[Report 1878] / Medical Officer of Health, Sunderland County Borough.

Contributors

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

Publication/Creation

1878

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REPORT

ON THE

HEALTH AND SANITARY CONDITION
OF THE BOROUGH,
FOR THE YEAR 1878.

BY

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ANALYST.

Physician to the Corporation Fever Hospital.

SUNDERLAND:

JOSEPH HUNTLEY, PRINTER, 18, NILE STREET.

1879.

HEALTH COMMITTEE.

ALDERMAN STOREY, J.P.

VICE-CHAIRMAN.

COUNCILEDE HARRALD.

Councilion NEWBY

T. BEEFE

E. RICHARDSON

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BOROUGH OF SUNDERLAND.

HEALTH COMMITTEE:

CHAIRMAN.

ALDERMAN STOREY, J.P.

VICE-CHAIRMAN.

COUNCILLOR HARRALD.

ALDERMAN BARKER.

,, PRESTON.

COUNCILLOR ARMITAGE.

- ,, MATTHEW BELL.
- ., R. CAMERON.
- ., CROSSBY.
- ., FERGUSON.
- .. HIRST.
- .. KIDSON.
- " LAVERICK.
- ,, LAWSON.

COUNCILLOR NEWBY.

- .. T. REED.
- .. E. RICHARDSON. .
- ,, S. RICHARDSON.
- ., RICKABY.
- .. RUDLAND.
- " SMITH.
- " STILES.
- .. THOMPSON.
- ., WIENER.
- " WRIGHTSON.

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TABLE OF DEATHS in the Urban Sanitary District of Sunderland, classified according to Diseases and Ages; and showing also the Population and the BIRTHS therein during the Year ending December 28th, 1878.

		LATION AGES.	hs.	Мо	RTALI		ROM			ses,	MORTA	LITY	FROM	SUB	JOINE	ED CA	uses,	, DIS	TINGU	ISHI	NG D	EATH	8 IN	Pers	sons	UNDI	R F	IVE !	YEARS	or A	GE.
DISTRICTS.	Census, 1871.	Esti- mated to middle of 1877.	Registered Births.	At all ages.		nud 5	and 15	15 and under 25.	25 and under 60.	and upwards.	Communication	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Croup,	Whooping Cough.	Typhus, C	Enteric or Typhoid,	or or	Diarrhora and Dysentery.	Cholera,	Rheumatic Fever.	Erysipelas.	Pyæmia.	Puerperal Fever.	Ague.	Phthisis.	Bronchitis.	Heart Disease.	Injuries.
the se selar at at at at	2.	3.01	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.				_	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	1333	32.
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								• • • • •			5 upwds.			10			2	2	2		6							24	11	13	7
SUNDERLAND WEST	1000	8,400		213		55	22	6	42		Under 5		3	10			18		1		18								19		4
BISHOPWEARMOUTH NORTH		20 004		700				91	****		5 upwds.			10				1	2	1	4							11	6	9	8
**************************************				128	204	111	60	31	118		Under 5 5 upwds.		17	36			29	1		1	49			2				5	60	1	7
BISHOPWEARMOUTH SOUTH		34,190		759	245	153	52	31	140		Under 5		16	13			36	1211	10	2	47							50	41	35	5
									110	2000	5 upwds.		5	14	1		1				47							5	64		
MONKWEARMOUTH		28,460	1161	625	195	170	42	20	103		Under 5		33	15	3	3	41		2		49							04	38 4I	36	10
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WORKHOUSE HOSPITAL				148	3	2	5	9	63	66	Under 5			1															1		
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CHILDREN'S HOSPITAL				1			1				Under 5																				
***************************************											5 upwds.					**															
					-						Under 5		81		7	14	170	1	4	3	175			3				16	223		22
Totals		112,459	4641	2864	851	686	206	111	548	462	5 upwds.			57		3	5		26	3	29		1	3		1		195	150	125	60

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REPORT, 1878.

N compliance with the general orders of the Local Government Board, I beg to submit, for the information of the Board and for the consideration of the Urban Sanitary Authority, my Fifth Annual Report on the Health and Sanitary condition of the Borough.

During the fifty-two weeks ending 28th December, 1878, 4,641 Births and 2,864 Deaths were registered in the Borough. The Births represent an annual rate of 41.3 per 1,000, and the Deaths an Annual Rate of 25.5 per 1,000. The Birth-rate was slightly in excess of that of the preceding year, whilst the Death-rate showed an increase of 3 per 1,000—an increase entirely due to the excessive Infant Mortality, to which special reference will be made hereafter.

BIRTHS AND DEATHS.

Of the 4,641 Births registered, 2,383 were Males and 2,258 were Females, representing a rate of 41.3 per 1,000 of the population, as against a rate of 40.8 in the year 1877.

BIRTHS.

In the four Registration Districts which comprise the Borough, the Birth-rate was highest in North and South Bishopwearmouth and Monkwearmouth Districts, being 45.6, 43.0, and 41.4 per 1,000 respectively, and lowest in Sunderland District, where the rate was only 31.7 per 1,000.

The greatest number of Births was registered in the second quarter of the year, viz., 1205, and the least number in the fourth quarter, viz., 1,116.

The total number of Deaths registered during the year was 2,864, of which number 1,412 were Males and 1,452 were Females, representing a Death-rate of 25.5 per 1,000, as compared with rates of 22.7, 23.6, 22.4, 20.8, and 22.5 in the years 1873, '74, '75, '76, and '77, respectively.

DEATHS.

Age at Death. 5 years of age, of which number 851 were under a year old. 865 Deaths were registered between the ages of 5 and 60 years; 211 between 60 and 70; 183 between 70 and 80; 60 between 80 and 90; and 8 between 90 and 100 years' old.

The mortality of persons aged 60 years and upwards, showed a decrease as compared with the previous year, the number being 462 as against 529. The mortality between the ages of 5 and 60 years also showed a decrease—the numbers being 865 as against 878.

The number of Deaths registered in each week during the year ranged from 31 in the week ending 9th March, to 76 in the week ending August 3rd.

The average age at death of children under 5 years of age was 13 months.

The average age at death of persons aged 5 years and upwards was $45\frac{1}{2}$ years.

Mortality in Registration Districts. In Sunderland District, where the population is very dense, and composed principally of the lowest class of society, the Deathrate was 29:3 per 1,000 of the population as against 25:7 in 1873, 26:6 in 1874, 24:6 in 1875, 21:8 in 1876, and 22:8 in 1877, an increase due to the excessive mortality from Scarlatina, Whooping Cough, and Measles.

In North Bishopwearmouth District, the number of Deaths registered, exclusive of those which occurred in the Corporation Fever Hospital, Children's Hospital, and Workhouse Hospitals, was 728, representing a Death-rate of 23.5 per 1,000 of the estimated population.

During the year, 148 Deaths were registered as having taken place in the Workhouse, 6 in the Corporation Fever Hospital, and 1 in the Children's Hospital, which increased the Death-rate of the District from 23.5 to 28.6 per 1,000.

In Bishopwearmouth South District, the Deaths, exclusive of those which took place in the Infirmary, numbered 752, representing a Death-rate of 22.0 per 1,000 of the estimated population.

REPORT.

The Deaths registered as having occurred in the Infirmary during the year numbered 46, and increased the Death-rate of the District from 22.0 to 23.4 per 1,000.

In Monkwearmouth, 625 Deaths were registered during the year, representing a Death-rate of 22.0 per 1,000 of the estimated population, being the lowest rate of the four Districts.

ZYMOTIC DISEASES.

During the year the following Deaths were registered as arising from the principal Zymotic Diseases, viz., Small-pox, 1; Typhus Fever, 23; Typhoid or Enteric Fever, 30; Scarlet Fever, 186; Whooping Cough, 175; Measles, 93; Diarrhea, 204; and Diphtheria, 14—making a total of 726, representing a Deathrate of 6.4 per 1,000 of the population, and forming more than one-fourth of the total mortality.

In Sunderland District, which is densely populated, and the majority of the property tenemented property, the Death-rate from this class of disease was 10.0 per 1,000 of the population: the mortality principally arising from Scarlet Fever, Measles, and Whooping Cough.

In North Bishopwearmouth and Monkwearmouth Districts, both of which also contain a considerable amount of tenemented property, the Death-rates from Zymotic Diseases were 6.3 and 6.1 per 1,000 respectively.

In South Bishopwearmouth, which includes the healthiest and most aristocratic portion of the Borough, the Death-rate was 5.0 per 1,000. In each district there was an increased mortality from Zymotic Diseases, due to the prevalence and fatality of the diseases already mentioned.

ZYMOTIC DISEASES.

DEATHS FROM ZYMOTIC DISEASES.

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Whole Borough, 112,459.	Rate per 1,000.	20 20 28 1.56 1.56 1.83 1.83 1.82	726		6.4
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North Bp.wearmouth. Population, 30,864	Quarter.	. 8144	43	191	6.3
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.d.	Quarter.	:624: 52-	37		
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South rearmo	Quarter.	1 :181122	45	17	5.0
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Sunderland— Bp. wearmouth. Population, 18,945 Population, 34,190	Quarter.	12: 23: 822:	26		
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14 63		Poid orid trin ess.		Totals .	Rate per 1,000
		Small Pox Typhus. Typhoid Scarlatina Measles. Whooping Cough Diphtheria Diarrhæa			
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One Death was registered as arising from Small-pox, being that of an unvaccinated infant 4 months' old. The circumstances Small-pox. under which the case occurred were peculiar. A lady having died suddenly, her son, a sailor, who happened to be in London, was telegraphed for; he was not very well when he arrived home; and a day or two after his arrival an eruption appeared on his body, which was taken for Chicken Pox, but which there was no doubt was a mild attack of modified Small-pox. The young man's sister, with her children, also arrived home about the same time as he did. During the period of his recovery, he frequently nursed his sister's infant, who took the disease in a confluent form, and died. Every means was taken by disinfection and otherwise, to prevent the further spread of the disease, and happily no other case occurred.

