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BOROUGH OF NEWCASTLE-UPON-TYNE.

REPORT
OF THE
MEDICAL OFFICER OF HEALTH
ON THE
SANITARY CONDITION
OF
NEWCASTLE-UPON-TYNE,
WITH
TABULAR RETURNS
AND
DIAGRAMS OF MORTALITY
DURING
THE YEAR 1875.



Newcastle-upon-Tyne:
JOHN CHRISTIE, "CAXTON HOUSE," CROSS STREET.
1876.

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NEWCASTLE-UPON-TYNE:
JOHN CHRISTIE, "CAXTON HOUSE," CROSS STREET.

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INDEX.

	PAGE
Rates of Birth and Death,	5
Zymotic Diseases,	5
Miasmatic Order of Diseases,	6
Infant Mortality,	8
Summary of Foregoing,	8
Non-Certified Deaths,	9
Respiratory Diseases, and some of their causes,	10
Observations on the state of the Public Health,	12
Rainfall,	13
Action taken by the Sanitary Authority,	13

TABLES.

I.—Population.—Births and Deaths in the Sub-districts of the Borough,	17
II.—III.—Rates of Death—Quarterly and in Sub-districts, and in different classes of Disease,	17
IV.—Number of Deaths in different classes and orders of Disease,	18
V.—Ages at Death,	19
VI.—Weekly Mean Number of Deaths at Seven Ætal Periods,	19
VII.—Number of Births and Deaths in different Quarters of Three consecutive Years,	19
VIII.—IX.—Deaths of Children,	20
X.—Non-Certified Deaths,	22
XI.—XII.—Deaths from Zymotic Diseases, &c.,	23
XIII.—Admissions to, and Deaths at, the Newcastle Fever Hospital,	29
XIV.—XVIII.—Unwholesome Food, Disinfections done, Nuisances Removed, Magisterial Proceedings, &c.,	30
	31

DIAGRAMS.

Fortnightly Chart of Deaths at Seven Ætal Periods.
Fortnightly Chart of Deaths liable to fluctuation with Temperature and Rainfall.
Plan of Newcastle shewing prevalent Zymotic Diseases.

To Mr. ALDERMAN WILSON,
 Chairman of the Sanitary Authority of the
 Borough of Newcastle-upon-Tyne.

SIR,

I have the honour to present to you my Report for the year 1875.

The Report, which compares favourably with those of former years, contains an account of the more important Diseases liable to fluctuation, with brief observations as to certain of the causes of affections of the Respiratory Organs.

Some explanation is offered of the satisfactory state of the public health, which necessarily includes the action taken by the Sanitary Authority during the year.

I am, Sir,

Your obedient servant,

HENRY E. ARMSTRONG, M.R.C.S.,
 MEDICAL OFFICER OF HEALTH.

Town Hall, Newcastle-upon-Tyne,
 12th February, 1876.

BOROUGH OF NEWCASTLE-UPON-TYNE.

REPORT 1875.

DURING the 52 weeks ending 1st January, 1876, 5,586 births and 3,588 deaths have been registered in the Borough. The births represent an annual rate of 40.6, and the deaths an annual rate of 26.1 per 1,000 population at all ages, as estimated by the Registrar-General to the middle of the year 1875.

The birth-rate shows a decrease of 0.3, and the death rate a decrease of 3.1 per 1,000 on the rates of 1874. In actual numbers the deaths from all causes average 69 per week. The three *maxima* (93, 95, and 92 deaths) were reached on the weeks ending respectively 9th January, 14th August, and 28th August, the chief causes of the increased mortality during the first of those weeks being deaths beyond the average of the year, from Scarlet and Enteric Fevers, Bronchitis, and the diseases incidental to old age; in the second of these weeks, to deaths beyond the average of the year, from Enteric Fever, Diarrhoea, Mesenteric Disease, Convulsions, Brain Disease, Atrophy and Debility; and in the third of these weeks, to deaths beyond the average of the year, from Diarrhoea, Mesenteric Disease, Premature Birth, Atrophy, and Debility. The three *minima* (44, 52, and 50 deaths) occurred in the weeks ending respectively April 24th, May 1st, and May 22nd. Comparison of the different quarters of the year yields the following:—

1875.	Number of Weeks with death above average.	Number of Weeks with average number of deaths.	Number of Weeks with deaths below average.
1st Quarter.	7	1	5
2nd „	1	„	12
3rd „	9	3	1
4th „	1	5	7
Entire Year.	18	9	25

Zymotic Diseases.—The rate of mortality from the seven following Zymotic diseases, viz:—Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, "Fever,"* and Diarrhoea, is 3.6 per 1,000 population. This rate in the previous year was 4.7, and in 1873 it was 6.8 per 1,000.

* Including Typhus, Enteric, and Continued Fevers.

The deaths in the Miasmatic Order to which the Seven last named diseases of the Zymotic Class belong, which in 1874 were considerably less than during 1873, show this Year a still more marked improvement. Thus the total deaths in the Order, which in the two former of these years were 863 and 975, are during 1875, 577. This improvement is general throughout the five Registration Districts into which the Borough is divided and, calculated according to estimated populations, is as follows:—in the Entire Borough 2·1 per 1000; in the Registration Sub-district of Westgate (which includes the Township of Elswick), 2·8; in St. Andrew's, 1·3; in St. Nicholas' (which includes the Parish of St. John), 0·8; in All Saints', 2·3; and in Byker which (includes the Townships of Heaton and Jesmond), 1·6 per 1000 estimated population of each.

The diseases the diminution of whose Mortality has contributed most to this improvement are three viz—Scarlet Fever, Whooping Cough and Diarrhœa. Scarlet Fever which has now been continuously prevalent in the Borough for upwards of three years, first became markedly fatal in the fortnight ending 5th October, 1872, when 4 deaths were registered under that head. The disease from that date rapidly increased, and by the end of the year had caused 87 deaths, and in January alone of 1873, 49 deaths. From this time, although Scarlet Fever continued prevalent, a decrease of its fatality accompanied the increase of temperature, and the deaths were reduced to 5 in the fortnight, by the end of the following June, after which their number began and continued to rise during the remaining half of the year, the disease reaching its climax of fatality in December, when 74 deaths from that cause were registered. As regards this epidemic, the first half of 1874 corresponded to that of the preceding year, the decrease of deaths with the approach of summer being somewhat similar. During the autumn and winter its mortality, although increased, did not rise beyond 11 deaths in any fortnight, and in the last two weeks fell to 3.

By the end of the first quarter of 1875, the deaths from Scarlet Fever had declined to 1 in the fortnight, and with one exception (viz 2 in the first half of May), continued at this rate until the two weeks ending 7th August, when, for the first time during almost three years, no deaths from that cause were registered. An increase has since then taken place, less marked however than any of the previous winter rises, 6 deaths only being registered in December. The increased fatality of the disease during the first and last quarters of the year 1875, has been common to all the Registration Sub-districts except that of St. Andrew's, which shews an

increase of deaths in the fourth quarter only. The mortality for the year, calculated on estimated population, has been relatively highest in the Sub-district of St. Nicholas, representing a rate 1·1 per 1,000; that of the Borough being 0·5. From its commencement in 1872 until the end of 1875, the epidemic has caused 870 deaths.

Whooping Cough shews a mortality of 63 cases, as compared with 104 during 1874. The improvement has been general throughout the Sub-districts. The disease was most fatal during the first and second quarters, when 24 and 18 deaths respectively, were registered from that cause.

Diarrhœa has caused 202 deaths—a favourable comparison with either of the two next preceding years, when the numbers were 246 and 241 respectively. The disease was, as usual, most prevalent during the autumn months, and was then distributed somewhat equally in proportion to population over the five Sub-districts of the Borough. Of the total deaths 153, or more than three-quarters, occurred during the 13 weeks ending 2nd October; of these, 107, or about two-thirds, were those of children under one year of age, and 22 were those of children aged between one and two years.

The only epidemic disease having an increased fatality over that of the previous year is *Measles*, from which 50 deaths were registered, against 18 in 1874. In 1873 the number dying from this disease was 62. The prevalent fatality of Measles during 1875 has been almost limited to the second half of the year, and was relatively most severe in the Sub-districts of St. Andrew and St. Nicholas.

Enteric Fever has caused 70 deaths, as compared with 75 during the previous year. The mortality from this cause has been relatively highest in Westgate and St. Nicholas, in each of which Sub-districts it represents a rate of 0·6 per 1,000 estimated population. In All Saints, the rate is 0·5; in Byker, 0·3; and in St. Andrew's, 0·2 per 1,000.

35, or one-half of the deaths from Enteric Fever, occurred during the spring quarter, and of these 22 were registered during the first six weeks of the year.

Typhus, which was prevalent in certain localities of the Borough towards the close of 1874, continued so during the early part of the following year, causing 6 deaths in the month of January, 3 in February, and 4 in March, after which the fatality became considerably less, 3 deaths only occurring during the second half of the year. The admissions of Typhus to the Newcastle Fever Hospital correspond with

the above statistics—49, out of a total of 83 cases, having been admitted during the spring quarter. Judging from the returns of the Fever Hospital, Typhus has, during the past year, been chiefly prevalent in three areas or groups of streets, viz. :—one near Blandford Street, one near Back Row, and one near Stockbridge. From the first of these areas 11 cases of Typhus were received into Hospital, including 6 from one kitchen in Blandford Street, 1 from Elswick East Terrace, 3 from Sunderland Street, and 1 from Peel Street. From the second group, 17 cases were removed to Hospital, including 8 from the Vagrant Ward, 4 from Back Row, 1 each from Zion Court, Queen's Lane, Castle Garth, Bank Side, and Dog Leap Stairs. From the third group, 22 cases were removed, including 2 from the foot of Pilgrim Street, 2 from Heath's Yard, 8 from one family in Spicer Lane, 1 each from Dog Bank, Stockbridge, and Coburg Stairs, 2 from Mount Pleasant, and 5 from Cherry's Entry, Pandon. In addition to these, 8 cases of Typhus were removed from the Workhouse, and other cases from different parts of the Borough.

