	1
Mattress Maker	1
Picture Frame Maker	î
Stocking Knitter	1
Tailors	6
Pinsmiths	9
Toymakers	ī
Watchmakers	4
	denti de la constante de la co
Total	119

TABLE 21. SHOWING THE NUMBER OF WORKPLACES.

Nature of Business.	Number of each.
Ale Bottler	1
Auctioneer	i
Bottle Exchange	1
Builders' Merchants	4
Florists	5
Haulage Contractors	5
Laundries	3
Mews	30
Oil Works	1
Photographers	12
Pottery Warehouse	1
Painters Restaurant Kitchens	32
Slaters	3
Salt Packers	6
Shipchandlers	2
Sign and Ticket Writers	2
Timber Merchants	1
Warehousemen	2
Wharfingers	4
Sundries	3
Total	120

TABLE 22.

Showing the Number and Nature of Irregularities dealt with under the SHOPS ACT, 1912.

Failure t	o Display	Shop Assistants Weekly Half-Holiday List	188
,,	"	Closing Notice *	522
,,	,,	Notice as to Employment of Young Persons	85
,,	Observe	Interval for Meals	25
,,	,,	Half-Holiday	17
,,	Close		10
,,	Display	Correct Holiday Lists	60
			970

TABLE 23.
RAG FLOCK ACT, 1911.

Articles Analysed.	No. Analysed		lt of lysis.	Extent of Adulteration.	Action taken.
Flock	5	3	2	Contained 158 parts per 100,000 soluble Chlorine as Chlorides	Paid Costs (£2/1/4)
				Contained 42 parts per 100,000 soluble Chlorine as Chlorides.	Letter of Caution.

TABLE 24.
WORK OF DISINFECTOR.

Articles.	Disinfec- ted.	De- stroyed.	Premises Disinfected.	No.
Beds Mattresses Blankets Pillows Quilts Sheets Bolsters Shawls Carpets Sundries	983 296 1163 1655 1131 758 866 98 96 1376	11 9 1 4 1 1 2 1	School Class Rooms School Cloak Rooms Sanitary Conveniences Rooms of Dwelling Houses	28 7 54 1715
Totals	8422	30	Da Navel E	1804

Number of	Visits in connection with Infectious Disease	56
"	Patients removed to Borough Sanatorium	571
,,	,, Otherwise	17
,,	Library Books Disinfected	267

TABLE 25. ANALYSIS OF FOOD AND DRUGS.

		1		
4.413	lysed.		lt of lysis.	AND THE PROPERTY OF THE PARTY O
Articles Analysed.	No. Analysed.	Genu- ine.	Adult- erated.	Extent of Adulteration. Action taken.
				(20 per cent. def. in Milk fat
Milk	150	124	26	12.4 ,, non-fatty solids Fined 10/- and costs
		1		11.6 ,, ,, Milk fat Dismissed. 3.3 ,, ,, Letter of Caution.
	198	h 15		19-9 Diemisead
			010	3.3 ,, ,, Letter of Caution.
		11119		2·3 ,, ,, non-fatty
				5·9 , solids do.
			1000	13:2 Mills fat Diemissad
	1			21.7 ,, ,, do.
	1			5.0 ,, ,, Letter of Caution.
				(8:3 " " " ") Rings co 1 1
				4.6 ,, ,non-fatty Fined £2 and costs
				33 ,, ,, Letter of Caution.
				16.6 ,, ,, Dismissed.
				[100 , , ,]
			1000	132 ,, non-fatty Fined £3 and costs
				6:6 Mills fot Letter of Caution
			151721	5.0 ,, ,, do.
				7.6 ,, ,, non-fatty
				solids Dismissed.
				119-7 non-fatty do
				solids
				50 ,, Milk fat Letter of Caution.
				8·3 ,, ,, do.
	100			4.9 ,, non-fatty solids do.
				3.3 ,, Milk fat do.
				13:3 ,, ,, Fined 20/- and costs
				6.6 ,, ,, Letter of Caution.
	REIN		in si	2.3 " " non-fatty solids do.
		Wash		3'3 , Solids do.
Camphorated Oil	1		1	Contained Mineral Oil instead
		1111		of Olive Oil and deficient in Fined 20/- and costs
Butter	2	2	-233	Camphor 50 per cent See inf. sample++
Magnesia	ĩ		ï	Contained :-
				Magnesium Sulphate 1.3
1				Sodium Bi-carbonate 27:1
			100	Citric Acid 20:6 Letter of Caution.
Dripping	1		1	Sugar and Moisture 51 0 See inf. sample† Contained at least 40 per cent. Dismi-sed.
				Cotton Seed Oil or Stearine See inf. samplet
Coffee	1		1	Contained 79 per cent. Chicory Dismissed. See inf. sample*
Totals	156	126	30	AMERICAN STREET, STREE