REPORT.

Twenty-three deaths were registered from Typhus, and 30 from Typhus and Typhoid Fever. Typhoid Fever, during the year, making a total of 53 as against 61 in the year 1877. Careful enquiry was made into the predisposing and exciting causes in every instance. The majority of the cases of Typhus arose either from destitution or infection. The existing causes of the Typhoid Fever cases were much more difficult to discover, and in many cases there was nothing whatever, as far as the sanitary condition of the premises in which the patients resided, or their surroundings, to which an outbreak of the disease could be attributed.

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Scarlet Fever, which was epidemic in the Borough throughout Scarlet Fever. the year, caused 186 deaths, of which 61 occurred in Sunderland sub-District, 56 in North Bishopwearmouth, 46 in South Bishopwearmouth, and 23 in Monkwearmouth.

Measles, which only caused one death in the year 1877, made Measles. its appearance at the commencement of the second quarter of the year, and continued fatally prevalent for 6 months, causing no less than 93 deaths,—the disease being most fatal in Monkwearmouth, where the disease first broke out.

REPORT.
Whooping

Cough.

Whooping Cough caused the deaths of 175 persons, of whom 170 were under 5 years of age. The disease was fatally epidemic during the first three quarters of the year.

Diphtheria.

The Deaths from Diphtheria numbered 14, 6 of which took place in North Bishopwearmouth District, 5 in Monkwearmouth, and 3 in Bishopwearmouth South. No Deaths from this disease were registered in Sunderland Parish.

Diarrhona.

The Deaths from Diarrhea showed a considerable increase as compared with the previous year, and numbered 204, three-fourths of which occurred in the third quarter of the year.

As showing the influence of Meteorological conditions of the Atmosphere as affecting the mortality from this form of disease, I would observe that during the 3 Autumn months of 1876, in which the mean temperature of the air was a little over 60 degrees Fahrenheit, the deaths numbered 109. During the same period in 1877, with a mean temperature of 58.4 degrees, the deaths fell to 53; whilst during the Autumn months of 1878, when the mean temperature rose to 62 degrees, the deaths numbered no less than 153;—showing pretty conclusively the influence of temperature in producing Diarrheea.

LOCAL DISEASES.

Diseases of the Lunge. Of the 2,864 Deaths, 373 were ascribed to Bronchitis, Pneumonia, and Pleurisy, of which 223 were those of children under 5 years of age; 100 were those of persons between the ages of 5 and 60 years; and 50 those of persons aged 60 and upwards.

In the several weeks the Deaths ranged from 0.2 and 2 in the weeks ending August 17th, 24th, and 31st, to 17 in the weeks ending March the 2nd and April 6th,

The following Table shows the number of Deaths each quarter, the Districts in which the diseases were most fatal, the general Direction of the Wind, Mean Temperature of the Air, and the Rainfall during the same period.

REPORT.

Quarters.	General Direction of Wind.	Mean Temperature.	Districts in which Diseases most fatal.
1	113 N. & S.W.	43·37 F 4.06 ins.	North and South Bishopwearmouth and Mkwearmouth
2	113 N. & S.E.	53.02 ,, 7.37 ,,	. All Districts.
3	61 N. & S.W.	62.00 ,, 6.43 ,,	East Sunderland, and North Bp.wmth. and Mkwearmth.
		42.05 ,,12.20 ,,	
	It will be observed	from the foregoing that	it in the two last

quarters of the year, in which the mean temperature of the air was highest and lowest respectively, with North and South Westerly Winds and heavy Rainfall, the mortality from Diseases of the Lungs was lowest. Apart from the general direction of the wind, which is an important factor in the production of Lung Disease, still in some degree, no doubt, this low mortality was due to the fact that Sunderland, or at least the greater portion of the town, stands some hundred feet above the level of the sea, and has a system of drainage which is very perfect, so that the heavy rainfall not only well purified the air, but also was carried rapidly away, so that in addition to the favourable direction of the wind and purity of the atmosphere, there was no great saturation of the soil, which at the later seasons of the year is so productive of fogs (which rapidly produce Bronchial affections), from which our town is exceptionally free.

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Consumption was returned as the cause of 211 Deaths, of Phthisis. which 103 were Males and 108 Females. 16 of the Deaths were those of Children under 5 years of age; 20 died between the ages of 5 and 15; 74 between 15 and 30; 47 between 30 and 40; 37 between 40 and 50; 11 between 50 and 60; 5 between 60 and 70; and 1 between 80 and 90.

REPORT.

In proportion to population, the mortality was highest in North and South Bishopwearmouth, and lowest in Sunderland and Monkwearmouth. The Deaths in the several quarters of the year were 37, 60, 57, and 57.

Heart Disease.

During the year, 126 persons died from Heart Disease, of which number 62 were Males and 64 were Females. The deaths from this disease showed a decline as compared with the previous year, when they numbered no less than 178, viz., 87 Males and 91 Females.

Diseases of the Nervous System

From Diseases of the Brain and Nervous system, 386 persons died, of which number nearly one-half were Children under 5 years of age. The principal causes of death in this class of disease were Convulsions, which caused 148 Deaths; Paralysis, 96; Inflammation of the Brain, 65; and Apoplexy, 47. The majority of Deaths from Paralysis took place in the Workhouse in North Bishopwearmouth District; and of the 148 Deaths from Convulsions, 61 took place in Bishopwearmouth South District.

Diseases of the DigestiveOrgans The Liver was the principal organ of the Digestive System which was attacked by fatal disease, 32 Deaths being ascribed to Disease of Liver, and 18 to Cirrhosis of Liver—a disease brought on by Intemperance. The Deaths arising from the last-named disease during the past 5 years have been as follows:—1874, 2 Deaths; 1875, 18; 1876, 13; 1877, 12; and 1878, 18.

INFANT MORTALITY.

INFANT MORTALITY. As has already been stated, the high rate of mortality in the Borough during the past year was entirely due to the excessive number of deaths of Children under 5 years of age. Of the 2,864 Deaths in the Borough, 1,537 were those of Children under 5 years old—showing a mortality at the rate of 13.7 per 1,000 of the population, and forming 54 per cent. of the total mortality.

The Infant Mortality was lowest in Bishopwearmouth South and Monkwearmouth Districts, viz., 11.7 and 12.8 per 1,000, and highest in Sunderland and North Bishopwearmouth Districts, where the rates were 17.5 and 14.2 per 1,000 respectively; so that it will be seen that the mortality was greatest in those

REPORT.

Districts where there was the most tenemented property, and in which the population was not only the poorest, but also the most dense. Bishopwearmouth South comprises within its area the "Belgravia" of the town, and also a fair proportion of tenemented property, but of a very different character to that in Sunderland Parish, and it enjoyed the lowest rate of Infant Mortality.

On reference to the adjoining table, it will be observed that the increased Infant Mortality was entirely due to Scarlet Fever, Measles, Whooping Cough, and Diarrhœa, which from time to time were fatally prevalent in the Borough; and I would here remark that during the 5 years ending December 31st, 1877, the Infant Mortality of the Borough had declined year by year, until in 1877 it was the lowest on record, so that at the commencement of 1878 more children under 5 years of age would be living than in any previous year; hence, when such diseases as those mentioned above made their appearance, the fatal effects produced would be proportionately increased; and such proved to be the case, as notwithstanding all the means used to prevent the spread of disease, the Infant Mortality increased from 9.6 per 1,000 in 1877, to 13.7 per 1,000 in 1878.

Scarlet Fever proved fatal in 186 cases during the year, of which 129 were those of children under 5 years of age. It may be observed, at the outset, with reference to this disease, that our large towns are scarcely, if ever, entirely free from it; the records of our own town, as far back as I can trace them, show that from year to year Scarlet Fever has been more or less prevalent, differing in its fatality as the disease has assumed a mild or malignant type. In 1873 there were 29 Deaths; in 1874 the number rose to 140; in 1875 it fell to 61; in 1876 the number increased to 133; in 1877 to 138; and last year to 186.

INFANT MORTALITY.