Infant Mortality.—Among other statistics of the mortality of the year that remain to be considered, are those relating to infants. The number of children dying in the Borough under one year of age during the year is 1,050, representing a rate of 7·6 per 1,000 estimated population at all ages. In 1874 this rate was 8·0, and in 1873 it was 7·8. In the Sub-districts, this rate during 1875 is as follows :—in Westgate, 7·0 ; in St. Andrew's, 5·2 ; in St. Nicholas', 7·1 ; in All Saints', 8·3 ; and in Byker, 10·9.

The high rate in the last-mentioned Sub-district is probably to some extent, though not entirely, due to under-estimate of population, since the rate per cent. of deaths under one year, to births registered, gives a somewhat more satisfactory result. This rate, in the Sub-districts, is as follows :—Westgate, 17·5 ; St. Andrew's, 18·1 ; St. Nicholas', 20·6 ; All Saints', 20·2 ; and Byker, 19·8 ; that of the entire Borough being 18·8, against 19·8 in the previous year.

Summary.—To recapitulate, there has been in Newcastle during 1875, a fair, and in some instances a marked reduction below former years in the mortality from those diseases and at those periods of life which are usually accepted as tests of sanitary condition. Febrile and

epidemic disorders shew a fatality less by one-third than during the previous year, and less by two-fifths than during 1873. The mortality from the seven principal of these diseases is the lowest recorded during any of the last five years. The infant mortality, whether calculated on estimate of population, or by the more accurate method of comparison with births, is considerably below that of late years ; and the general death-rate from all causes is also the lowest of five consecutive years.

On comparing the diseases of infants in 1874 with those in 1875, the equality of the principal factors of the mortality at this period of life is striking. Thus in each of these years 77 per cent of the deaths in the Borough, of children under one year of age, were due to the same seven diseases viz. :—Whooping Cough, Diarrhoea, Mesenteric Disease, Convulsions, Bronchitis, Premature Birth, and "Atrophy and Debility,"—the actual number of deaths from these causes being 852 in the former and 818 in the later of those years. Closer examination of the factors of these numbers shows that the proportion borne by each, in each of the years, was remarkably similar, the death from one cause only, viz. :—Mesenteric disease, differing by so much as 3 per cent in the two years, two only viz. :—Convulsions and "Atrophy and Debility," differing by 2 per cent, and one only viz. :—Whooping Cough, by 1 per cent, the proportions borne by the three remaining diseases to the whole, being equal in the two years.

Non-Certified Deaths.—Some light is thrown on the comparatively high Infantile death rates in the Sub-districts of All Saints' and Byker, by examination of the table of "Non-Certified" * deaths in the appendix.

The number of deaths in this class is 176. 110 were those of children under one year of age, of which 16 died in the Sub-district of Westgate, 11 in St. Andrew's, 9 in St. Nicholas', 44 in All Saints', and 30 in Byker. The rates per 1,000 of these Infantile deaths to births registered during the same period are, for the Borough 20, for Westgate 7, for St. Andrew's 20, for St. Nicholas' 23, for All Saints' 37, and for Byker 30. Of the non-certified deaths in the Sub-district of All Saints', 31, or nearly three-fourths, are attributed to Convulsions, and .5 to "Debility" ; of those in the Sub-district of Byker 8, or one-fourth are assigned to Convulsions, and 13, or nearly one-half, to "Debility."

* i.e., Deaths for which no proper medical or other legal certificate is given.

Respiratory Diseases.—An important order of diseases and one that always occupies a prominent position in the Mortality sheets, is that of the Respiratory Organs, in which term is included affections of the Breathing Apparatus other than Consumption, Croup, and Whooping Cough. 549 deaths in this order, or 15 per cent. of the deaths from all causes, have been registered during the year, 583, 502 and 455, occurring respectively in each of three preceding years. Of these during 1875, 142, or almost 26 per cent. are those of children under one year of age, of which deaths Bronchitis caused 102, and Inflammation of the Lung 33, leaving 7 as the result of other diseases of the Breathing Organs.

A general idea of the connexion between Meteorology and Respiratory Affections may be formed from the published Weekly Returns, where the deaths at all ages from such causes are set forth. A more accurate knowledge may, however, be gained by observing the effect of the varying states of the atmosphere in relation to these deaths in the very young. At this period of life the most frequent of these diseases, Bronchitis for the most part runs a short course, thereby allowing some means of estimating the probable date of commencement of attack in each case, for comparison with the observed state of the weather at the time.

The effect of season on the Respiratory Organs of the young is shewn by the following comparison of the infantile deaths from diseases of these Organs in the different quarters of the year with the mean temperatures of the same periods. During the Summer and Autumn quarters, with respective mean temperatures of 51.6° and 56.8°, the deaths of children under one year from the above mentioned diseases were 26 and 25 respectively, while during the Spring and Winter quarters, with respective mean temperatures of 39.1° and 41.6°, the deaths of infants from these causes rose to 31 in the former and 60 in the latter. As is obvious, low temperature is not of itself, sufficient to account for all increases in Respiratory Affections, since during the Spring quarter, the mortality from those diseases was less than in the following Winter quarter, when the temperature was somewhat higher. Some explanation of this will probably be found in the fact that Easterly, and especially North-Easterly, winds were more prevalent during the last than during the first quarter of the year. The nearness of Newcastle to the east coast, exposes the population to the effect of winds which are at all times trying to the Breathing Organs, more so when combined with cold, especially when the fall of temperature is sudden.

During the 13 weeks ending 3rd April, 1875, the greatest weekly number of deaths of children under one year of age from Respiratory

diseases, occurred in the week ending 6th March. A fortnight previously, which may be assumed as the probable date of commencement of attack in these cases (week ending 20th February), the daily temperature shewed a mean range of upwards of 11°, (45.1° 33.9°,) the temperature in the shade reaching a maximum of 50.2° at the beginning of the week, and falling to freezing point near its close, the mean of the week being 38.6°. The mean temperature of the week ending 27th February, (34.1°) shewed a fall of 4.4 degrees below that of the previous week—the mean of certain days being very little above 32°—and snow fell heavily. During the second half of the former and almost the whole of the latter of these weeks, the wind blew strongly North-East. In the second quarter the highest weekly number of deaths as above, occurred during the week ending April 10th, and was probably connected with the almost continuous prevalence of North-East winds from the 11th to the 17th of March—followed by wide daily ranges of temperature until the end of the month. In the third quarter, the greatest mortality from Infantile Respiratory diseases was recorded on the week of maximum mean temperature during the year—viz. that ending 21st August. The temperature of the first week in August though never below 45.9°, gave a mean of 3.3° below that of the previous week, and was accompanied by an almost continuous North-East wind, which also prevailed during much of the following week. The highest degrees of mortality in this order of disease during the fourth quarter, and also during the entire year, were attained on the weeks ending respectively 18th and 25th December, when the deaths (11 and 10) were more than treble those of any other two consecutive weeks of the year. The mean temperatures of the two weeks immediately preceding those on which the increased number of deaths was registered shew a slight decline, and that of the week before a very considerable decline (6.2°) below previous weekly means. The daily range during this period was slight, once only in the three weeks exceeding 6°. The wind at the same was almost continually in the North-East.

The much greater mortality of the winter as compared with the Spring quarter is probably to a considerable extent dependent on the facts that, 1st, the temperature of the former though on the whole the higher of the two, was *falling*, while that of the Spring was *rising*, and 2nd, that the Easterly winds prevailed to a greater extent.

The foregoing illustrations, shew the importance of preserving equality of temperature of the body,—a result only to be obtained in this country by suitable clothing and avoidance of exposure. To attempt to make children hardy by taking them out in severe weather imperfectly

protected from the cold is as injudicious as to endeavour to rear them by the opposite course, and as often defeats its object. Respiratory diseases, fatal and not fatal, are extremely common at all ages and in all classes, and often result from apparently trifling causes, among which in addition to those already named, may be mentioned the breathing of the air of over heated or imperfectly ventilated rooms. In the former instance, the sensitive tissues of the Respiratory Organs become relaxed and consequently more susceptible to chills and the impurities of the external air, as in towns; in the latter, they are directly exposed to more or less of irritation from various matters already exhaled from the lungs or resulting from the combustion of coal gas, &c.—and thus in either case become the seat of disease.

Although it cannot be said that the Breathing Apparatus of one class of society is more liable to disease than that of another, it will readily be understood that the above causes are aggravated by want and operate to a larger extent among the poor than among the rich.

Without attempting fully to account for the general improvement of the health of the Borough during 1875 as compared with late years, there are certain points bearing close relation to Zymotic Diseases which may be considered of interest in connexion with the relatively low ebb of these affections in Newcastle during the present year. One of these is the tendency of epidemic disorders to exhaust themselves. This no doubt serves to a considerable extent to explain the present comparative immunity of this town from certain diseases as *e.g.* Smallpox, and probably also to some degree, Typhus and Scarlet Fever. As has been shewn, the latter of these after an epidemic continuance of over two years began to decline in 1875. Epidemic Typhus prevailed in 1865-6, and, less extensively, more than once since that time; the late Smallpox epidemic after lasting almost two years, died out towards the end of 1872. So also with other diseases, it is found that, upon causes difficult of explanation, the virulence of each appears to wear itself out in time.

Smallpox in this country now seldom puts on an epidemic form, such as is frequently and almost regularly observed in India by the natives, and such as was common in England before the introduction of vaccination about the beginning of the present century. The benefit of vaccination is thus twofold—to the vaccinated person directly—and to the community indirectly, by retarding and modifying the epidemics of the disease.