TABLE 26.

ANALYSIS OF FOOD AND DRUGS. INFORMAL SAMPLES.

INFORMAL SAMPLES.							
Articles	alysed.	Ana	lt of lysis.	la divesti 🖫			
Analysed.	No. Analysed.	Gen- uine.	Adult- erated.	Extent of Adulteration.	Action taken.		
Butter	31	31	***	Annual Control of the			
Lard	17 5	17 5		Series on the			
Margarine	3	3					
Camphorated Oil	6	5	1	Contained Mineral Oil in place of Olive Oil with which it			
HOUSE IN THE PARTY.				should have been made. See Formal Sample††			
Licorice Powder	8	8		See Pormar Sample			
Gregory Powder	12	11	1	Contained 3 parts Calcined and 2 parts Carbonate Magnesia			
Cream (Preserved)	3	3		a parte Carbonate magnesia			
Seidlitz Powder Citric Acid	6 3	6 3					
Acetic Acid	1	1					
Cream of Tartar Borax	2	2					
Tartaric Acid	2	2	***				
Magnesia	5	3	2	Contained 4 per cent. Mag- nesia, rest Soda Bi-carbonate,			
laters hose 22 Louis		-		Citric Acid and Sugar.			
				Contained only 40 per cent. Calcined Magnesia, rest Car-			
				bonate and Moisture.			
Cod Liver Oil	1	1		See Formal Sample+			
Castor Oil	9	9					
Saffron Dripping	1 7	6	ï	Contained 30 to 40 per cent.			
Dripping				Cotton Seed Oil. See Formal Sample‡			
Cheese	3		3	Contained respectively 10.5, 3.1, 5.1 of fat, far below what			
Dalais Dani				Cheese should contain.			
Baking Powder Fruit Wine (Black	14	14		The second of th			
Currant)	1	***	1	Found to be a weak solution of Glucose and some colouring			
Butter (Fresh)	6	6		and flavouring material.			
Sausage	8	2	6	Contained 0.69, 0.41, 0.26, 0.30,			
				0 46, 0 27, per cent. Boric Acid.			
Cocoa	5 6	5	6	Contained 27 40 40 50 00			
The second secon	0	1000	0	Contained 37, 40, 49, 56, 30, and 76 per cent. Chicory. See Formal Sample*			
Mustard	6	6		200 Tormar Campie			
Pepper		6 3		SE EUTO			
Syrup	1	1					
Totals	182	161	21	to ter her ?	Norsin		
200000	102	201			AND DESCRIPTION OF THE PARTY OF		

TABLE 27.

MAGISTERIAL PROCEEDINGS.

Particulars of Complaints.	No.	How disposed of.
Adulterated Milk	11	7 Dismissed. 1 Fined 10/- and costs. 1 ,, £2 ,, 1 ,, £3 ,, 1 ,, £1 ,,
Camphorated Oil containing Mineral Oil instead of Olive Oil and de- ficient 50 per cent. in Camphor	1	Fined £1 and costs.
Rag Flock containing excess of sol- uble chlorine as chlorides	1	Paid Costs (£2 1s. 4d.)
Dripping containing at least 40 per cent. Cotton Seed Oil	1	Dismissed.
Coffee containing 79 per cent. Chicory	1	Do.
Washhouse pavement out of repair	1	Withdrawn on payment of costs (abated)
Yard pavement out of repair	2	1 Abated—case withdrawn. 1 Abatement Order made to Abate in 1 month.
Back eave spouts out of repair	2	Withdrawn on payment of costs.
Unwholesome premises	1	Abate in 14 days, also fined 2/6 and costs.
Pigeons a nuisance	1	Dismissed.
Dilapidated house	2	Withdrawn on payment of costs (Nuisances abated).
Insanitary conveniences & approaches	1	Dismissed.
Failure to notify Infectious Disease in house	2	Fined 10/6 in each case.
Selling Fish during Prohibited hours.	1	Fined 5/- and costs.
Failure to display Shop Assistants' Half-Holiday List	1	Fined 20/- and costs.