Cause of Death.	Sunderland.	Population, 18,945.	North Bishopwearmth.	Population, 30,864.	South Bishopwearmth.	Population, 34,190.	Monkwearmouth.	Population, 28,460.	Whole Borough. Population, 112,459.
	Under 1	1 to 5	Under 1.	1 to 5	Under 1	1 to 5	Under 1	1 to 5	TOTAL.
Small-Pox Typhus Typhoid Fever Remittent Fever Scarlatina Measles Whooping Cough Diphtheria Diarrhœa Bronchitis, Pneumonia, and other Diseases of Respiratory Organs Croup Phthisis Convulsions Marasmus Atrophy Heart Disease Debility Violence Meningitis Liver Disease Premature Birth Other causes (see Table at end of Report)	7 11 17 16 32 11 23 13 5 1	1 34 14 47 14 25 2 2 5 15 1 3		1 35 12 15 1 16 30 6 3 6 20 1 4 4 1 1 	1 3 6 19 38 36 2 38 19 25 2 13 13 30	29 10 17 29 10 17 2 9 28 21 6 1 3 10 	10 13 38 16 1 1 24 22 19 1 2 21 26	2 1 14 23 28 3 11 25 2 3 7 11 	1 1 4 3 129 81 170 7 175 223 14 16 141 146 1 81 23 41 1 82 197
Total	153	179	258	182	245	155	195	170	1537
	8	32	4	40	4	00	3	65	

Measles in 1873 was more fatal than Scarlet Fever—the Deaths REPORT. numbering 31; in 1874 they increased to 59; in 1875 they Measles. were 54; in 1876 they declined to 42; whilst in 1877 there was only one death; whereas in 1878 they numbered 93. Death registered in 1877. occurred in Bishopwearmouth South District in December; and the first Death registered in 1878 was in the week ending 16th of March, and took place in Williamson Street, Monkwearmouth; and although this was the first intimation received by me of the disease being in the Borough, on visiting the house and making enquiries, I found a number of cases in the immediate neighbourhood; and within a few days numerous cases were reported scattered about in various parts of the town, in which there was no evidence whatever that the person suffering from the disease had been exposed to Infection or Contagion. The disease was epidemic during the second and third quarters of the year, and during that period 86 out of the 93 deaths were registered. During the December quarter only 3 deaths occurred; and at the present time the town is free from the disease.

Whooping Cough caused 175 Deaths, as against 63 in the whooping preceding year. The disease was fatally prevalent throughout the first nine months of the year, from which time it began to decline, and in the fourth quarter 9 Deaths only were registered.

The Deaths from Diarrhœa, which in the year 1877 were only Diarrhœa. 82, increased to 204 in 1878—175 of which were those of children under 5 years of age, of which 125 were infants under a year old. The disease was most prevalent and fatal in the Autumn quarter, during which period 156 of the deaths occurred.

I think it has been conclusively shown from time to time that the prevalence of Diarrhœa depends, in a great measure, upon the Meteorological condition of the atmosphere, combined with negligent and careless feeding. In the Autumn of 1876, when the mean temperature of the air was a little over 60 degrees Fahrenheit, 109 Deaths were registered; in 1877, when the mean temperature was 58.4 degrees, the deaths numbered 82; whilst in 1878, when the mean temperature rose to nearly 62.0 REPORT.

degrees, the mortality increased to 204. As showing the effect of improper and unwholesome feeding, it may be stated that of the 125 infants who died from this disease under a year old, no less than 97 were artificially fed by the bottle—a system of feeding fraught with most pernicious, injurious, and fatal effects, and one to which I have referred year by year in my Annual Reports.

Apart from the Diseases of the Zymotic class, Diseases of the Respiratory Organs were most fatal, causing 223 Deaths; whilst Convulsions and Marasmus carried off 141 and 146 respectively. Debility caused 81 Deaths, all but two of which were Infants under a year old; whilst 82 Deaths were attributed to premature Birth.

The Deaths of 22 children were registered as arising from violence, principally scalds, burns, and overlaying—deaths more or less preventable.

The effects of disease and negligence, as pourtrayed in the Infant Mortality Table, are worthy of a careful and thoughtful consideration, as indicating either the results of carelessness or ignorance on the one hand, or a deterioration in the strength and vigour of constitution for which Englishmen and Englishwomen have been so famous in years gone by, on the other. The various causes of Infant Mortality, apart from the disease which actually kills, have been so frequently referred to, that it is not necessary that I should again repeat them. Much, however, remains to be done by way of influencing public opinion in regard to this important subject.

Action taken during the Year for preventing the REPORT. spread of Disease.

During the year the following cases were removed by the Corporation Fever Hospital. Sanitary Inspectors, and admitted into the Corporation Fever Hospital, Dunning Street, viz.:—Fever, 15; Scarlet Fever, 31; and Measles, 3; making a total of 49 cases in all, as against 14 admitted in the previous year. Six Deaths occurred in the Hospital—2 from Fever and 4 from Scarlet Fever.

In all cases of Infectious Diseases reported, the premises were Isolation. visited by the Sanitary Inspectors or myself; and during the year, 1,657 cases were reported, viz. :- Small-pox, 2; Typhus Fever, 59; Typhoid Fever, 70; Continued Fever, 34; Scarlet Fever, 591; Measles, 320; Whooping Cough, 337; Diarrhea, 207; Diphtheria, 20; and Croup, 17. Careful examinations and inspections of the dwellings in which the cases occurred, were made, and enquiries made respecting the outbreak of the disease. When it was found desirable, the cases were removed to the Corporation Union Fever Hospital, and so isolated; but isolation, whilst perfectly sound in theory, as the best means of preventing the spread of disease, is practically most difficult to carry out. Take, for example, such diseases as Scarlet Fever and Measles: in the first instance, there is the difficulty of ascertaining when the disease first makes its appearance, a notice of the death being in very many instances the first intimation of such a disease being in a given locality. On visiting the spot it is found that others are either ill from, or in the convalescent stage of the disease. Provided they are well lodged and cared for, the parents are unwilling that they should be removed; and many of them are so young, that parents would not listen to such a proposal. In cases of Typhus and Enteric Fever, the circumstances are somewhat different, there being less disinclination for the removal of such cases, and the timely removal of the first case will often cut short an outbreak of Typhus. As an illustration of the necessity of early information being given, I would observe that in the early part of the year, a labouring man, residing at Lookout Hill, Monkwearmouth, who had been out of work, and in a

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REPORT.

destitute condition, took ill of Typhus. As soon as he took ill, he became entitled to 10s. per week from his club, and the Doctor's attendance. The case was not reported to me. The man, however, recovered, but mark the result. During his recovery, his wife took the disease, and died; his children took ill, and were removed to the Hospital; a neighbour meeting him in the house took ill, and died; a young girl visited the house, she also took ill, and ultimately died. Altogether, the outbreak resulted in 13 persons being attacked by the disease—3 of whom died. Had the first case been removed, the probability is that the disease would have spread no further. The difficulties in preventing the spread of Infectious Diseases, especially amongst the working classes, are very great, principally arising from the intercommunication between one and another. The spread of Scarlet Fever was, in a number of instances, traceable to this cause: parents and guardians not realizing the fact of the great danger incurred by visiting infected houses.

Every available means was taken to arrest the spread of Scarlet Fever, so fatally prevalent in the Borough. A special request was sent to Medical Men to give early information of all cases coming under their notice, and the majority of these gentlemen readily acquiesced in the request, and from that time have kindly made returns to the Officer of Health.

The spread of Scarlet Fever, by means of Schools, was clearly proved, and the following special instructions were issued—one to parents and guardians, and the other to School Proprietors and Teachers. The first was to the following effect:—

- "Scarlet Fever being at present unfortunately very prevalent and very fatal in the Borough, all parents and heads of households are urgently requested—
- (1.) To inform the Medical Officer of Health, at his Office, 17, East Cross Street, of each ease immediately it arises.
 - (2.) To isolate the patients, if possible.
- (3.) If this be impossible, to have them sent to, and treated in, the Corporation Hospital, Dunning Street.
- (4.) To send no children to School from houses in which the disease exists.
 - (5.) In case of poverty, to apply to Inspector McKay for Disinfectants."

The Notice issued to Proprietors of Schools, &c., was as REPORT.

Protection against Infectious Disease.

To Proprietors of Schools, School Managers, and Teachers.

As from personal enquiries made, there is every reason to believe that Scarlatina (at present Epidemic in the Borough), Measles, and other Infectious Diseases, which from time to time are more or less prevalent amongst children, are spread to a considerable extent by means of Schools, it is imperatively necessary that Proprietors of Schools, School Managers, and Teachers should take every precaution against such Diseases being introduced into their Schools; and with a view of assisting them in that direction, I have been desired by the Health Committee to make such recommendations as might seem advisable for effecting that object, and beg to submit the following—

- 1. That on admission into any School, it should be one of the requirements from parents that they should give notice to the Head Master or Mistress immediately on their becoming aware of the fact that Infectious Disease of any kind is in their houses.
- 2. That on receipt of such notice, the Master or Mistress shall give information thereof to the Medical Officer of Health.
- That when any child is absent from School on the plea of illness, a letter from the parents or a certificate from a Medical Man should be required, stating the nature of such illness.

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- 4. That a child who has suffered from Infectious Disease of any kind should not be allowed to re-enter the School without producing a certificate from a Medical Man, stating that he or she can do so without danger of infecting others.
- 5. That children should not be allowed to attend School from a house in which Infectious Disease is known to exist, as although not ill themselves, they are very likely to carry the infection to others, and so spread the disease.

REPORT.

- 6. During the hours in which a School-room is not occupied, the upper and lower sashes of the windows should be opened so that the room may be thoroughly ventilated. It is desirable that in all School-rooms there should be means for cross ventilation.
- 7. During the Winter months, School-rooms should always be kept warm and comfortable, by means of open fires or stoves. It is a false notion to suppose that a number of children in a room is sufficient to keep such room warm; no doubt the temperature will be raised, but this is done by the extraction of the heat from the bodies of the children, which cannot but be injurious to their health; whereas, an open fire, whilst warming a room and keeping the children warm, also acts very efficiently as a means of ventilation.
- 8. Cleanliness among the scholars should be especially insisted upon, both as regards their clothes and persons. The greater the cleanliness of a School, and of the scholars attending it, the less likelihood there will be of infectious disease spreading, should it by any chance be introduced therein.
- 9. The School-room floors, desks, and forms should be thoroughly cleansed with soap and water, and the walls brushed down at least once a week; and at the end of each term the rooms should be disinfected with Sulphurous or Nitrous Acid, and cleansed throughout.