With Typhus and Scarlet Fever also, against which we have no similar safeguard, there would appear to be a tendency to outbreaks followed by periods of quiescence, and it is perhaps to this that our comparative immunity in 1875 is to some degree, though not entirely, due.

Among other agencies, the rainfall, which is beyond the average, has doubtless benefitted the general health. Falling as much as it did, in prolonged and heavy showers at that season when the want of it is usually felt, the atmosphere, the streets, and lanes, and the sewers must all have been by it freed of much impurity, at a time when reduction of temperature from the presence of an additional amount of water could be productive of no Sanitary ill effects. The following Table shews the weekly rainfall, yielding a total of 30.67 inches for the year 1875, that of 1874 being 24.03 inches.

TABLE OF RAINFALL DURING 1875.

1ST QUARTER.		2ND QUARTER.		3RD QUARTER.		4TH QUARTER.	
Week Ending.	Inches.	Week Ending.	Inches.	Week Ending.	Inches.	Week Ending.	Inches.
January 9	0.61	April 10	0.73	July 10	0.21	October 9	0.18
" 15	0.16	" 17	0.00	" 17	1.67	" 16	1.14
" 23	0.67	" 24	0.00	" 24	2.75	" 23	2.55
" 30	0.24	May 1	0.22	" 31	0.11	" 30	0.75
February 6	0.06	" 8	0.13	August 7	0.98	November 6	0.81
" 13	0.31	" 15	0.07	" 14	2.28	" 13	1.33
" 20	0.34	" 22	0.44	" 21	0.00	" 20	2.04
" 27	0.59	" 29	0.42	" 28	0.38	" 27	1.04
March 6	0.28	June 5	0.02	September 4	0.63	December 4	1.09
" 13	0.25	" 12	0.60	" 11	0.91	" 11	0.16
" 20	0.08	" 19	0.51	" 18	0.06	" 18	0.00
" 27	0.05	" 26	0.16	" 25	0.95	" 25	0.29
April 3	0.00	July 3	1.16	October 2	0.21	1876. Jan. 1	0.05
Total ...	3.64	Total ...	4.46	Total ...	11.14	Total ...	11.43

The action of the Sanitary Authority for the protection of the public health has, during the past year, been energetic and unceasing, both in dealing promptly with individual cases of infectious diseases as they came under observation, and in the adoption of general preventive measures. Without this, there can be little doubt that Typhus would have prevailed much more fatally and extensively than it has done, that disease having broken out in three separate places, after an absence from the town of a considerable length of time. Steps have been taken to gain early information of fresh cases, and every means has been used to

secure their immediate isolation in Hospital—the Sanitary Authority defraying expenses of upwards of 30 patients, not paupers, whose circumstances did not enable them to pay for themselves. Daily notice continues to be received from the Dispensary and other sources, of infectious disease of all kinds, when, as hitherto, examination into its probable cause is at once proceeded with, and such recommendations are given and steps taken as are most suited to the nature of the case, and best conduce to the extinction of the disease—including the gratuitous disinfection and purification of the premises of cases, and the replacing of infected articles of bedding by others.

With respect to general measures carried out by the Sanitary Authority, the continued adoption of the ash-pan system of refuse removal (instead of the offensive privy-midded method) in streets with deficient yard space, and places imperfectly ventilated, is a step of great importance towards the improvement of the public health. 535 of these pans have been put in during the past year, and are, like those previously introduced, cleansed daily, or as often as is required. Although the adoption of the ash-pans in certain streets has been followed by an improvement of the health of those localities, it would be premature and perhaps erroneous to regard the two circumstances in the relation of cause and effect. The fact nevertheless exists, and it is but fair to assume that the early removal of excrement and other organic refuse by this simple and inoffensive system has contributed to the good result.

In the rapidity of removal lies the chief sanitary superiority of this over the privy-midden method; for the ash-pans, under proper management, are thus emptied before decomposition of the refuse has time to set in. The advantage to health from this plan as compared with the probable effects of the continued evolution of poisonous gases from large or old middens is obvious.

Another circumstance entitled to consideration in connexion with the improved state of the health of the Town is the comparative absence of overcrowding. 29 cases only of illegal overcrowding have come under notice during the year. The number during 1874 was 197. I have no reason to believe that the small number of cases detected during the present year is due to remissness on the part of the Inspectors; on the contrary, a recent personal inspection of much of the worst kind of tenement property has excited in me some surprise that there was so little offence of the Borough regulation, which requires 300 cubic feet of house space for each occupant. The absence of overcrowding, which may also

be partly inferred from the freedom from Typhus during the latter part of the year, is the more remarkable that the rent of tenement property in Newcastle is high, some dark and damp cellars kitchens (recently closed) bringing 2s. 6d., and even 3s. 6d., a week.

The amount of dampness, darkness, and defective ventilation observed in the recent inspection above referred to is sufficient, without any other agency, to have acted both as predisposing and exciting causes to various forms of disease; and induces the reflexion that had the exclusion of moisture and admission of light and air been as diligently attended to in what is now the older tenement property as the reverse would appear to have been the case, the health of the occupants of the present day would have been very different.

With the present scarcity of dwellings the shutting up of rooms even under conditions such as the above, is to a great degree impracticable, a bad room being better than none. Notices have however been served for the closing of 136 of the worst, of which about half came under observation during the above mentioned inspection.

For various reasons, the insanitary condition of much of the tenement property of the Borough has, until recently, been practically an ill without a remedy. That the subject has been thoughtfully considered, its gravity fully appreciated, and the only possible means of dealing with it indicated by the Municipal Authorities before legal power was obtained to put those means in action is shewn by various records, notably by a Report of a Sanitary Sub-Committee under the presidency of Mr. Alderman Wilson, presented to the Council in March, 1867, from which the following extract is taken, shewing the conclusions arrived at by the Committee, with reference to some of the causes of ill health. "There is only one remedy that will be effectual, that is, to provide in some way, more accommodation of a character specially adapted to the classes which occupy the overcrowded and ill constructed parts of the town, and, *pari passu*, with this to compel the structural alteration if practicable, of such places. * * * * * It may also be needful in many instances to open out these places by new thoroughfare, so as to admit light and ventilation. * * * * * When other accommodation is sufficiently provided, it will then be necessary in many instances entirely to close, or to have removed certain places and rooms, which from their situation are utterly incapable of improvement."

Such are the opinions of competent judges, as to the requirement of Newcastle nine years ago, when legal power to carry out some of the

most advanced of these ideas did not exist. The Artizan's and Labourers Dwellings Act 1875, of which the above is a foreshadowing, meets many of the difficulties that have hitherto stood in the way; and the power therein given, has led to the collection of information respecting the sanitary defects of a very large amount of the tenement property in the Borough.

HENRY E. ARMSTRONG, M.R.C.S.,

MEDICAL OFFICER OF HEALTH.

Town Hall, Newcastle-on-Tyne.
12th February, 1876,

BOROUGH OF NEWCASTLE-UPON-TYNE, 1875.

APPENDIX.

TABLE I.

POPULATION (ESTIMATED BY THE REGISTRAR-GENERAL TO THE MIDDLE OF THE YEAR), 187,665.

Registration Sub-districts.	BIRTHS. Registered in 52 weeks ending 1st January, 1876.				Total.	DEATHS. Registered in 52 Weeks ending 1st January, 1876.		
	Male.		Female.			Male.	Female.	Total.
	Legitimate.	Illegitimate.	Legitimate.	Illegitimate.				
Westgate	1151	64	1123	50	2388	723	692	1415
St. Andrew's	262	18	296	11	587	205	201	406
St. Nicholas	204	13	176	5	398	323	160	483
All Saints	560	38	554	24	1176	366	371	737
Byker	505	18	498	16	1037	296	251	547
Borough total	2682	151	2647	106	5586	1913	1675	3588

The Births represent a rate of 40·6 per 1000 Estimated Population.
The Deaths represent a rate of 26·1 per 1000 Estimated Population.
Increase of Births over Deaths, 1998

TABLE II.—ANNUAL DEATH RATE PER 1,000 LIVING IN NEWCASTLE FOR THE PAST FIVE YEARS, COMPARED WITH THE AVERAGE RATE IN 21 TOWNS OF THE UNITED KINGDOM.

	1871.		1872.		1873.		1874.		1875.	
	Annual Average in 21 Towns.	Annual Rate in Newcastle.	Annual Average in 21 Towns.	Annual Rate in Newcastle.	Annual Average in 21 Towns.	Annual Rate in Newcastle.	Annual Average in 21 Towns.	Annual Rate in Newcastle.	Annual Average in 21 Towns.	Annual Rate in Newcastle.
1st Quarter	29·0	28·0	26·8	28·0	25·6	29·4	25·6	29·1	29·6	27·4
2nd „	24·8	32·4	23·6	24·1	22·7	27·0	22·9	24·9	23·5	22·7
3rd „	25·9	37·7	24·1	27·1	23·8	29·9	24·5	31·6	23·7	28·9
4th „	27·8	31·0	23·0	26·2	25·4	33·4	28·9	31·7	25·3	25·4
Annual rate	26·9	32·2	24·3	26·3	24·3	30·1	25·5	29·2	25·4	26·1

TABLE III.—RATES OF DEATH IN THE DIFFERENT CLASSES OF DISEASE PER 1,000 OF POPULATION IN EACH REGISTRATION SUB-DISTRICT.

Registration Sub-District.	Westgate (W.)* excluding Benwell and Fenham.	St. Andrew's	St. Nicholas (V. H.)*	All Saints'.	Byker.
Population (estimated to middle of 1875.)	59,637	19,324	11,467	28,391	18,846
CLASS.	Rate pr 1000	Rate pr 1000	Rate pr 1000	Rate pr 1000	Rate pr 1000
I.—Zymotic†	4·9	4·3	6·8	3·7	4·2
II.—Constitutional	4·2	2·4	7·0	3·7	4·5
III.—Local	9·8	10·3	16·7	12·5	12·3
IV.—Developmental	3·6	3·1	3·1	3·8	6·2
V.—Violent Deaths	0·5	0·4	5·7	0·9	0·8
VI.—Violent Deaths not classed	...	...	...	0·03	...
Sudden Deaths, cause unascertained	0·7	0·4	1·5	1·3	0·8
Causes not specified	...	...	...	...	...
Total	23·7	20·9	40·8	25·93	28·8

*H (Hospital). *W (Workhouse). *V (Vagrant Ward).