TABLE 28.

Summary of the Houses dealt with under the Housing, Town Planning, &c., Act, Section 17, showing the principal items of repairs, &c., carried out thereat.

To be a second to be a fill to the second to	and the second s
SITUATION OF PREMISES.	Remarks.
54, Burleigh Street	An offshoot building two storeys high has been pulled down and the site given up for yard space. New windows provided in back rooms, new floors and ceilings in three rooms; chimney, roofs, and walls repaired, attic stairs removed and attics sealed up; all the windows made to open.
28, Spring Garden Lane	Attic rooms discontinued for use and stair- cases thereto removed. New partitions and new floor provided, and staircase altered with the addition of more light thereto. Two new ceilings, and sundry repairs, in- cluding all windows, being made to open.
4-4½, Warren Street	One half of this house has been pulled down and given up as yard space. New w.c. erected with new drains, etc., rooms provided with additional light, new floors, partitions, etc.
182, High Street East	A four-storey building offshoot at the rear has been pulled down and the site given up as additional yard space, which affords light to staircase and back rooms. The attic rooms (3) have been closed and the staircase removed; new w.c. erected in the yard and new floors and ceilings provided. The external wall (North) rendered in cement.
89, High Street East	A three-storey building, including baker's oven, situated at the rear, has been pulled down and the space given up for yard, and two new water-closets for this house and No. 88 provided.
88, High Street East	A building in the rear used as a slaughter- house pulled down and the site given up for yard space, additional staircase pro- vided to second floor rooms, small dark room on first and second floors done away with, new landing windows provided, attic rooms discontinued and old staircase re- moved giving more ventilation, etc., new floors, ceilings, and general repairs.

SITUATION OF PREMISES.	Remarks.
2½, Vine Street	A three-storey offshoot building pulled down, affording additional light and ventilation to staircase, and ground floor rooms; new windows, floor, and ceiling; repairs to roof, spouts, and chimney. A large room (Mission Room) formerly bar and sitting rooms of licensed premises.
3, Vine Street	Premises generally repaired, and in connection with No. 2½ has been improved by the demolition of building, and high wallsparty walls which obstructed the light and ventilation.
20, Vine Street	A three-storey building at the rear pulled down and the site given up for yard space, affording more light and ventilation to this and the adjoining dwellings; new windows provided to ground floor rooms, old staircase and attic room dispensed with, new floor, ceilings and general repairs, including roof, etc.
4, Vine Street	Four rooms, viz., two on ground floor, and two on the first floor, have had enlarged windows provided, the staircase too has had windows provided. The floors, walls and roofs repaired, and the external wall rendered with cement.
45, Vine Street	A three-storey building offshoot at the rear has been demolished and given up as yard space. New window frames fixed, also new floors, ceilings, and doors; roof thoroughly overhauled and repaired. Attic stairs removed and new drainage and general tepairs.
34, Burleigh Street	Building one storey high at the rear pulled down and the space given up for yard. New windows at the back provided, cellars built up and filled in with builders' rubbish; repairs to walls, floors, etc.
35, Burleigh Street	A two-storey building offshoot pulled down, affording additional light and ventilation; additional windows provided to ground floor room; walls, floors and ceilings repaired.
36, Burleigh Street	An offshoot building at the rear pulled down, enlarging the yard space and affording additional light and ventilation to the ground floor rooms; new windows provided, and sundry general repairs.

Hartley Nesham	Street and Square	The premises in Hartley Street have been pulled down, a licensed public-house, and also buildings between the site given up as additional yard space which also offords more light and ventilation to this and the
		adjoining houses; new outoffices, drainage,

- 15, Harrison Street ... Old floors taken up, earth removed from below, and new floors relaid; a light provided to staircase, windows repaired and made openable, internal walls repaired, also roof, fireplace, and spouts.
- 16, Harrison Street ... A dilapidated building at the rear has been cleared away forming a yard; new floor (ground floor) laid, repairs to other floors, windows, roof, walls, etc.
- 17, Harrison Street.