The result of issuing these notices was that during the next two weeks no less than 136 cases of Scarlet Fever were reported to me, most of which, however, were convalescent.

Disinfection and Cleansing of Rooms.

Notices were served in all cases of Infectious Disease, upon the occupier of the premises in which the disease had been, to cleanse and disinfect the same; 802 notices were served during the year, and in 45 instances the premises were disinfected by one of the Inspectors.

Destruction of Infected Bedding, &c. In 23 instances, when infected bedding, &c., was of such a character as to require destruction, the same was removed and burnt. In the case of poor persons, the articles so burnt were replaced at the cost of the Local Authority.

Disinfection by During the year, a large quantity of bedding and clothing was disinfected by heat in the Disinfecting Chamber adjoining the Corporation Hospital.

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From a return appended to this Report, and kindly furnished to me by Mr. Thompson, the Vaccination Officer, it will be seen vaccination. that the Vaccination Act is very efficiently carried out in this Borough.

During the year 14 seizures of Unsound Meat were made, and Unsound Meat. comprised 1,890 lbs. of Beef and Mutton; 539 lbs. of Pork; 224 lbs. of Salt Tongues; 140 lbs. of Fish; and 7 couple of Rabbits. In all the cases the food was destroyed with the consent of the owners, and no proceedings were taken before the Magistrates. It is now becoming the practice amongst Butchers, &c., if they have any doubt as to the fitness for human food, of any animal or carcase in their possession to at once communicate with one of the Inspectors or myself, and have it examined before being offered for sale, a practice much to be commended, although it is to their own personal interest.

SICKNESS AND DEATHS.

From the returns made by the Medical Officers of the Medical Sickness and Charities and Poor Law Districts, it appears that during the year, 12,554, or upwards of 12 per cent. of the entire population, received gratuitious Medical and Surgical aid-a higher percentage than in any previous year, no doubt due, in a great measure, to the depressed state of trade, and consequent inability, on the part of many persons, to pay for Medical advice.

Of the number above-mentioned, 10,082 were recipients at the hands of the Medical Charities, and 2,642 were under the care of the Parish Medical Officers.

The introduction of the Provident Dispensary system into the town, will have the effect of reducing the number of cases treated by the Poor Law Medical Officers, as by a weekly payment, so small that the great majority of the poor can afford to pay, Medical aid will at all times be readily obtained, in the place of the dangerous delays which now necessarily occur when a sick person's friend either has to seek a Medical order from the Relieving Officer, or travel for hours up and down the town in search of a Dispensary Ticket.

SANITARY REPORT. The Sanitary condition of the Borough during the year has been carefully looked after by the Health Committee and its officials, and every practicable means of improving that condition been carefully carried out.

General Inspection of the Borough. The Borough is divided into blocks for periodical inspection by the Inspectors of Nuisances, and a complete inspection of the whole Borough is made once in every six or eight weeks. Of course, there are certain Districts which require much more careful and constant supervision than others, especially Sunderland Parish, and certain portions of Bishopwearmouth and Monkwearmouth.

During the year, 4,378 notices were served by the Inspectors for the Sanitary improvement of Houses and Premises, and 50 persons were summoned before the Magistrates for infringement of the Public Health Act, of which number 28 were convicted, and ordered to abate the nuisances, and pay costs; 4 were fined five shillings and costs; and in 18 instances the summonses were withdrawn on payment of costs, the nuisances having been abated after the issue of the summonses.

In 320 instances notices were served to repair Spouts, which were defective; and in 4 to abate nuisances arising from Smoke.

The number of Nuisances reported were 1,902, of which 98 were abated without formal notice, and 1,756 were abated after notice being given, but without proceedings being taken.

The number of orders taken by the Inspectors, and private orders received at the Office, for the cleansing of Ash-pits, was 8,202, and the total number of loads removed and disposed of was 32,250, exclusive of the Scuttlings of Sunderland Parish, amounting to 6,240 tons, collected in quantities of about 20 tons day by day, and sent out to sea.

The principal subject which engaged the attention of the Health Committee during the year, was that of the Slaughter Houses, and in the month of May the following report was made Houses. by me to the Health Committee-

SANITARY

"I have caused a careful inspection to be made of the Slaughter Houses in the Borough, with special reference as to their dimensions, proximity to dwelling rooms, ventilation, drainage, construction of floors, water supply, hours of slaughtering, position of lairs, and general sanitary condition.

"There are 206 Butchers and 19 Pork Butchers in the Borough, and the number of persons employed in the trade is 364.

"The number of animals slaughtered in a year is as follows— Cattle, 10,972; Sheep and Lambs, 60,684; Pigs, 10,313; Calves, 982;—Total, 82,951.

"The total number of Slaughter Houses, Butchers and Pork Butchers Shops, including those in the Market, is 225; and of that number, in all but 62 instances, the slaughtering of animals is carried out in shops, and with 14 exceptions at any hour of the day, and in many instances, the slaughtering of animals is carried out in yards, cellars, &c.

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"In the majority of cases, the dwelling rooms communicate directly with the shop and slaughter house, showing the great necessity for such shops being kept in a thoroughly good sanitary condition, particularly with regard to cleanliness, ventilation, and water supply.

"The sanitary condition of many of the slaughter houses is stated as bad, and in 5 instances as very bad.

"With reference to ventilation, in 93 instances it is stated to be good, and in 97 deficient.

"In 15 instances the Slaughter Houses have no water supply.

"The condition of the lairs is very unsatisfactory, and in a large number of instances, the Slaughter Houses have no proper lairs or hunger houses attached to them, and Cattle, Sheep, &c., are kept for days in open yards in all weathers, and in passages, coal-houses, and even cellars, until such time as they are slaughtered, a condition of things which ought not to be allowed to exist.

"The erection of Public Abattoirs in all large towns is very desirable. At the same time, there does not seem any probability of one being erected in this Borough for some time to come, unless the Butchers would take the subject up, and erect one themselves, as has been done with advantage in other places. Still, something should be done with a view of having the existing slaughter houses kept in a good sanitary condition; and to obtain so desirable an object, I would recommend that the existing slaughter houses be registered as is done in all the other large towns in the Kingdom, in accordance with the provisions of the 127th section of the Town Improvement Clauses Act; and that a set of Bye-Laws be prepared for the registration of the same, and also 'That from and after the 1st of July next, no new place or premises shall be used or occupied as a slaughter house without a license being obtained for the erection of the same in accordance with the 126th section of the said Act.' The effect of which will be that in all new premises proper accommodation will have to be provided for the keeping as well as for the slaughtering of Cattle, &c.

"By making the licensing prospective and not retrospective, no one's interest will be affected, whilst at the same time a great sanitary improvement will be gradually introduced."

The report was referred to a Sub-Committee, who subsequently recommended "That the report, and recommendations contained therein, be received and adopted," which was unanimously agreed to by the Health Committee.

Since that time the whole of the Slaughter Houses have been registered, and each Butcher furnished with a copy of the Slaughter House Bye-laws; and in future no new shop or other premises can be used as a Slaughter House without the license of the Local Authority be first obtained,

SANITARY

It would add greatly to the improvement of the Borough in every way if the suggestions made in my report, that the Butchers should erect an Abattoir for themselves, could be carried out. Many of the most respectable and intelligent Butchers have stated to me that they are in favour of abolishing slaughtering in shops, which as at present carried out in many of them, is an outrage on public decency, and must have a demoralizing effect upon the minds of both old and young. The experience gained during the last two years, at the Abattoir of the River Wear Commissioners, where all the Foreign Cattle imported here, are slaughtered, must, I think, have convinced the majority of the trade that such a system is in every conceivable sense much more preferable than the one adopted in the town. I believe land could be obtained and an Abattoir erected near the Cattle Station in Monkwearmouth, at a reasonable cost; and I feel sure many out of the trade would assist by taking shares in a company when such a place was erected; then the Council could be fairly asked to prohibit all slaughtering in shops, and thus remove at once and for ever a system which the public at large would be thankful to see abolished.

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The Common Lodging Houses, numbering 38, and registered Lodging Houses. to accommodate 985 persons, were inspected periodically, both by day and night, and found to be kept in a cleanly and orderly condition.

It was not found necessary to take proceedings against any of the Lodging House Keepers for infringement of the Bye-Laws.

Five case of Fever occurred in the Lodging Houses during the year, and were promptly removed to Hospital; of those removed 2 were Tramps, 2 were Labourers, and one was a Hawker.

The various premises in which offensive trades are carried out, Offensive Trades were from time to time inspected, and when necessary, notices were served upon the owners to make improvements and alterations.

The Health Committee will grant no licenses to carry on the business of Tripe-dresser, Bone-boiler, &c.; and so long as such businesses are carried on without causing a nuisance, or being injurious to the health of the neighbourhood, the owners are not interfered with.

Sewerage Works

The amount of Sewerage Works carried out during the year has been but small, not but that more was required to be done, as there are several large areas requiring sewering. Application has been made to the Local Government Board for a sum exceeding £20,000 for completing the sewerage of these areas; and information has just been received that the loan has been granted, so that these necessary works will now be proceeded with. In the interest of the public health, it is highly desirable that all new blocks of property should be thoroughly and efficiently sewered before the houses are allowed to be occupied.