† The deaths in the Zymotic class are corrected by the distribution of those occurring at the Fever Hospital to the sub-districts from which they came.

TABLE IV.

DEATHS FROM ALL CAUSES IN EACH SUB-DISTRICT ACCORDING TO ORDER OF CLASSIFICATION OF THE REGISTRAR GENERAL.

ORDER.	Westgate.	St. Andrew's	*St. Nicholas.	All Saints.	Byker.	TOTALS.	
	Number of Deaths.	Number of Deaths.	Number of Deaths.	Number of Deaths.	Number of Deaths.	Deaths from all causes.	Per centage of Total Deaths in each of the different orders to total deaths from all causes.
CLASS I.							
ZYMOTIC DISEASES.							
1. Miasmatic ...	261	75	81	90	70	577	16.0
2. Enthetic ...	9	1	5	6	4	25	0.7
3. Dietic ...	11	6	5	6	5	33	1.0
4. Parasitic ...	4	...	...	...	...	4	0.1
	285	82	91	102	79	639	17.7
CLASS II.							
CONSTITUTIONAL DISEASES.							
1. Diathetic ...	37	9	10	11	12	79	2.2
2. Tubercular ...	215	38	71	94	73	491	13.6
	252	47	81	105	85	570	15.8
CLASS III.							
LOCAL DISEASES.							
Diseases of—							
1. Nervous System...	204	63	58	149	92	566	15.7
2. Organs of Circulation ...	98	24	33	36	32	223	6.2
3. Respiratory Organs ...	203	74	57	136	79	548	15.3
4. Digestive Organs ...	61	28	21	19	21	150	4.2
5. Urinary Organs ...	17	6	16	11	5	55	1.5
6. Organs of Generation ...	4	3	2	2	2	13	0.3
7. Organs of Locomotion ...	...	...	4	1	1	6	0.1
8. Integumentary System ...	...	2	1	1	1	5	0.1
	587	200	192	355	233	1567	43.4
CLASS IV.							
DEVELOPMENTAL DISEASES.							
Diseases of—							
1. Children ...	54	12	6	13	25	110	3.0
2. Adults ...	12	3	2	7	1	25	0.7
3. Old People ...	68	18	9	25	24	144	4.0
4. Nutrition ...	81	28	19	64	67	259	7.2
	215	61	36	109	117	538	15.0
CLASS V.							
VIOLENT DEATHS.							
1. Accidents and Negligence	27	7	64	26	16	140	4.0
2. Homicide...	2	...	1	...	...	3	0.07
3. Suicide ...	5	1	1	...	...	7	0.2
4. Executions ...	...	...	...	1	...	1	0.03
	34	8	66	27	16	151	4.3
Violent Deaths not classed	...	...	...	1	...	1	...
Sudden Deaths (causes unascertained)	8	2	3	18	3	34	0.9
Causes not specified	34	6	14	20	14	88	2.4
	42	8	17	38	17	122	3.4
Total	1415	406	483	737	547	3588	...

* The number in St. Nicholas' sub-district is increased by 150 deaths in the Infirmary, and 20 in the Fever Hospital. 85 of the former came from beyond the Borough.

TABLE V.—AGES AT DEATH.

PERIODS.	West-gate.	St. Andrew's	St. Nicholas.	All Saints.	Byker.	TOTAL IN BOROUGH.
Under 1 year ...	418	106	82	238	206	1,050
1 year and under 5 years ...	185	70	59	144	97	555
5 years " 20 " ...	84	26	42	45	32	229
20 " " 40 " ...	190	55	131	82	49	507
40 " " 60 " ...	236	52	107	114	73	582
60 " " 80 " ...	254	80	56	98	73	561
80 " and above ..	48	17	6	16	17	104
Total (all ages) dying during the 52 weeks ending Jan. 1st, 1876 ...	1415	406	483	737	547	3,588

TABLE VI.

WEEKLY MEAN NUMBERS OF DEATHS AT SEVEN ÆTAL PERIODS.

Under 1 year ...	8.0	2.0	1.6	4.5	3.9	20.2
1 year and under 5 years ...	3.5	1.3	1.1	2.5	1.9	10.7
5 years " 20 " ...	1.6	0.5	0.8	0.8	0.6	4.4
20 " " 40 " ...	3.6	1.0	2.5	1.6	0.9	9.7
40 " " 60 " ...	4.5	1.0	2.0	2.2	1.4	11.2
60 " " 80 " ...	4.9	1.5	1.0	1.9	1.4	10.8
80 " and upwards ...	0.9	0.3	0.1	0.3	0.3	2.0
Totals ...	27.0	7.6	9.1	14.0	10.4	69.0
Percentage of deaths under 1 year to total deaths in sub-district &c. ...	26	26	17	32	37	29

TABLE VII.

BIRTHS AND DEATHS IN THE DIFFERENT QUARTERS OF THE YEARS 1873, 1874, AND 1875.

	BIRTHS.			DEATHS.		
	1873.	1874.	1875.	1873.	1874.	1875.
First Quarter ...	1,413	1,425	1,447	977	982	942
Second Quarter ...	1,433	1,366	1,346	898	838	778
Third Quarter ...	1,347	1,355	1,386	994	1,069	992
Fourth Quarter ...	1,459	1,388	1,407	1,190	1,068	876
Total ...	5,652	5,534	5,586	4,059	3,957	3,588

TABLE VIII.

DEATHS OF CHILDREN UNDER 1 YEAR AND PERSONS OVER 60 YEARS, IN NEWCASTLE IN 1873, 1874, AND 1875.

	NUMBER OF DEATHS.					
	Under 1 Year of Age.			Over 60 Years.		
	1873.	1874.	1875.	1873.	1874.	1875.
First Quarter	236	229	220	181	173	212
Second „	198	236	192	153	141	157
Third „	345	382	333	126	172	140
Fourth „	271	249	255	173	187	156
Total	1,050	1,096	1,050	633	673	665

TABLE IX.

DISEASES OF CHILDREN DYING UNDER ONE YEAR OF AGE.

CLASS.	CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS.					TOTAL.
		Westgate.	St. Andrews.	St. Nicholas.	All Saints.	Byker.	
I.—ZYMOTIC DISEASES.	ORDER .						
	Small-pox	7	2	1	1	...	11
	Measles	2	2	...	...	1	5
	Scarlet Fever (Scarlatina)	1	...	...	...	...	1
	Diphtheria	4	...	...	...	1	5
	Croup	25	2	2	3	1	33
	Whooping-cough ... ..	...	2	...	...	...	2
	Enteric or Typhoid Fever	1	...	2	...	...	3
	Erysipelas	1	...	...	...	...	1
	Dysentery	45	19	12	28	30	134
	Diarrhoea ... ..	...	...	1	...	1	2
	Simple Cholera	2	...	...	...	...	2
	Other Zymotic Diseases ... ..	...	...	...	...	...	...
	ORDER 2.						
	Syphilis	4	...	3	6	4	17
	ORDER 3.						
	Privation	2	...	...	...	...	2
	Want of Breast-milk	4	1	...	...	...	5
ORDER 4.							
Thrush	4	...	...	...	...	4	
ORDER 2.							
Scrofula	6	1	...	...	...	7	
Tabes Mesenterica	20	1	1	16	13	51	
Phthisis	3	...	1	1	1	6	
Hydrocephalus	6	...	...	1	2	9	
Carried forward	137	30	23	56	54	300	

TABLE IX.—CONTINUED.

CLASS.	CAUSE OF DEATH.	REGISTRATION SUB-DISTRICTS.					TOTAL.
		Westgate.	St. Andrews.	St. Nicholas.	All Saints.	Byker.	
	Forward ...	137	30	23	56	54	300
III.—LOCAL DISEASES.	ORDER 1.						
	Cephalitis	1	1	2
	Convulsions	70	12	17	66	32	197
	Brain Disease, etc.	9	5	3	12	12	41
	ORDER 3.						
	Laryngitis	1	1
	Bronchitis	36	15	13	24	14	102
	Pneumonia	16	...	2	10	5	33
	Asthma	1	1
	Lung Disease, etc.	3	1	1	5
	ORDER 4.						
	Enteritis	4	2	1	7
	Peritonitis	1	1
	Ulceration of Intestines	1	1
	Hernia	1	1
	Jaundice	5	2	...	1	3	11
	ORDER 5.						
	Kidney Disease, etc.	1	1
ORDER 8.							
Skin Disease, etc. ... ..	...	...	...	1	1	2
ORDER 1.							
Premature Birth	31	8	6	11	12	68	
Cyanosis	3	...	...	...	...	3
Spina Bifida	3	...	...	...	...	3
Other Malformations	7	1	...	1	...	9	
Teething	5	1	...	...	6	12
ORDER 2.							
Childbirth	2	...	...	2	...	4
ORDER 4.							
Atrophy and Debility	71	25	14	46	57	213	
ORDER 1.—(ACCIDENT OR NEGLIGENCE).							
Suffocation	8	1	2	1	1	13	
Otherwise ... ..	...	...	...	1	1	2
ORDER 2.—(HOMICIDE).							
Murder and Manslaughter	2	...	...	...	...	2
ORDER 4.—(EXECUTION).							
Sudden Deaths (Cause unascertained) ... ..	...	...	...	2	1	3
Causes not specified or ill-defined	3	1	...	3	4	11	
TOTAL	418	106	82	238	206	1050	
Annual Rate of DEATHS under 1 year per 1,000 } Population in each Sub-district, &c.	7.0	5.2	7.1	8.3	10.9	7.6	

TABLE X.
NON-CERTIFIED* DEATHS IN EACH SUB-DISTRICT DURING THE 52 WEEKS ENDING 1ST JANUARY, 1876.