 Old floors taken up and the ground floor excavated, new floors laid, with ventilation below, also new floor to first floor rooms; new partitions and ceilings; new window frames, and repairs to roof, walls, fireplaces, etc., covered ashpit and privy converted to w.c. and ashpan; new drains laid.
- 10, Gerald Street ... Ground floors have been relaid, also internal walls repaired. Attic rooms have been provided with additional windows, made openable, admitting of thorough ventilation. Roofs, spouts, etc., repaired.
- 83, Church Street North...

 Two two-storey offshoot buildings in the rear have been pulled down, giving additional yard space and ventilation, and an area formed for the ground floor rooms; new additional windows have been provided. New floors in two rooms, new ceilings and general repairs to other parts of the house.
- 33, Vine Street ... A one-storey building at the rear has been pulled down, giving additional yard space; light and ventilation, new and additional windows provided, all windows made openable, new floors, and repairs to walls, ceilings, roof, etc.
- A large two-storey offshoot building pulled down, giving additional light and ventilation to the back rooms and staircase, part yard cemented, attic rooms discontinued, and staircase removed; roofs, walls, and floors repaired.

SITUATION OF PREMISES.	REMARKS.
24½, Hopper Street	Old roof taken off and new roof, including new timbers, provided, floors taken up and earth excavated from beneath and new floors relaid, also new ceilings and external walls, fireplaces, and other general repairs.
25, Hopper Street	Old roof taken off and new roof, including new timbers, provided, floors taken up and earth excavated from beneath and new floors relaid, also new ceilings and external walls, fireplaces, and other general repairs.
40-41, Huddlestone Street	A large two-storey building used as a work-shop pulled down and the space given up as yard area; an offshoot room has had the wall thickened from 4½ in. to 12 in. New floors laid and new window frames, partitions and ceiling to main building. Attic room sealed up, dormer windows removed, and roof, walls and yard repaired.
17, Moor Terrace (Adelaide Place)	A large warehouse with cellars at the rear of this house and the adjoining houses, Ncs. 17, Cousin Street and 18, Moor Terrace, has been pulled down, and also a large
18, Moor Terrace (Adelaide Place)	chimney stack. The space has been given up to form separate yards for each house, with new water-closet drains, and with separate and direct entrance from each tenement. Internal repairs carried out, consisting of new floors and additional windows, also repairs to roofs, chimneys,
17, Cousin Street	etc.
7, Hodgkin Street	Part of the house at the back, three storeys high, pulled down and given up as yard space. New floors, ceilings, windows and partitions provided. Numerous small repairs to the house, including roof and chimney. One gable has been partially rebuilt and the cellars filled up.
39, Hope Street	Demolished voluntarily.
40, Hope Street	Demolished voluntarily.
18, Flag Lane	Two-storey building at the rear pulled down and site given up for yard, the surface of which is cemented. New washhouse pro- vided. General repairs to roof, floors, walls, ceilings, etc.
19, Flag Lane	Two-storey building at the rear pulled down and site given up for yard, the surface of which is cemented. New washhouse pro- vided. General repairs to roof, floors, walls, ceilings, etc.