Unpaved Streets

From time to time the attention of the Health Committee has been called to the unsanitary condition of many of the unpaved streets, especially those in the Hendon, New Hendon, Rectory Park, Pallion, and Monkwearmouth Estates. Of course, this is a question which only pertains to the Health Committee, as their conditions affect the public health, as the paving and flagging is under the direction of the Highways Committee. It is, however, very desirable, not only on the ground of health, but also as affecting the comfort and convenience of the occupiers of the houses in such streets, that all the back streets in the Borough should be properly paved; and I understand the whole question is under the consideration of the Committee.

Adulteration of Food Act. In the month of April, 2 persons were summoned before the Magistrates for selling Adulterated Milk; and on the cases being tried, although they were clearly proved, exception was taken by Mr. William Bell, Solicitor, that Inspector McKay, who had purchased the Milk, was not a prejudiced person within the meaning of the Act, and stated that a case had been granted by the Bench at Bath for the decision of the Court of Queen's Bench. Upon this, the cases were adjourned for three months, at the end of which, as no decision had been given by the superior Court, penalties of 20s. and costs were inflicted. During the last six months of the year no further action was taken by the Inspector in obtaining articles of food for analysis; but it will be satisfactory to the public to know that the question of "prejudice" has been at length settled by the Court of Queen's Bench. Mr. Justice Mellor having given the following judgment within the last few

days-"The Court were of opinion that if the prejudice contemplated by the Act was to be regarded as one of a pecuniary nature, it would destroy the effect of a most salutary enactment which was not intended to limit its operations to the admixture of deleterious matter, but was meant to prevent the sale of articles containing any foreign admixture. It was not, in the opinion of the Court, the intention of the legislature to confine the person complaining to a private customer, and the public officer could not be precluded from prosecuting an offending party under the Act." Mr. Justice Lush concurred, observing "that the differences of opinion which unfortunately prevailed as to the construction of the Act, which was a most beneficial one, tended to cripple its operations." Judgment was accordingly given for the Appellant (the Inspector under the Act). As this decision now settles the question, the provisions of the "Adulteration of Food and Drugs' Act" will be carried out as heretofore.

In concluding my report, I have to thank the Chairman, Vice-Chairman, and Members of the Health Committee, for the considerate attention they have at all times given to my Reports, and the recommendations contained therein; and I also take this opportunity of thanking the Mayor, Aldermen, and Councillors generally for unanimously re-electing me to the office of Medical Officer of Health.

The Health Department of this Corporation has increased considerably during the last five years, both as regards its staff, and the amount of work requiring to be done; and I have to express my satisfaction at the manner in which the sub-officials and employés generally have carried out their various duties. Inspectors McKay and Finlay, and Mr. Clement Thompson, Clerk in the Department, have done their work well and efficiently.

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Mr. Wilkinson, the Superintendent of the Scavenging department, has been most energetic in carrying on his duties, which, at the end of the year, were of an exceptionally trying character; and to Mr. Trotter is also due a word of praise for the way in which the Stables and Horses have been attended to. It is gratifying to find that during a period of nearly two years not one horse has been lost, either by accident or disease.

APPENDIX.

TABLE OF BIRTHS

Registered in the Borough, from January 1st to December 28th, 1878.

Sate per 1,000.	I	31.7	43.0	45.6	41.4		41.3	
Total.		603	1462	1415	1161	4641	4641	
Total.	P	278	708	199	605	2258	11	65
Tot	M	325	754	748	556	2383	4641	41-3.
Fourth Quarter.	F	75	191	154	137	527	91	0.
Fou	M	83	174	195	137	589	1116	10.0.
Third Quarter.	F	78	178	161	143	559	1136	10-1.
Th.	M	85	179	173	140	577	П	10.
Second Quarter.	F	7.4	193	185	170	625	95	1-
Second	Ж	76	181	184	142	583	1205	10-7.
rst ter.	F	51	176	167	156	550	84	4
First Quarter.	M	81	220	196	137	634	1184	10.4.
DISTRICTS.		Sunderland	South Bishopwearmouth	North Bishopwearmouth	Monkwearmouth		Totals	Rate per 1,000

TABLE OF DEATHS

Registered in the Borough for the Year ending December 28th, 1878.

NAME AND ADDRESS OF THE	nlation.	First Quarter.	rst rter.	Second Quarter.	ond ter.	Third Quarter.	ird rter.	Fourth Quarter.	rth rter.	Totals.	als.	Total.	,000.
DISTRICTS.	Pop	Ж	A	Ж	A	M	A	М	A	М	A		H.
Sunderland	18,945	48	76	64	77	瑟	- 19	73	69	269	289	558	29-3
South Bishopwearmouth	34,190	857	06	110	93	104	121	95	103	391	407	798	20.6
North Bishopwearmouth	30,864	118	112	114	190	115	108	111	105	458	425	883	25.9
Monkwearmouth	28,460	19	74	08	66	68	94	58	64	294	331	625	20.5
		318	352	368	369	392	390	334	341	1412	1452	2864	22.5
Totals 122,459	122,459	.9	670	T.	737	78	782	.9	675	3864	ヹ	2864	23.5
Rate per 1,000		. 5.	5.9.	55.8	8.	5.5	2.	5.6.	6.	22.5	25		

OCCUPATION of PERSONS, 20 Years of Age and upwards, who died from the under-mentioned Diseases during 1878,

(Given as accurately as the Returns allowed.)

Occupation.	Heart Disease.	Phthisis.	Disease of Lungs.	Apoplexy.	Paralysis.	Cancer.	Totals.
Agents Builders Brakesman Butchers Boat-builders Boilermaker Bookbinder Barman Bricklayers Brewer Bottlemakers Cabmen Cutler Confectioners Clerks Cordwainer Cartmen Cooper China Dealer Draper Enginemen Ferryman Farrier Fish Dealer Glassmakers Greengrocers Gate Keeper Gentlemen Grocers Gardeners Gilder Hatters Hind Hair Dressers Hawkers Innkeepers Implement Maker Joiners Keelmen Labourers Lime Burner Minlers Millwright	1 1	1 2 1 1 1 1 2 4 1 2 1 1 1 1 5 3		1	1 2 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2		2 2 1 6 2 1 1 1 2 1 2 1 3 1 2 1 2 1 3 1 2 1 2 1
Carried forward .	33	48	48	4	27	7	167

V.
OCCUPATION OF PERSONS.—Continued.

Occupation.	Heart Disease.	Phthisis.	Disease of Lungs.	Apoplexy.	Paralysis.	Cancer.	Total.
Brought forward	33	48	48	4	27	7	167
Moulders Mine Inspector Mast Maker Masons Miller Medical Assistant Nonconformist Minister Plumber Photographer Paper Maker Pensioner Puddler Potters Painters Policemen Plasterer Pilot Ropemakers Railway Guards Seamen Shipwrights Shoemakers Stokers Shipowner and Builder Solicitor Stone-cutter Surgeon Steward School Masters Smiths Sailmakers Saddler Sweep Spinner Sawyer Timber Measurer Tripe Dealer Trailors Travellers Not specified	33 	48 2 1 1 2 2 2 2 2 2 1 2 1 1 1 1	48	4	27 	7 1 1 1 1 1 	167 3 1 1 1 1 1 1 1 1 1 1 1 1 2 2 1 1 2 2 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1
Totals	57	77		25	56		297
Females	61	79			40		
Grand Totals	118	156	138	47	96	49	604

LIST OF STREETS

Wherein ZYMOTIC DISEASES occurred in the Year 1878,

(Given as accurately as the Returns allowed).

SUNDERLAND DISTRICT.

		ا د		-i	80		9.	
Name of Street.	Fever.	Scarlatina	Measles.	Diphtheria	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Bull open Burleigh street. Bank street Buck square Barrack street Chipchase street Chapel street Covent Garden street. Coronation street. Church street Church walk Cross place Dunn's entry Deans' yard Ettrick place. Fitters' row Ferry landing Flag lane George street Golden alley Hartley street Hodgskin street Havelock street High street Hat case. Horn's lane Low quay Lucknow street Lombard street Lombard street Low street Minorca Moorgate street Maling's rigg Maude's lane. Northumberland place Nesham square Nesham place New Grey street Old Grey street Old Grey street	3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	i		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 2 2 1 3 1 2 1 1 1 1 1 1 1 1 20	3 3 1 1 3	4 14 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 2 2 3 3 3 3
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VII.
SUNDERLAND DISTRICT—Continued.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Brought forward	23 2 1 2 1 1 1 1 3	98 4 3 10 5 1 3 9 8 1 1 3 7 3 4	21 1 1 1 10 7		3	20 1 5 1 4 5 1 	16 2 1 2 1 2	1 1 2 2 9 4 7 1 18 6 4 1 18 3 2
Total	36	166	43		119	41	31	192

VIII.
BISHOPWEARMOUTH DISTRICT.

							-	
Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Australia street Albert street. Anne street, Ballast hills Anne street Addison street Amberley street Alfred street Argyle street Argyle street Aiskell street Argyle square Alexandra terrace Athol road. Ayre's quay Blandford street Bramwell street Bridge street. Brougham street Bridge street Coronation street Clementina street Clementina street Castle street Catherine street Catherine street Catherine street Catherine street Cousin street Clyde street Crow street Crow street Crow treet Clyde street Crow treet Crow treet Clyde street Crow treet Clyde street Crow treet Clyde street Crow treet Clyde street Cross street Crow treet Clyde street Clyde street Crow treet Clyde street Clyde str	1	1		i	::		1	1 2 1 1 2 2 1 1 1 2 2 1 1 1 1 2 2 1
Carried forward	24	81	24	1.	18	17	20	65

IX.