ALLEGED CAUSE OF DEATH.	WESTGATE.			ST. ANDREWS.			ST. NICHOLAS.			ALL SAINTS.			DYKER.			TOTAL.		
	Under 1 Year.	1 Year and under 2.	2 Years and above.	Under 1 Year.	1 Year and under 2.	2 Years and above.	Under 1 Year.	1 Year and under 2.	2 Years and above.	Under 1 Year.	1 Year and under 2.	2 Years and above.	Under 1 Year.	1 Year and under 2.	2 Years and above.	Under 1 Year.	1 Year and under 2.	2 Years and above.
Apoplexy	6	1	1	8	1	1	3	1	1	1	1	1	2	1	1	1	1	1
Convulsions	4	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Premature Birth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Natural Causes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Child-Birth	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Heart Disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Thrush	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Injuries	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Old Age	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Consumption	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bronchitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dropsy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Unknown	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Debility &c.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rupture of a Blood Vessel	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Croup	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Jaundice	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Inebriety	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Exhaustion	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Asthma	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Typhoid Fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Whooping Cough	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Delirium Tremens	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Strangulated Hernia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Epilepsy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sudden Death	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	16	1	16	11	2	7	9	1	11	44	1	18	30	3	7	110	7	59

* The term "non-certified" does not include inquest cases, or deaths certified by unqualified practitioners, but is applied only to the deaths of persons unattested by any medical attendant whatever, and on which no inquest was held.

TABLE XI.

RETURN OF DEATHS FROM MIASMATIC DISEASES FOR THE 52 WEEKS ENDING 1ST JANUARY, 1876, CORRECTED BY DISTRIBUTION OF THOSE OCCURRING IN THE FEVER HOSPITAL TO THE REGISTRATION SUB-DISTRICTS, FROM WHICH THEY CAME.

	Number in entire Borough.	REGISTRATION SUB-DISTRICTS.				
		Westgate.*	St. Andrew's.	St. Nicholas.	All Saints.	Byker.
Total Miasmatic deaths	577	269	76	68	94	70
INCLUDING—						
Scarlet Fever	74	29	13	13	9	10
Diarrhoea	202	79	30	18	38	37
Measles	50	22	10	9	6	3
Whooping Cough	63	40	7	3	9	4
Enteric Fever	70	38	5	7	14	6
Typhus	25	10	2	8	5	...
Other Miasmatic deases	93	51	9	10	13	10
Total Miasmatic deaths per 1,000 population of each sub-district	4.3	4.5	3.9	5.9	3.3	3.7
Deaths from Scarlet Fever per 1,000 do.	0.5	0.5	0.7	1.1	0.3	0.5
Deaths from Diarrhoea per 1,000 do.	1.5	1.3	1.5	1.5	1.3	2.1
Deaths from Enteric Fever per 1,000 do.	0.5	0.6	0.2	0.6	0.5	0.3

* Excluding Benwell and Fenham.

TABLE XII.

LOCALITY OF DEATHS FROM PREVALENT ZYMOTIC DISEASES.

LOCALITY.	DEATHS IN WESTGATE SUB-DISTRICT.										
	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHOEA.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	During 13 Weeks ending Oct. 5, 1875.		
Clumber street	All ages. 3	Under 1 year. 2	1 year and under 2 years. ...
Blenheim street	...	1	...	...	...	...	...	...	3	2	...
George street	1	...	...	...	...	2	2	...
Tweed street	1	...	...	...	...
Diana street	2	2	...
Oyster Shell lane	2	2	...
Waterloo street	1	...	...	...	...
Park road	1	1	...
Derby street	1	1	...
Duke st eet	1	1	...	...	...	...	1	1	...
Carried forward	...	1	1	2	...	...	2	...	15	13	...

TABLE XII.—CONTINUED.

LOCALITY OF DEATHS FROM PREVALENT DISEASES.

DEATHS IN WESTGATE SUB-DISTRICT.—Continued.											
LOCALITY.	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHŒA.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	During 13 Weeks ending Oct. 5, 1875.		
									All ages.	Under 1 year.	1 year and under 2 years.
Brought forward ...	0	1	1	2	0	0	2	0	15	13	0
Blandford street	1	1	...
Hill street	2	2	...
Mill House, Gallowgate	1	1	...
Bell street	2	2	...
Sycamore street	3	1	...
Mill lane ...	1	...	...	...	...	...	...	...	1	...	...
Workhouse	9	...	...	...	2	...	...
Noble street	1	...	...
Pitt street	2	2	...
Back Marlborough street	1	...	...	...	...	...	1	1	...
Panmure street	1	...	...
Dunn street	2	...	...	...	1	1	...
Railway terrace	1	...	1
Teynham street	1	1	...
Alexander street	1	...	...	...	...	...	1	...	1
Pine street	1	...	...	1	1	...
Bayley street	2	...	...	1	...	...
Gloucester street	1	1	...
Seaham street	1	2	...	...	...	...	...	...	...	...
Elswick street	1	...	...	1	1	...
Hawthorne street	2	1	1
Buckingham street	2	...	...	...	...	1	...	1
Wellington street	1	...	1
Middle street	2	2	...
Lord Byron street	1	1	...
Herbert street	1	2	...	...	...	...	2	2	...
Georges road	1	...	1	...	...	...	...
Budle street	1	1	...
Glue lane	1	...	1
Maple street	1	1	...
Bentinck crescent	1	1	...
Carr street	1	...	1
Church street	1	...	...
Campbell street	1	1	...
Hedley place	1	...	...
Elswick East terrace	1	...	2	...	...	...	...	...	...
Sunderland street	2	1	...
Penn street	1	1	...
Scotswood road	1	...	1	...	...	...	...	1	...	1
Westgate road	1	1	...
Ramshaw street	1	...	...	...	...	...	...	...
Hindhaugh street	1	...	...	...	...	...	...	...
Boundary street	1	...	...	...	...	...	...	...
Back Boundary street	1	...	...	...	...	...	...	...
Rendell street	1	...	...	...	...	...	...	...
Carried forward ...	2	2	8	12	14	3	4	2	61	41	7

TABLE XII.—CONTINUED.

LOCALITY OF DEATHS FROM PREVALENT DISEASES.

DEATHS IN WESTGATE SUB-DISTRICT.—Continued.											
LOCALITY.	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHŒA.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	During 13 Weeks ending Oct. 5, 1875.		
									All ages.	Under 1 year.	1 year and under 2 years.
Brought forward ...	2	2	8	12	14	3	4	2	61	41	7
Elswick row ...	1	...	...	...	...	...	...	...	...	...	...
Bath lane ...	...	...	...	...	1	...	...	...	...	...	...
Cottenham street ...	...	...	...	...	1	...	...	...	...	...	...
Bentinck street ...	1	...	...	...	...	...	...	...	...	...	...
Gunn terrace ...	...	...	...	...	1	...	...	...	...	...	...
Rye Hill ...	1	...	...	...	2	...	...	...	...	...	...
Shumac street ...	1	...	...	...	...	...	...	...	...	...	...
Kyle street ...	...	...	...	...	1	...	...	...	...	...	...
Laurel street ...	1	...	...	...	...	...	...	...	...	...	...
Cambridge street ...	...	...	...	...	1	...	...	...	...	...	...
Churchhill street ...	...	...	...	...	1	...	...	...	...	...	...
Barrack square ...	...	...	...	...	...	1	...	...	...	...	...
Ponteland terrace ...	...	...	...	...	...	2	...	...	...	...	...
Villa place ...	...	...	...	...	...	1	...	...	...	...	...
Gloucester road ...	...	1	...	...	...	...	...	...	...	...	...
Belgrave terrace ...	...	...	...	...	...	...	...	...	...	1	...
Total ...	7	3	8	12	22	7	4	2	61	42	7
DEATHS IN ST. ANDREW'S SUB-DISTRICT.											
Sandyford Court ...	1	...	...	...	...	...	...	...	1	1	...
Northumberland street ...	...	...	...	...	1	...	...	...	...	...	...
Prudhoe street ...	1	...	1	...	...	...	...	...	1	1	...
St. James's, Barras bridge... ..	...	...	...	...	1	...	...	...	...	...	...
Leazes lane ...	...	...	...	...	1	...	...	...	...	...	...
Blyth & Tyne Railway station ...	...	1	...	...	...	...	...	...	...	...	...
Bulmer street ...	...	...	...	...	...	...	...	...	2	1	1
Percy court ...	...	...	...	...	...	...	1	...	1	1	...
Fleece court ...	...	...	...	...	...	...	...	...	2	1	1
Stowell square ...	...	...	...	...	...	...	...	...	1	1	...
Percy place ...	...	...	...	1	...	...	...	...	2	2	...
Liverpool square ...	...	...	...	...	...	...	...	...	1	1	...
Brunswick place ...	...	...	...	...	...	...	...	...	1	1	...
Back lane ...	...	...	...	...	...	...	...	...	1	1	...
Sandyford lane ...	...	...	...	...	...	...	...	...	1	...	...
Eldon street ...	...	...	1	...	...	...	...	...	...	...	...
Gallowgate ...	...	...	...	...	...	...	...	...	1	...	1
High Friar street ...	...	...	...	...	...	...	...	...	2	...	1
Ellison terrace ...	...	...	...	...	...	...	...	...	1	...	1
Clayton street ...	...	...	...	...	...	...	...	...	2	2	...
Christie's buildings ...	...	...	1	...	...	...	...	...	...	...	...
Carried forward ...	2	1	3	1	3	...	1	...	20	13	5

TABLE XII.—CONTINUED.

LOCALITY OF DEATHS FROM PREVALENT DISEASES.