SITUATION OF PREMISES.	Remarks.
20, Flag Lane	A two-storeyed building behind this house has been pulled down and site given up for additional yard space; new windows pro- vided and general repairs to the house.
21-21½, Flag Lane	A three-storey offshoot building pulled down and site given up for additional yard space. New ceilings, floors, and windows, repairs to walls, fireplaces, roof, etc.
22, Flag Lane	A three-storey offshoot building at the rear pulled down and the site given up as ad- ditional yard space, new additional win- dows provided, roof, floors, walls and ceil- ings and other repairs carried out.
33, Lawrence Street	A large building in the yard has been pulled down and the site given up for yard space, which has been cemented. A new roof has been provided. Attic rooms dismantled and sealed up. Repairs to walls, floors, and windows, and outer walls of offshoot building rendered with cement.
61, Moor Street	A two-storey building at the rear pulled down and the site given up as yard space. New additional windows provided to the back rooms and staircase and general repairs to the house and shop.
60, Moor Street, 12, Pemberton Street	A new staircase from the upper tenements into the yard. Additional windows to existing staircase and passages. Repairs to roofs, windows and floors.
26, Hanover Place	The area at the rear has been enlarged, affording additional light and ventilation to the back rooms on first floor. Two rooms at the back on ground floor have been built up. New wall built dividing the rooms, also new floors and windows, new w.c. erected and general repairs to floors, walls and roof.
35, Hanover Place	Part of the house two storeys high pulled down and given up as yard space, one room on the ground floor has been built up, new staircases to first floor rooms, and general repairs.
11, Mount Pleasant	Outbuildings and yard walls taken down and re-erected; light provided to staircase. Ceilings and walls re-plastered. Floors and staircase repaired,

11, Burleigh Street	A three-storey offshoot building pulled down and given up for additional yard space, affording additional light and ventilation to this and adjoining houses. New windows, ceilings, floors and general repairs to walls, chimney and roof.
12-13, Burleigh Street	A three-storey offshoot pulled down, also part of the house, giving additional yard space and light and ventilation to the adjoining houses. New gable wall, new and additional windows provided, new ceilings, attic rooms discontinued and abolished. General repairs to walls, floors, roof and chimney.
38, Burleigh Street	An offshoot building at the rear pulled down and given up for yard space; attic rooms closed and staircase removed. New and additional windows provided and generally repaired.
27, Vine Street	A two-storey building in the yard has been pulled down and given up as additional yard space, affording more light and ventilation to the ground floor rooms. New roof, partition, walls and floors; all windows re-hung and made to open. Repairs to fireplaces, stairs, walls, etc.
28, Vine Street	Additional windows provided to ground floor room. New ceiling and floor; repairs to roof, spouts, walls and staircases.
1, Northumberland Place.	New windows provided, floors taken up, the earth excavated from below and new floors re-laid, one room offshoot made into a washhouse. The walls of another offshoot thickened from 4½ in. to 12 in. The roof and chimneys repaired and other general repairs.
£6, Zion Street	Part of the house three storeys high pulled down, the site given up as additional yard space, new windows, floors, and partitions and ceilings. The attic rooms discontinued and stairs removed, also dormer window, roof, chimney, and general repairs.
116, Church Street North.	A large two-storey building at the rear has been partially demolished, affording additional light and ventilation. New front and back walls with new roof, floor and ceiling, additional light and ventilation, new front and back walls, with new roof, floor and ceiling, additional and enlarged windows and general repairs to staircase, fireplace, etc.

SITUATION OF PREMISES.	Remarks.
115, Church Street North.	A large two-storey building in the rear pulled down and part given up as additional yard space. New windows and ceiling provided. Attic rooms have been abolished and the staircase removed and general repairs.
North and Cottage in Yard	Room with borrowed light abolished. New ceilings and division walls. Cellars filled in with builders' rubbish; outer walls rendered with cement. Roofs, chimneys, and windows repaired.
19-20, Hanover Place and 20, Back Hanover Place	The lower part of these buildings, hitherto used as shops, with a dwelling room at the rear, being semi-basement, have been discontinued, the doorway and window built up, leaving the rooms on second and third floors only as dwelling rooms. These have been thoroughly repaired and put into good habitable condition.
12-13-14, Hanover Place	A two-storey building at the rear has been pulled down, and the site given up as additional vard space, affording additional light and ventilation. New back staircase provided, new fireplace, all windows repaired and rehung. Roofs, floors and ceilings repaired.
50, Vine Street	A two-storey offshoot pulled down, giving additional yard space, light, ventilation, and additional windows provided to attic rooms. Floors, ceilings, windows, roof, etc., generally repaired.
51, Vine Street	A three-storey offshoot pulled down and the site given up as additional yard space; new floors and ceilings provided. Repairs to windows, roof, walls, and fireplaces, and sundry general repairs.
45, Flag Lane	New windows, ceilings, floors, and fireplaces. Repairs to roof, chimney, and walls. An outbuilding in front of the house has been pulled down and the site given up to the public.
2, Hartley Street	New gable wall built and external walls rendered with cement, roof and spouting repaired; attic room discontinued and sealed up, walls, ceiling and floors repaired.
3, Hartley Street	External walls rendered with cement. New ceilings to two rooms, internal walls replastered, and window, floor, etc., repaired.