BISHOPWEARMOUTH DISTRICT—Contd.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Brought forward Dove street, Pallion Deptford road Dock terrace Dannatt's court	24	81 3 	24	1	18 4 2	17 2 1	20	65 3 2 1
East street Elgin street Eden street Eden street West Exhibition terrace East Cross street		i 1 2 1	6		6 2 2 2	1 1 1 1		6 1 1 1 2 2 1 2
Ferguson street Ford street Frederick street Foyle street Farrington row Ferry road Fenwick terrace	:::::::::::::::::::::::::::::::::::::::	1 1	4 2	i i 	2 4	1 i		1 2 1 3
Fowler terrace Franklin street Grace street, Pallion Glass street Granville street Green street Grove terrace	i ::	1 3 4	2 3		3	1 i 	:::::::::::::::::::::::::::::::::::::::	4 1 1 1 2 1 1 1
Gerald street. Gill Bridge avenue Gibson terrace Garden place Garden street Hind street	i i 	1 3	4	:::::::::::::::::::::::::::::::::::::::	i 3	i		2 1 1
Howick street Hetton street Hawthorn street Harold street Hope street Hedley street	i	2 1 2 1	3 2 2		3 3	1 2 1	i i	1 2 2 1 5 3 2 2
Howarth street. Harrison street. Herrington street. Hume street Hedworth street Hillfield Hendon street		2 2 6 4	··· ·· ·· · · · · · · · · · · · · · ·	2		1 1 2 2 2 2		2 4 1 3 4 3
Hendon road	::	5 1 6	::	::	::	2 4	::	6
Carried forward	29	143	63	4	55	52	23	152

X.
BISHOPWEARMOUTH DISTRICT—Contd.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Brought forward	29	143	63	4	55	52	23	152
High street West. Holmeside Hopper street Hudson road. Havelock terrace Hylton road Hill street Infirmary John street, Ballast hills Johnson street Johnson street King's road Lawrence street Lister street Lilburn street Lambton street Lambton street Lawrence teret Lime street Lime street Lime street Liburn street		5 2 4 7 1 3 1 3 1 7 1 1 1 1 1 1	1 1 1		1 1	1 1 1 1 2 1 2	5	1 2 1 1 2 2 2 1 1 3 4 4 3 1 I 1 1
Littlegate Low row Milburn street Marlborough street. Margaret street Moor street, Millfield Moor terrace Moor terrace Moor street Mainsforth terrace Mowbray road Mount pleasant Nicholson street North street Napier street, Pallion Nile street. Numbers' garth Norman street North Durham street North Ravensworth street Panns Pickard street		2 4 3 5 5 2 9 9	3 5		3 2 2 2	2	1 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Carried forward	. 51	240	75	5	83	74	40	223

XI.
BISHOPWEARMOUTH DISTRICT—Contd.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Pemberton street Palmer street Parade Page street Peacock street West Paley street Queen street Rosalie terrace Robinson terrace Ropery road Rutland street Rosedale street Ropery road Railway street Ridley terrace Rock terrace Rock terrace Rock terrace Rowrace R		240 1 3 1 2 2 1 4 2 5 1 1	75 3 3 1 1 2 1 2 2 2	5	83 3 1 9 4	74	40	223 2 2 4 2 1 1 1 1 2 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1
St. Marks buildings St. Cuthbert's terrace Sussex street South Durham street South Moor street Simpson street Somerford place Sunderland street Tatham street Toward terrace. The Royalty Trimdon street. Tees street Tyne street Thompson street Trewhitt's crescent The Retreat Tweed street Tweed street Carried forward	. 1	3	0	1 1	1	1 1 1 1 1 2	2	2 1 4 1 1 1 2 4 4 1 1 1 2

XII.
BISHOPWEARMOUTH DISTRICT—Contd.

1			_		_	_		
Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Brought forward	61	290	101	10	109	97	48	286
Tower street. Thornhill crescent Upper Sans street Vane terrace. Villiers street Wellington lane Westbourne road West Sunniside Westbury street Washington street Washington street Woodbine terrace Wall street Wilson street Woodbine street Water street Ward street Ward street Ward street Ward street Ward terrace Woodbine street Ward street Woodbine street Ward street Ward street Ward street Woodbine street Ward street Ward street Woodbine street William street William street Walker street Wast Wear street York street	· · · · · · · · · · · · · · · · · · ·	2 1 2 4 4 3 1 3 8 6 2 3 2 3	1 2 5 6 1 2		2 1 3 4 1 5 5	2 1 1 2 1 1 1 1 1 1 1 	1 1	3 1 2 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1
Total	70	334	124	10	139	109	50	333

XIII.
MONKWEARMOUTH DISTRICT.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Albany street Byron street Bloomfield street Brooke street Barrington street Barrington street Bardling street Barclay street Bond street Back Stables Calver street Church street Chilton street Charles street Charles street Cage hill Colliery square Causeway Dundas street Duke street Devonshire street Devonshire street Dock street Dock street Dixon's square Edmundson street Finsbury street Fulwell road Gladstone street George street Garden court Hay street Hamilton street Hamilton street Hardwicke street Hood street Hodgson's buildings Hallgarth square Liddell street Look-out hill Long row Mill row Millum terrace Mulgrave street Portobello lane Rendlesham street	2 2 3 1 6 2 2 2 2 5 1 1 7	4 1 3 7 1 1 3 3 2 2 3 2 3 3 1 1 2 1 1 2 1 1 2 1 2 1 1 2 1 1 1 1	14 2 3 2 1 11 3 2 2 4 	i	1 3 2 3 2 4 8 4 2 3 2 4 2 4 2 4 2 4 2 4 2 1 2 4 2 1 2 4 2 1 2 4 2 1 2 2 4 2 2 4 2 2 4 2 3 2 4 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 3 2 3 3 3 2 3 3 3 3	1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	4 1 1 8 1 6 1 3 2 1 4 1 1 2 2 1 4 1 1 3 5 3 1 1 2 1 2 1 2 1 3 1 3 1 3 1 2 1 3 1 2 1 3 1 3
Carried forward	39	60	102	5	49	36	10	117

XIV.

MONKWEARMOUTH DISTRICT—Contd.

Name of Street.	Fever.	Scarlatina.	Measles.	Diphtheria.	Whooping Cough.	Diarrhœa.	Removed to Hospital.	Deaths.
Brought forward Rothsay street Richmond street Roker avenue Society lane Stobart street Southwick lane Sheepfolds Strand Victor street Whickham street Wilson street Wayman street Waterloo street Waterloo street Williamson street Woodger's buildings Whitburn street Wear street Warwick street Warwick street Williamson terrace Wardle terrace Wreath quay road Zetland street	39 2 2 4 5 2	60 5 1 2 4 7 3 1 1 5	102 4 3 3 2 4 6 2 13 7 2 3 2	5		36 1 1 1 2 5 2 3 2 1	10	117 1 1 1 1 1 1 1 1 1 1 1 1 2 4 2 3 1 3 1 2 4 2 3 1 3 1 2 3 3 4 4 5 5 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8
Total	54	91	153	10	79	57	14	.169
Sunderland District Bishopwearmouth District	1000	1	43		119 139	41 109	31 50	192 365
Monkwearmouth District		91			79	57	14	169
Grand Totals	160	591	320	20	337	207	95	726

STATEMENT OF VACCINATION IN THE SUNDERLAND UNION, FOR THE YEAR ENDING DECEMBER, 1877.

1	*		٧.			
Still in Abeyance.	Ī	-1	6	20	61	16
Removals into other Unions.	6	00	48	117	51	233
Dead previous to Removal.	43	22	158	149	157	529
Postponed by Medical Authority.	60	YO.	59	16	9	59
Total Vaccinated.	325	225	1489	1214	1207	4462
Vaccinated by Private Medical Practitioners	151	47	750	513	393	1854
Vaccinated by Public Vaccinator.	174	178	739	701	814	2606
Births Registered.	380	260	1734	1502	1423	5299
REGISTRATION DISTRICTS.	Sunderland East	Sunderland West	Bishopwearmouth South	Bishopwearmouth North	Monkwearmouth	TOTALS

JOHN THOMPSON, Vaccination Officer.

TABLE OF METEOROLOGICAL OBSERVATIONS

From January to March, 1878.