DEATHS IN ST. ANDREW'S SUB-DISTRICT.—Continued.											
LOCALITY.	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHOEA.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	For 13 Weeks ending Oct. 2, 1875.		
									All ages.	Under 1 year.	1 year and under 2 years.
Brought forward ...	2	1	3	1	3	...	1	...	20	13	5
Higham Place	1	...	...	...	...
Alma Street	1	...	...	...	...	...	...	...
Chester Street	1	...	...	...	...	...	...	...
Bellegrove Terrace	1	...	...	...	...	...	...	...
Back Eldon Street	1	...	...	...	...	...	...	...
Alexandra Place	1	...	...	...	...	...	...	...
Mackfords Entry	1	...	...	...	...	...	...	...
North Street	2	...	1	
Total ...	2	1	3	7	3	...	2	...	22	13	...
DEATHS IN ST. NICHOLAS' SUB-DISTRICT.											
Fever Hospital	4	1	...	1	...	...	...
Fenkle street ...	1	...	...	...	...	...	...	...	...	...	...
Monk square	1	1	...	1	...	...	...	...	...	...
Queen's lane ...	5	1	...	...	...	...	...	...	...	...	...
Clavering place ...	1	...	...	...	...	...	...	...	...	...	...
64 Close	1	...	...	...	...	...	...
Zion court, Westgate road	1	...	...	...	1	1	...
Hanover street	1	1	...
Thornton street	1	1	...
Pitman's row, Forth Bank	1	1	...
Pearson's court, Westgate rd.	1	1	...
Butcher's entry, Forth Banks	1	1	...
Ratcliff's court, Stowell st.	1	...	...
St. Nicholas Church yard	1	1	...
Moffatt's court, Westgate rd.	1	...	...
Tuthill stairs	2	1	1
Westgate Police Station	1	1	...
Castle garth	1	...	1
Stowell street	1	...	...	...	...	...	...	...
Forth place	1	...	...	...	...
Back row	1	...	...	...	...	...	...	...
Richardson's yd, Hanoversq.	1	...	...	...	...
Westgate road	1	...	...	...	...	...	...	...
Total ...	7	2	1	3	5	3	...	3	12	8	2

TABLE XII.—CONTINUED.

LOCALITY OF DEATHS FROM PREVALENT DISEASES.

DEATHS IN ALL SAINTS' SUB-DISTRICT.												
LOCALITY.	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHOEA.			
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	During 13 Weeks ending Oct. 5, 1875.			
									All ages.	Under 1 year.	1 year and under 2 years.	
New road	1	1	...	
Bell's yard	1	...	1	...	...	...	...	...	...
Henry street ...	1	...	...	...	...	...	...	...	...	...	...
Gosforth street	1	...	...	...	...	...	...
Ridley street ...	1	...	...	...	1	...	...	...	...	...	...
Victoria place	1	...	...	...	...	...	...
Matford's entry ...	1	...	...	...	...	...	...	...	...	...	...
Copland terrace ...	1	...	...	...	...	...	...	...	...	...	...
8 St. Ann's row	1	...	...	...	...	...	...
Broad chare	2	...	...	...	...	...
Lime street	1	...	...	...	...	...
Ridley street	1	...	...	...	...	...
Akenside hill	1	...	...	...	...	...	1	...	...	...
Wesley street	1	...	1	...	1	...	...	...
Newton yard, St. Ann's st.	1	1	...	
Wall knoll	3	1	...	
Stepney terrace	1	...	...
Albert street...	1	1	...	
Union North terrace	1	1	...	
Doctor's entry, Sandgate	1	...	...
Sarah street	1	1	...	
St. Ann's street	1	...	1	
Carlton street	1	1	...	
Melbourne street	1	...	...	...	...
Stepney lane	1	...	...
Crawhall terrace	1	...	1	
Chatham place	1	1	...	
Johnson's entry	1	...	1	
Gibson street	1	...	...	...	...	1	1	...	
Back Picton terrace	1	1	...	
Dean street	1	1	...	
Picton terrace	1	...	1	1	...	
White house, Sandgate	1	1	...	
North shore	1	1	...	
Tucker's entry	1	1	...	
Clarence street	1	1	...	
Mount Pleasant	1	1	...	
Flag entry	1	1	...	
Painter Heugh	1	1	...	
Kent street	1	1	...	
Fireman's houses, Manors	1	...	...
Richmond street	1	...	...	...	...	...	...	...
Argyle terrace	1	...	...	...	...
Total ...	4	1	1	3	4	5	1	3	30	21	3	

TABLE XII.—CONTINUED.
LOCALITY OF DEATHS FROM PREVALENT DISEASES.

LOCALITY.	SCARLET FEVER.				ENTERIC FEVER.				AUTUMNAL DIARRHŒA.			
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	For 13 Weeks ending Oct. 2, 1875.			
									All ages.	Under 1 year.	1 year and under 2 years.	
Meadow Field House	1											
Watson Terrace					1							
Elizabeth Street	1											
Quality Row...	1			1								
Byker Buildings		1										
Jesmond Road						1						
Cook Street ...				1					1	1		
Dent's Hole ...									1		1	
St. Anthony's									3	3		
St. Peter's ...				1					3	2	1	
Bywell Terrace									1	1		
Corbridge Street				1					1			
Matthew Street												
Gardner's Buildings									1			
Brandling Place									1	1		
Windsor Terrace									1	1		
Thornborough Street									1		1	
Portland Road...									1	1		
Byker Hill ...									2	2		
Parker Street									1	1		
Albion Row ...									2	2		
Flora Street ..									1	1		
Headlam Street									1	1		
Robinson Street									1	1		
St. Lawrence Pit Row									1	1		
Grafton Street									1	1		
Rosedale Street				1					1	1		
Maling Street									1		1	
Crawford's Row									1	1		
Clifford Street				1								
Total...	3	1		6	1	1	2	2	27	22	4	

SUMMARY OF TABLE XII.

REGISTRATION SUB-DISTRICTS.	SCARLET FEVER.					ENTERIC FEVER.					AUTUMNAL DIARRHŒA.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.	For 13 Weeks ending Oct. 2, 1875.		
											All ages.	Under 1 year.	1 year and under 2 years.
Westgate	7	3	7	12	29	22	7	4	2	35	61	42	7
St. Andrew's	2	1	3	7	13	3		2		5	22	13	6
St. Nicholas'	7	2	1	3	13	5	3		3	11	12	8	2
All Saints'	4	1	1	3	9	4	5	1	3	13	30	21	3
Byker	3	1		6	10	1	1	2	2	6	28	23	4
Grand Total of Deaths	23	8	12	31	74	35	16	9	10	70	153	107	22

TABLE XIII.
ADMISSIONS TO AND DEATHS AT THE NEWCASTLE FEVER HOSPITAL FROM 1ST JANUARY TO 31ST DECEMBER, 1875, INCLUSIVE.

DISEASES.	ADMISSIONS.												DEATHS.														
	Total.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Typhus	88	14	14	21	5	11	4	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Enteric Fever	18	4	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Continued Fever	4			1																							
Febricula	1																										
Scarlet Fever	10			1		1																					
Pneumonia	1																										
Herpes Catarrhalis	1																										
Erysipelas	1																										
Small-Pox	1																										
Intestinal Disease	1																										
Broncho-Pneumonia	1																										
TOTAL	122	18	15	26	12	13	5	4	5	3	6	7	7	4	1	5	2	5	2	1	1	1	1	1	1	20	

TABLE XIV.

RETURN OF INSPECTIONS OF UNWHOLESOME FLESH, FRUIT, &c., DURING 1875.

Provisions Inspected and Found Unfit for Human Food.	AMOUNT.	HOW DISPOSED OF.	
		Destroyed by Magistrates Order.	Destroyed by Inspector with owner's consent.
Carcases of Beef	14	5	9
" Mutton... .. .	24	1	23
" Veal	1	...	1
" Pork	23	3	20
Rabbits	45	45	...
Geese	76	63	13
Ducks	26	...	26
Hams	9	...	9
Eggs	9000	...	9000
Stones of Fish	3	...	3
" Potatoes	500	500	...
" Oranges	14	6	8
" Plums	5	5	...
" Pears	3½	3½	...
Baskets of Cherries	6	1	5
Boxes of Strawberries	6	...	6

In addition to the foregoing, 4 Carcasses of Beef, and six of Mutton, were partly bruised; the bruised portions were cut off and destroyed.
 Number of Summonses 13. Convictions 10.
 Amount of fines imposed £45 7s. 6d.

January, 1876. (Signed) WM. HEDLEY, Inspector.

Inspector Isaac Adamson reports that during the year 52 Packages of Fish in the Fish Market, have been seized and destroyed as unfit for Human Food.

TABLE XV.

ARTICLES DESTROYED AND REPLACED BY THE SANITARY DEPARTMENT DURING THE YEAR 1875.

4 Feather Beds	18 Straw Mattresses
17 Flock Beds	7 Feather Pillows
1 Hair "	13 Flock "
3 Rabbit down	1 Rabbit down Pillow
9 Bed Ticks	2 Rugs
2 Feather Bolsters	1 Sheet
3 Flock "	

TABLE XVI.

SUMMARY OF CASES DISINFECTED BY THE INSPECTORS OF NUISANCES, DURING THE YEAR ENDED DECEMBER 31st, 1875.

PARISH OR TOWNSHIP.	DISEASES.						Totals.
	Scarlet Fever.	Enteric or Typhoid Fever.	Typhus.	Measles.	Small Pox.	Diphtheria.	
Elswick	39	20	8	8	...	...	75
Westgate	43	12	13	16	3	1	88
St. Nicholas'	24	16	9	14	...	...	63
St. John's	18	1	2	2	...	...	23
St. Andrew's	21	7	8	21	...	...	57
All Saints'	41	36	25	28	...	...	130
Jesmond ... .. .	...	2	...	...	...	...	2
Byker	9	12	...	...	...	...	21
	195	106	65	89	3	1	459

TABLE XVII.—NUISANCE REMOVAL.
 BOROUGH OF NEWCASTLE-UPON-TYNE.