18, Vine Street	A one-storey building at the rear pulled down and given up as additional yard space, water-closet taken down and rebuilt. Floors, windows, ceilings, walls and roof repaired. Attic rooms discontinued and staircase removed.
19, Vine Street	A one-storey building at the rear pulled down and the space given up for additional yard space. Repairs to floors, walls, windows, ceilings and roof. Attic rooms discontinued and staircase removed. Slop w.c. abolished and an ordinary w.c. provided.
42, Silver Street	A large three-storey building at the rear pulled down and the site given up as yard space, new gable wall built, attic rooms discontinued, all windows rehung. Roof, walls, floors, ceiling and staircase repaired.
43, Silver Street	Part of a three-storey building pulled down and given up as additional yard space, new windows, floors and ceilings provided, also roofs, spouts, etc.
13, Hardwick Street	A two-storey offshoot building partially pulled down and re-roofed; light to staircase pro- vided. Repairs to walls, ceilings, and floors, all windows repaired and rehung.
14, Hardwick Street	A two-storey offshoot building partially pulled down and re-roofed; light to staircase pro- vided. Repairs to walls, ceilings, and floors, all windows repaired and rehung.
11, Barrington Street	An additional 4½ in. wall built against an offshoot building to prevent dampness. New windows and new floors provided.
8-9, Huddlestone Street	Ground floors taken up, the ground excavated, and new floors laid. New window frames provided, fireplaces and grates renewed, new ceilings to two rooms. New staircase from upper tenements to yard provided and general repairs to roof, spouts, outer walls, etc., and a new yard drain provided:
7, Flag Lane	Two attic rooms have been discontinued and sealed up; new staircase formed, with new floors, ceilings and windows. Roofs, spouts, and outer walls repaired.
8, Flag Lane	Attic rooms discontinued and built up; walls, roof, floors, and ceilings repaired and a new staircase from first floor to the yard provided, to give tenants access to a yard, etc.

SITUATION OF PREMISES.	Remarks.
9, Flag Lane	New floors and partition walls, with repairs to roof, fireplace, windows and ceiling.
10, Flag Lane	A two-storey building partially pulled down, giving an increased yard space. New windows, floors and ceilings provided, reroofed, main building and repairs to fire-places, walls, etc.
11, Flag Lane	A two-storey building at the rear partially pulled down, giving an enlarged space; new windows, floors, and ceilings provided. New w.c. erected. Repairs to roof, walls, fireplace, etc.
26, George Street East	A two-storey building at the rear partially pulled down, giving additional yard surface, light and ventilation, and new windows provided. Attic rooms discontinued, and repairs to roof, floors, walls and staircase, etc.
27, George Street East	A two-storey building at the rear partially pulled down, giving additional yard surface, light and ventilation, and new windows provided. Attic rooms discontinued, and repairs to roof, floors, walls and staircase, etc.
28, George Street East	A building at the rear pulled down, giving additional yard space. Back wall taken down and retuilt. New ceiling and partitional walls; repairs to floors, windows and fireplace.
31-31½, George Street East	A three-storey building in the rear has been pulled down, and the site given up as additional yard space. New windows to back rooms, light to staircase. General repairs to roof, walls, floors, etc., and new stoves provided.
5, East Street	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.
45-46, East Street	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.