1												
JANUARY.	FEBRUARY.	MARCH.										
Barometer. Highest. and Lowest. John Chiection of Wind.	Barometer. Highest. Lowest. Similar Commercial Commerci	Date. Barometer. Highest. multiple dest. James dest. James dest. James dest. James dest. Wind. Wind.										
11 30·556 41·0 33·0 NW ·00 12 30·527 41·0 32·0 NW ·00 13 30·300 49·0 38·0 WNW ·01 14 30·100 49·0 40·0 WNW ·02 15 30·102 51·0 42·0 SW ·08 16 29·935 55·0 47·0 WNW ·02 17 30·310 47·0 40·0 SW ·00 18 30·411 45·0 35·0 WSW ·00 19 30·316 48·0 41·0 SW ·05 20 30·040 52·0 41·0 W ·00 21 29·740 51·0 44·0 NW ·00 22 29·928 42·0 35·0 SW ·00 23 29·364 39·0 35·0 SW ·09 24 29·247 40·0 35·0 NNW ·00 25 29·348 39·0 25·0 NNW ·00 26 29·943 41·0 28·0 NW ·05 27 30·061 40·0 35·0 SSW ·05	2 30·390 50·0 39·0 NW 00 3 30·351 46·0 36·0 NNW ·00 4 30·500 44·0 40·0 NNW ·00 5 30·507 44·0 39·0 SW ·00 6 30·480 46·0 36·0 SW ·00 8 30·540 52·0 42·0 NW ·01 9 30·250 45·0 35·0 WSW ·00 11 29·963 46·0 36·0 NNW ·00 12 30·212 44·0 37·0 SW ·05 13 29·900 42·0 34·0 SSE ·22 14 29·900 44·0 37·0 SE ·11 15 29·929 47·0 38·0 SW ·38 16 29·962 48·0 41·0 SW ·04 17 30·000 57·0 47·0 SW ·00 18 29·835 52·0 42·0 SW ·00 18 29·835 52·0 42·0 SW ·00 20 29·975 53·0 42·0 SW ·00 21 30·319 48·0 39·0 SW ·00 22 30·450 58·0 46·0 SW ·00 23 30·287 54·0 43·0 SW ·00 24 30·190 50·0 40·0 WNW ·00 25 29·938 50·0 41·0 WNW ·00 26 29·885 47·0 42·0 SW ·00 27 29·695 51·0 44·0 SW ·00 28 29·658 53·0 46·0 SW ·00 28 29·658 53·0 46·0 SW ·00 28 29·658 53·0 46·0 SW ·00	2 29·736 55·0 45·0 NW ·00 3 30·228 54·0 49·0 W ·00 4 30·244 54·0 47·0 SW ·00 5 30·197 58·0 41·0 SW ·00 6 29·561 57·0 47·0 NW ·00 7 29·472 56·0 42·0 NW ·08 8 29·866 50·0 38·0 NW ·00										
Mean Height of Barometer in Month, 30.03.	Mean Height of Barometer in Month, 30·16	Mean Height of Barometer in Month, 29.97										
Rainfall, 2.34.	Adopted Mean Temperature 44·12. Rainfall, 0·90.	Adopted Mean Temperature 44·16. Rainfall, 0·82.										

TABLE OF METEOROLOGICAL OBSERVATIONS

From April to June, 1878.

-	Ш																-	
			API	RIL.					M	AY.					JU	NE.		
Estrofolion or		Date. Barometer.	Highest.		Direction of Wind.	Rainfall.	Date.	Barometer.	Highest.		Direction of Wind.	Rainfall.	Date.	Barometer.	Highest.	Lowest, la	Direction of Wind.	Rainfall.
	在 在 在 在 在 在 是 是 是 是 是 是 是 是 是 是 是 是 是 是	1 28·883 2 28·984 3 29·350 4 29·668 5 29·800 6 30·257 8 30·116 9 30·177 10 30·161 11 30·191 12 30·241 13 30·100 14 29·870 15 29·850 16 29·795 17 29·620 18 29·700 19 29·670 20 29·523 21 29·623 22 29·916 23 29·117 24 29·813 25 30·016 27 30·230 28 30·172 29 30·072 30 29·723	47.0 47.0 55.0 51.0 54.0 50.0 51.0 52.0 47.0 58.0 58.0 68.0 68.0 52.0 68.0 52.0 68.0 52.0 68.0 69.0 69.0 69.0 69.0	31.0 36.0 35.0 35.0 36.0 37.0 39.0 40.0 41.0 42.0 44.0 44.0 45.0 45.0 44.0 44.0 45.0 44.0 45.0 41.0 40.0	NW WSW WNW NE SSW SSE SE ESE ESE ESE WSW WNW WSW SW SW SSE	.000 .000 .000 .000 .000 .000 .000 .00	2345678910111213141:161131422222342562728930		$64 \cdot 0$ $63 \cdot 0$ $62 \cdot 0$ $68 \cdot 0$ $60 \cdot 0$ $51 \cdot 0$ $55 \cdot 0$ $58 \cdot 0$ $62 \cdot 0$ $54 \cdot 0$ $63 \cdot 0$ $62 \cdot 0$ $63 \cdot 0$ $62 \cdot 0$ $63 \cdot 0$ $62 \cdot 0$ $63 \cdot 0$ $60 \cdot 0$	$\begin{array}{c} 46 \cdot 0 \\ 51 \cdot 0 \\ 47 \cdot 0 \\ 47 \cdot 0 \\ 47 \cdot 0 \\ 45 \cdot 0 \\ 46 \cdot 0 \\ 40 \cdot 0 \\ 47 \cdot 0 \\ 48 \cdot 0 \\ 45 \cdot $	ESE WNW WNW SW ESE NE SE SE SE SE SW SW SW NW NW SE NE SW NW NW NW NW NW NW NW NW NW NW NW NW NW	-011 -000 -044 -599 -100 -030 -011 -055 -128 -055 -555 -199 -000 -011 -03 -02 -03 -02 -03 -02 -000 -02 -000 -000	$ \begin{array}{r} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \\ 23 \\ 24 \\ 25 \\ 26 \\ 27 \\ 28 \\ 29 \\ 29 \\ 29 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20 \\ 20$	30·156 30·061 29·723 29·408 29·467 29·526 29·300 29·811 29·911 29·863 29·811 29·927 30·020 29·948 30·150 30·100 30·180 30·150 30·130 30·025	57.0 56.0 60.0 60.0 61.0 57.0 69.0 61.0 55.0 67.0 67.0 67.0 67.0 74.0 75.0	$\begin{array}{c} 46 \cdot 0 \\ 49 \cdot 0 \\ 48 \cdot 0 \\ 47 \cdot 0 \\ 47 \cdot 0 \\ 49 \cdot 0 \\ 52 \cdot 0 \\ 53 \cdot 0 \\ 51 \cdot 0 \\ 46 \cdot 0 \\ 45 \cdot 0 \\ 46 \cdot 0 \\ 50 \cdot 0 \\ 52 \cdot 0 \\ 52 \cdot 0 \\ 52 \cdot 0 \\ 52 \cdot 0 \\ 60 \cdot 0 \\ 62 \cdot 0 \\ 59 \cdot 0 \\ 63 \cdot 0 \\ 57 \cdot 0 \\ \end{array}$	SSE SW ENE NNW SW SSE SW NNE NNE NNW SW SE SW SW SE SW SE SW SE SE SW SE SE SE WSW E	.03 .00 .17 .06 .13 .00 .15 .01 .25 .13 .04 .64 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
一品茶	833	the state of	Mon	th, 2	9:85.		Mean Height of Barometer in Month, 29:71.							Mean Height of Barometer in Month, 29 90.				
100	pd			21.		ure	Adopted Mean Temperature 53.50. Rainfall, 3.20						Ad		58	-43.		ure
18		R	-	-	15.			R	-	_	20			Ra	-	200	-	, 1·72.

XVIII.

TABLE OF METEOROLOGICAL OBSERVATIONS

From July to September, 1878.

JULY.	AUGUST.	SEPTEMBER.
Barometer. Highest. mt. Iconest. Japan Direction of Wind. Rainfall.	Barometer. Highest. wanted Towest. Stanfall.	Date. Barometer. Highest. mand remained birection of Wind. Rainfall.
11 29·700 66·0 50·0 NW	2 30·192 66·0 57·0 NE 00 3 29·946 65·0 59·0 NE 00 4 29·895 65·0 59·0 ENE 62 5 29·922 72·0 58·0 ENE 26 6 29·788 66·0 59·0 SE 02 7 29·643 81·0 59·0 WSW 23 8 29·862 76·0 59·0 SW 00 9 30·092 72·0 57·0 SE 00 10 29·714 62·0 58·0 SSW 09 11 29·706 77·0 53·0 SE 60 12 29·357 79·0 57·0 WSW 01 13 29·390 72·0 57·0 WSW 01 14 29·267 73·0 57·0 NE 12 15 29·464 66·0 54·0 SSE 00 17 29·658 68·0 52·0 NW 21 18 29·900 76·0 57·0 NW 03 17 29·658 68·0 52·0 NW 21 18 29·900 76·0 57·0 NW 03 19 29·933 74·0 55·0 SE 00 21 30·035 70·0 55·0 SE 00 22 30·043 70·0 52·0 SE 00 24 29·514 64·0 56·0 E 00 24 29·514 64·0 56·0 SE 00 25 29·475 67·0 57·0 NE 05 26 29·449 71·0 57·0 NW 01 27 29·538 75·0 56·0 SW 10 28 29·571 70·0 57·0 SW 00 28 29·571 70·0 57·0 SW 00	2 30·180 71·0 55·0 NNW 00 3 30·060 76·0 59·0 WSW 00 4 30·131 68·0 60·0 SE 01 5 30·042 67·0 57·0 NE 00 6 29·966 77·0 58·0 WSW 00 7 30·086 75·0 60·0 WSW 00 8 30·100 71·0 57·0 ENE 00 9 29·870 72·0 57·0 ENE 00 10 30·174 73·0 51·0 NW 00 11 30·170 79·0 52·0 SW 00 12 29·950 60·0 53·0 NNW 00 13 30·052 74·0 49·0 NW 08 14 29·855 66·0 49·0 SW 00 15 29·450 63·0 58·0 SW 00 15 29·450 63·0 58·0 SW 00 16 29·400 68·0 49·0 NW 08 18 29·524 63·0 54·0 NW 08 18 29·524 63·0 54·0 NW 09 18 29·563 63·0 47·0 NW 09 19 29·866 67·0 52·0 NW 09 19 29·866 62·0 48·0 SSW 09 22 29·826 62·0 48·0 SSW 09 23 29·327 63·0 47·0 SW 38 24 29·616 66·0 45·0 NW 09 22 29·826 62·0 48·0 SSW 09 23 29·327 63·0 47·0 SW 38 24 29·616 66·0 45·0 NW 09 25 29·423 58·0 48·0 SSW 38 26 29·769 68·0 44·0 NW 00 27 29·923 65·0 47·0 NW 00 28 30·000 57·0 51·0 WSW 00 29 30·000 57·0 51·0 WSW 00 29 30·000 57·0 53·0 SSW 11
Mean Height of Barometer in Month, 29.75.	Mean Height of Barometer in Month, 29.72.	Mean Height of Barometer in Month, 29.84.
63.50.	63.0.	Adopted Mean Temperatur 59.23.
0.47.	Rainfall, 4·49.	Rainfall, 1 47.