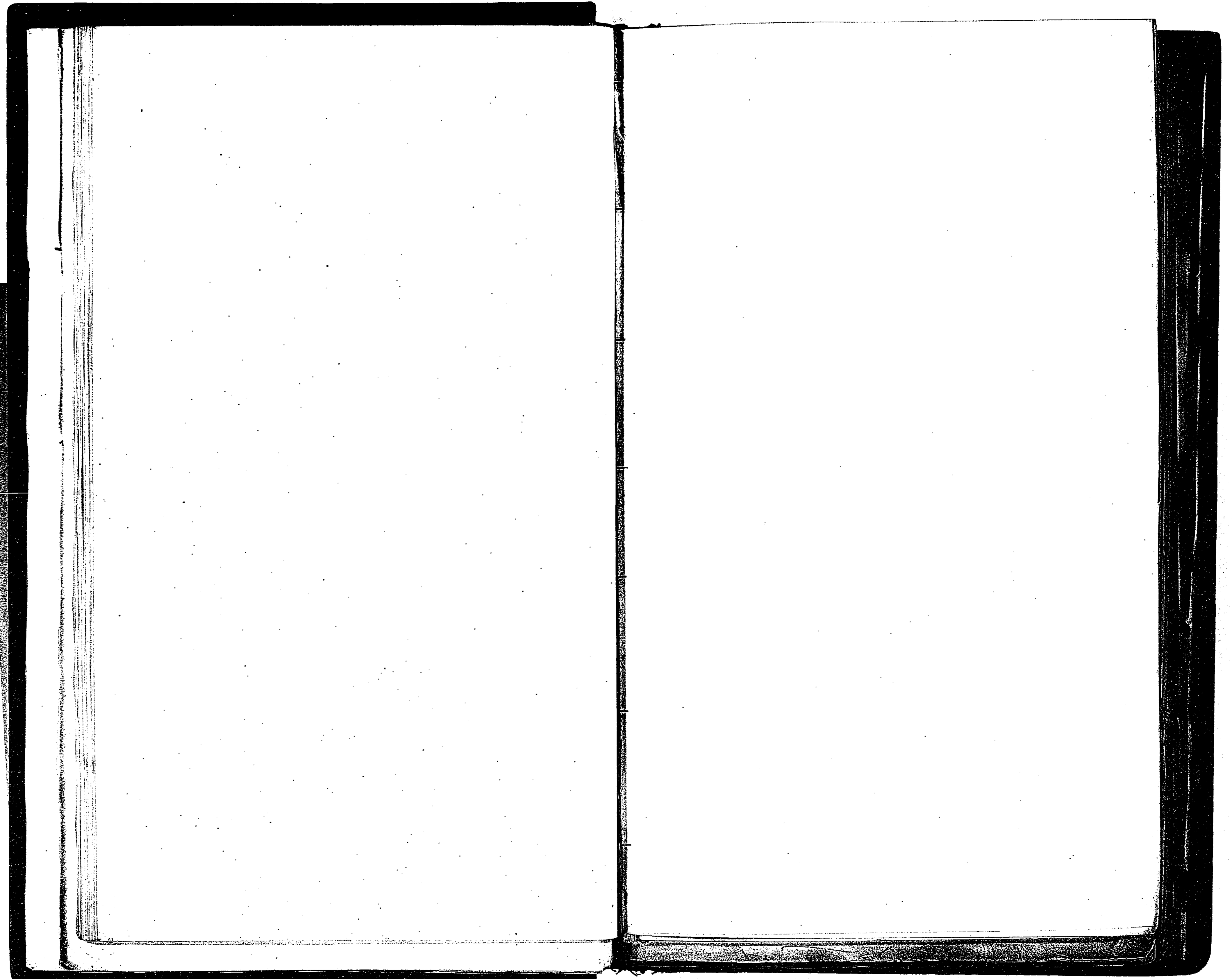
A SUMMARY OF NUISANCE CASES FOR THE YEAR ENDING 31st DECEMBER, 1875.

Parishes or Townships.	Rooms Closed, unfit for Human Habitation	Rooms Whitewashed, Painted, and Repaired.	Yards, Passages, and Staircases Cleaned.	Dilapidated Privies and Ash-pits Repaired.	Defective Drains and Gutters Cleaned and Repaired.	Swine and other Animals Removed.	Water-closets Cleaned and Repaired.	Overthrowing.	Defective Water-spouts Repaired.	Water supply.	Branch Drains.	New Water Closets, Privies and Ashpits.	Sewage Pools and Accumulations.	TOTALS.
Westgate	14	30	68	417	168	26	88	4	112	30	4	11	23	995
Elswick	19	26	112	158	151	4	363	...	34	51	1	...	8	927
St. Andrew's	10	40	131	158	99	5	59	9	120	9	0	16	54	711
All Saints'	54	33	132	301	191	38	251	8	237	81	5	28	78	1442
St. John's	4	14	79	47	50	1	48	1	61	5	2	2	20	334
St. Nicholas'	10	5	48	3	38	1	45	3	34	11	...	2	19	219
Byker	24	24	71	111	52	3	15	4	16	21	...	12	1	354
Jesmond	1	1	...	7	14	...	...	...	8	1	1	...	1	34
Total for Borough	136	178	641	1202	763	78	869	29	622	209	14	71	204	5016
Notices for Consumption of Smoke														23
TOTAL														5039

TABLE XVIII.

BOROUGH OF NEWCASTLE-UPON-TYNE.
 A SUMMARY OF PROCEEDINGS TAKEN BEFORE THE MAGISTRATES OF THE ABOVE BOROUGH BY THE SANITARY DEPARTMENT DURING THE YEAR ENDED 31st DECEMBER, 1875.

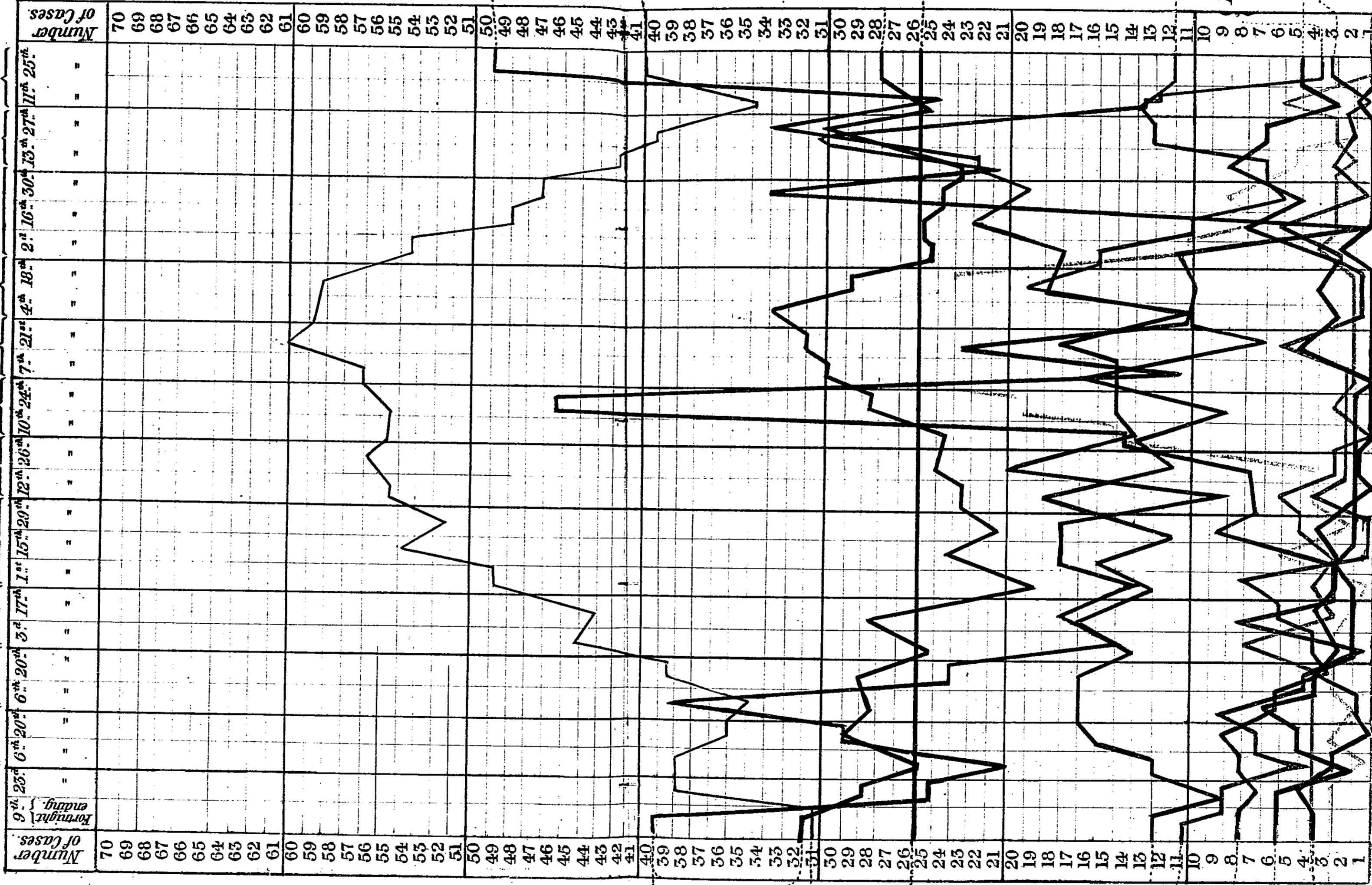
NATURE OF COMPLAINT.	No. of Cases.	HOW DISPOSED OF.	Amount of Penalties Imposed.
Dilapidated Yards, Water-closets, Privies, and Ash-pits repaired... .. .	80	{ Seventy-six did work and paid costs; four ordered to be done by Magistrates }	£ s. d.
Rooms closed, unfit for human habitation	1	Room closed and costs paid ... .. .	.....
Defective Drains	29	Twenty-nine did work and paid costs. ... .. .	.....
Manufactories emitting Offensive Vapours, &c.	4	{ Two fined 40s. and costs, and two dismissed }	4 0 0
Slaughter-Houses	2	{ One fined 5s. and costs, and one dismissed }	0 5 0
Water Supply	11	{ Nine did work and paid costs; two fined 20s. and costs... .. . }	2 0 0
Bye-Laws	33	{ Twenty-two did work and paid costs, three fined 10s. and costs, two fined 5s. and costs, and six fined 2s. 6d. and costs. }	2 15 0
Whitewashing	98	{ Two dismissed, ninety-three did work and paid costs, one fined 10s. and costs, one fined 3s. 6d. and costs, and one fined 2s. 6d. and costs }	0 16 0
Water Spouts	10	Ten did work and paid costs. ... .. .	.....
Sanitary Act Regulations	37	{ Thirty-four did work and paid costs, one fined £5 and costs, and two fined 5s. and costs. }	5 10 0
Total	305	Total	15 10 0



BOROUGH OF NEWCASTLE UPON TYNE, 1875.