47, East Street	An offshoot building two-storeys high has been reduced to one storey, and the lower storey discontinued as a living room and converted into a washhouse. Repairs to floors, ceilings, walls and fireplaces.
87, Whitburn Street, 88, Whitburn Street, 1, Charles Street North	A two-storey building pulled down, giving additional yard space. New sanitary conveniences erected; one room shop reconverted into a dwelling room and a small room (shop) converted into a washhouse. New windows to staircase and general rerepairs to roof, floors, etc.
43-44, George Street East.	A two-storey building at the rear pulled down, affording additional light, ventila- tion, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
41-42, George Street East.	A two-storey building at the rear pulled down, affording additional light, ventila- tion, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
39-39½, George Street East	A two-storey building at the rear pulled down, affording additional light, ventila- tion, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
38-38½, George Street East	A two-storey building at the rear pulled down, affording additional light, ventila- tion, and yard space. Repairs to walls, ceilings, floors, windows, fireplace, etc.
29, New Grey Street	A two-storey room at the rear has been pulled down, and space given up for additional yard space. New windows to ground floor room. Attic rooms discontinued and staircase removed. Repairs to roof, chimney, floors, and staircase.
30, New Grey Street	A two-storey room at the rear has been pulled down, and space given up for additional yard space. New windows to ground floor room. Attic rooms discontinued and staircase removed. Repairs to roof, chimney, floors, and staircase.
10, Walton Place	A three-storey building at the rear has been pulled down and given up for yard space. New staircase provided, also new floors and ceilings. Yard cemented, washhouse provided, and sundry repairs to windows, roof, etc.

11, Walton Place	A two-storey building pulled down, affording additional yard space and ventilation. Washhouse provided by the conversion of a one-storey living room for this purpose. Yard cemented, new ceilings and repairs to windows, roofs, walls, etc.
26, Coronation Street	A two-storey building pulled down, affording additional yard space, light, and ventila- tion; repairs to roof, wall, and ceiling.
27, Coronation Street	A large wooden erection and staircase de- molished, affording additional yard space, light and ventilation. New and additional windows provided, new floor and repairs to ceiling, etc. New w.c. erected; drains, etc., repaired.
25, Flag Lane	Part of a two-storey building pulled down, giving additional yard space, also more light and ventilation to ground floor rooms; new outside staircase provided. Yard cemented and drains relaid. External walls rendered with cement. General repairs to floors, ceiling and roof.
26-26½, Flag Lane	A large one-storey building at the rear pulled down, giving additional yard space, also more light and ventilation to ground floor rooms. New outside staircase provided. Yard cemented and drains relaid. External walls rendered with cement, and general repairs to floors, ceiling and roof.
6, Back Dundas Street	External walls rendered in cement, new floors, ceiling and partition walls. New and additional light to staircase and sundry repairs to roof, spouts, etc.
38, Silver Street	A three-storey building in the rear pulled down, giving yard space, light and ventila- tion. New w.c. erected, and pavement cemented. Cellars built up, new gable built, and general repairs to walls, roof, floors, etc.
14, New Grey Street	A two-storey building situated between this house and No. 33, Golden Alley has been pulled down, and the space given up for yard. New floors and ceilings and new windows, repairs to walls, roof, etc.
33, Golden Alley	A two-storey building situated between this house and No. 33, Golden Alley has been pulled down, and the space given up for yard. New floors and ceilings and new windows, repairs to walls, roof, etc.

SITUATION OF PREMISES.	Remarks.
2, Covent Garden Street	A building in the yard pulled down and given up as additional yard space. New windows, floors, and ceilings provided. Repairs to staircase, walls and roof. Attic stairs re- moved and sealed up.
3, Covent Garden Street	A three-storey offshoot building in the rear pulled down, giving additional light and ventilation. New floors and ceilings, passage cemented, roof, chimney, etc., epaired. Attic rooms discontinued, and staircase thereto removed.
5, Covent Garden Street	A three-storey offshoot building in the rear pulled down, giving additional light and ventilation. New floors and ceilings, passage cemented, roof, chimney, etc., repaired. Attic rooms discontinued, and staircase thereto removed.
6, Zion Street	A one-storey building at the rear pulled down, giving additional yard space, light and ventilation. Attic rooms discontinued, and old stairs removed. Windows, floor, roof, and chimney repaired.
10, Lilburne Street	A two-storey building in the rear lowered, one storey affording light and ventilation to the staircase. A 4½ in. wall has been added to the external wall, making a 12 in. cavity wall. New ceiling to ground floor room, and all windows made to open.
10, Covent Garden Street.	A two-storey building in the rear pulled down, giving additional yard space, light and ventilation. Attic rooms sealed up and staircase removed, new windows pro- vided, and general repairs carried out.

. Newstand - For MINEAT