TABLE OF METEOROLOGICAL OBSERVATIONS

From October to December, 1878.

																	_
	(OCT	OBE	R.			N	OVE	MBI	ER.			D	ECE	MBI	ER.	
Date.	Barometer.		Lowest.	Direction of Wind.	Rainfall.	Date.	Barometer.	Highest.		Direction of . Wind.	Rainfall.	Date.	Barometer.	Highest. me	Towest.	Direction of Wind.	Rainfall.
1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	30·022 30·240 29·972 30·060 30·004 29·754 29·456 29·104 29·358 28·913 29·523 30·072 30·147 30·022 29·922 29·922 29·916 29·819 29·225 28·983 29·177 28·969 29·133 29·386 29·435 29·640 29·532	61.0 65.0 66.0 64.0 67.0 66.0 68.0 61.0 67.0 65.0 60.0 56.0 55.0 55.0 55.0 51.0 54.0 56.0 51.0 54.0 54.0 54.0 54.0 56.0	46·0 41·0 49·0 53·0 55·0 55·0 55·0 55·0 49·0 46·0 49·0 52·0 48·0 53·0 53·0 52·0 41·0 43·0 43·0 41·0 38·0 41·0 38·0 33·0 33·0	N NW W WSW SW SW SW SW SW SW SW	.07 .00 .00 .00 .00 .01 .03 .00 .00 .00 .00 .00 .00 .00 .00 .00	$\begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 20 \\ 22 \\ 23 \\ 24 \\ 25 \\ 26 \\ 27 \\ 28 \\ 29 \\ 30 \\ \end{array}$	29·966 30·192 30·216 30·239 29·879 29·485 29·693 30·084 29·206 29·316 29·142 29·468 29·667 29·375 29·220 29·544 30·128 30·328 30·328 30·173 29·952 29·934 29·650 29·236 29·423 29·473 29·809 29·888	46.0 47.0 45.0 40.0 40.0 40.0	35.0 35.0 35.0 37.0 40.0 37.0 32.0 37.0	NE NNE NNE NNW NNW NNW NNW NW NW NW NW NW NW NW NW	188 311 022 100 166 522 199 266 03 000 1.7 01 02 644 80 00 00 00 00 00 00 00 00 00 00 00 00	$ \begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \\ 23 \\ 24 \\ 25 \\ 26 \\ 27 \\ 28 \\ 29 \\ 30 \\ 30 \\ 30 \\ 30 \\ 30 \\ 30 \\ 30 \\ 30$	29·653 30·028 30·022 30·286 30·034 29·967 29·629 29·515 29·590 29·647 29·600 29·630 29·538 29·465 29·388 29·016 29·447 29·700 29·575 29·720 30·256 30·080 29·450 29·450 29·450 29·500 29·560	44·0 44·0 43·0 38·0 35·0 36·0 35·0 35·0 35·0 33·0 33·0 33·0 33·0 33	37·0 36·0 38·0 31·0 31·0 31·0 30·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 29·0 28·0 20·0 30·0 20·0 20·0 20·0 20·0 20·0 20	NNW NW NW NW NW NW NW NW NW NW NW NW NW	.099 .000 .299 .033 .088 .055 .711 .115 .066 .144 .000 .001 .001 .001 .001 .001 .001
	in	Mor	nth, 2	29.64.			in	Mor	nth,	Barome 29·74.			in	Moi	nth, 2	Barome 29·62.	
A	dopted		in T∈ 2·98.	mperat	ure	Ad	dopted		n Te	mperat	ure	A	dopted		n T∈ 2·76.	empera	ture
	R	ainfa	all, 1	51.			R	ainfa	all, 6	49.		1	R	ainfa	all, 4	15.	

CASES in which Premises were visited by the Medical Officer of Health and Sanitary Inspectors, on account of Infectious Diseases prevailing therein.

Smallpox Typhus Fever Typhoid ,, Other ,, Scarlatina Measles Diphtheria Whooping Cough	2 59 70 34 591 320 20 337 17	Bedding and Articles of Clothing Burned to Prevent Contagion, and Houses Disinfected. Flock and Chaff Beds Mattresses Pillows, &c Sheets, &c Houses Disinfected by the Inspector	No. 6 8 9
Diarrhœa	1657	Total	68

LIST OF CASES in which it was found necessary to adopt Magisterial proceedings.

Particulars of Complaint.	No. of Cases.		Penalties Imposed.
Depositing Offensive Matter on the Street	2	Two Fined 5s	£ s. d.
mises in such a state as to be a Nuisance and Inju- rious to Health Exposing Unsound Food for Sale	48	28 Orders to abate made, 18 cases withdrawn, and 2 fined 5s. each	0 10 0
Adulteration of Food	2	One fined 20s. and one 2s. 6d	1 2 6
	52		£2 2 6

XXI.

Number of Persons summoned under the Sanitary
Acts.

Sanitary Acts.	Number of Persons.	Convicted.	Dis- charged.	Nuisances abated and Summonses withdrawn on payment of Costs.
Public Health Act Selling and Exposing for Sale Unsound Food Adulteration of Food Act Bye-Laws		20 2 2		32 ————————————————————————————————————
Total	56	24		32.

TABLE shewing the amount of Bad Meat and other unwholesome Articles of Food seized and destroyed during 1878.

Class of Food Seized.	No. of Seizures.	Weight in Pounds Seized and Destroyed.	No. of Persons summoned.	No. of Convictions.	Amount of Penaltiesimposed
Beef and Mutton	8 - 1 2 1	1890 539 224 (140 lbs.) (7 couple)	No proceedings	taken.	
Total	14				

XXII.

Nuisances reported, and Notices served by Sanitary Inspectors during the Year.

Number of Nuisances Reported	1,902
Nuisance abated without formal Notice	98
Nuisances abated after Notice without proceedings	1,756
Nuisances abated after proceedings had been taken	448
Number of formal Notices given	3,576
Complaints made at Office, and attended to by Inspectors	319
Order of Magistrates to abate Nuisances	28

Notices served.

To Repair Defective House Drains, Roofs, Water-closets, Ash-pits, &c.	762
To Whitewash Premises, Cleanse Rooms, Yards, Outhouses, &c. Defective Spouts	2,475 320 15 4
had occurred	802 4,378

Ash-pits Cleansed by Corporation.

Orders taken by Inspectors during inspection, and Private Orders received at the Office 8,202	Number of Loads removed during 1878 32,250
Total 8,202	Total 32,250

Deaths Registered in the Borough of Sunderland during the Year 1878.

	Deaths	KE	lg:	SI	er	ea		n	me	9	RO	ro	ug	n	0	2	III	100	eri	an	0 (aur	Ing	I	ne	1										
		Sea To	est.	Ì		ī							A	3E	В	EL	OV	v.										118	OERI	AND	-	BISHC	PWN	en.	CHEAR	-
CA	USES OF DEATH.		1		1		1	-3	T	-19	1-	-01	1-	25	-	10	-10	T	-50	-	0	-79			-50	-	100	EAR		T IN	2 3	OBT	1 60	CTS.	MONE	- mount
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9	Comping Cough	40 10 10	65 100 100	17 15	100 200 200 200	111 25	33 17 36	18 41 18	18 43 33	5 23 2	1 1		ī	18	-	E	1			3	=		3	=		3	=	18	27 1 24	6 1	9 27	1 1	16	- Hills	14 15 2	11
30 D	Northern Provinces	1 A	114	11	71	16	11	5	11	-	9		- 1		ī	E		7		î	1	1 1	3	2			=	1	10 1		1	1	5 2	13.75	7	12
7	Professional Company of the Company	12	10	100		7	ī	1 1	1	i	1	1 3	1	1	10	-	1	0 0	E	ī	1	1 3				-	=	-	-	A	1	A S	1 3	13	1	-
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	Cannor Alteres Martification	11.4	51 6 6	1	1	2		1		-	=		1	1	=	3		4 1		*	2000	1	1 2 1	2 1	1 -	1	7	2	1			4 0 10	1 0 0			3
	Annua	-	3	i	1 7	1		-	=		=				E	=	E		1		1	7		-		-	-		-			1 3		1		
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