Fortnightly Diagram of Deaths from principal Zymotic Diseases & Diseases of the Respiratory Organs.

JAN. FEB. MAR. APL. MAY. JUNE. JULY. AUG. SEPT. OCT. NOV. DEC.



Respiratory Diseases other than Phthisis, Croup, and Whooping Cough

Fortnightly Death-Rate per 1000 population, from all causes

Annual Death-Rate per 1000 population, from all causes

Phthisis

Enteric Fever

Scarlet Fever

Whooping Cough

Typhus

Respiratory Diseases other than Phthisis, Croup, and Whooping Cough

Mean Temp. Fahr.

Fortnightly Death-Rate per 1000 population, from all causes

Annual Death-Rate per 1000 population, from all causes

Phthisis

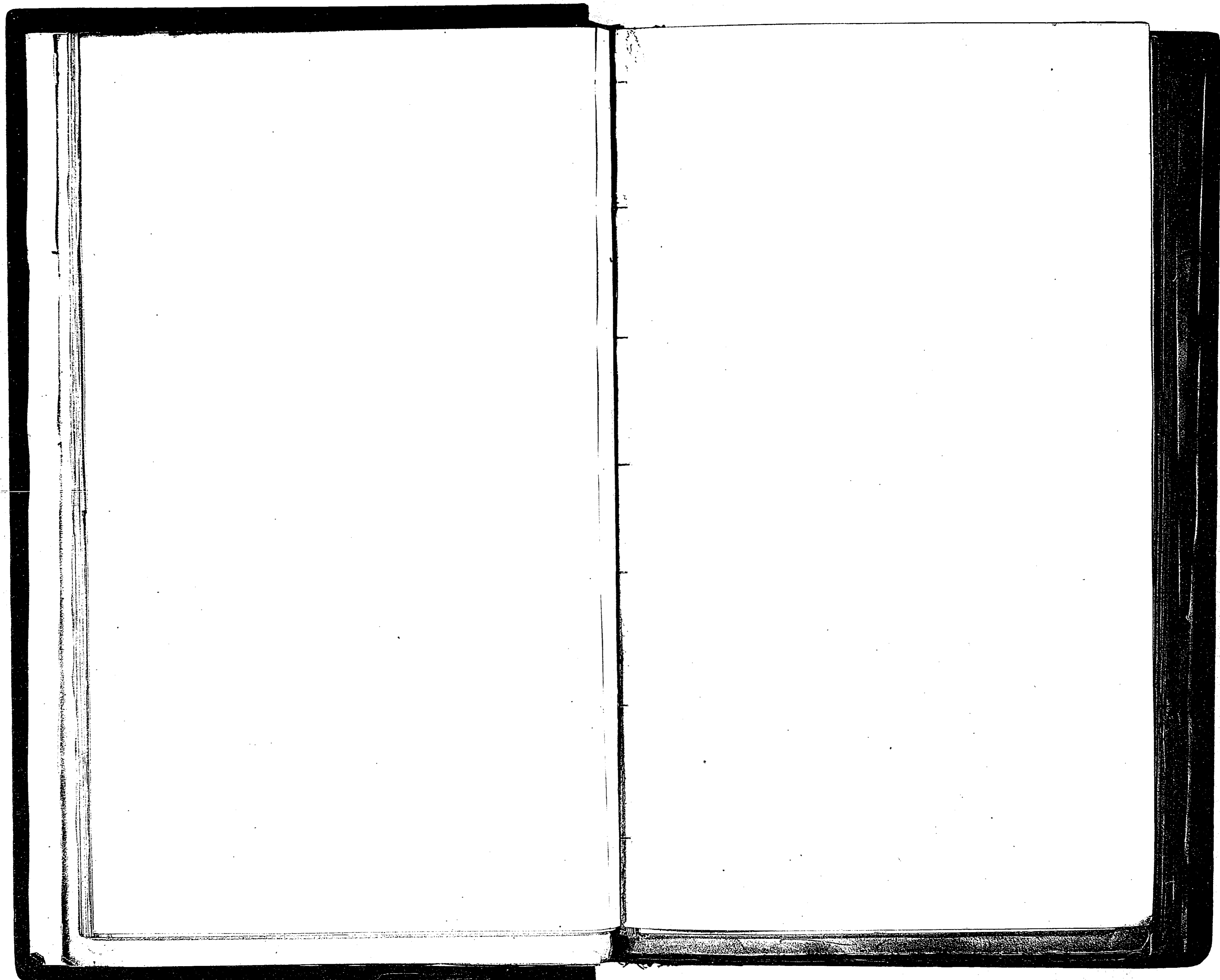
Rainfall in tenths of an inch

Scarlet Fever

Enteric Fever

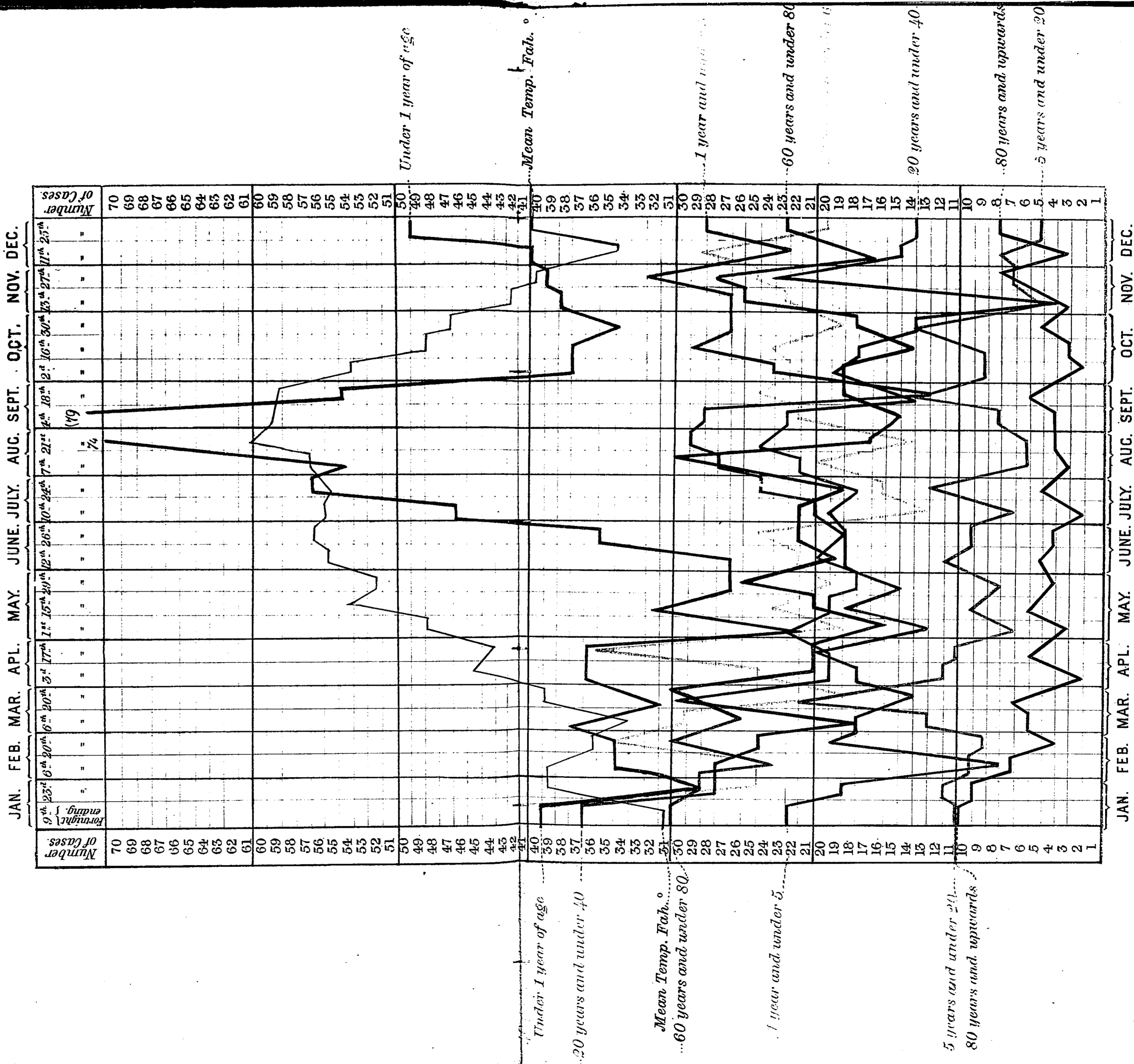
Whooping Cough

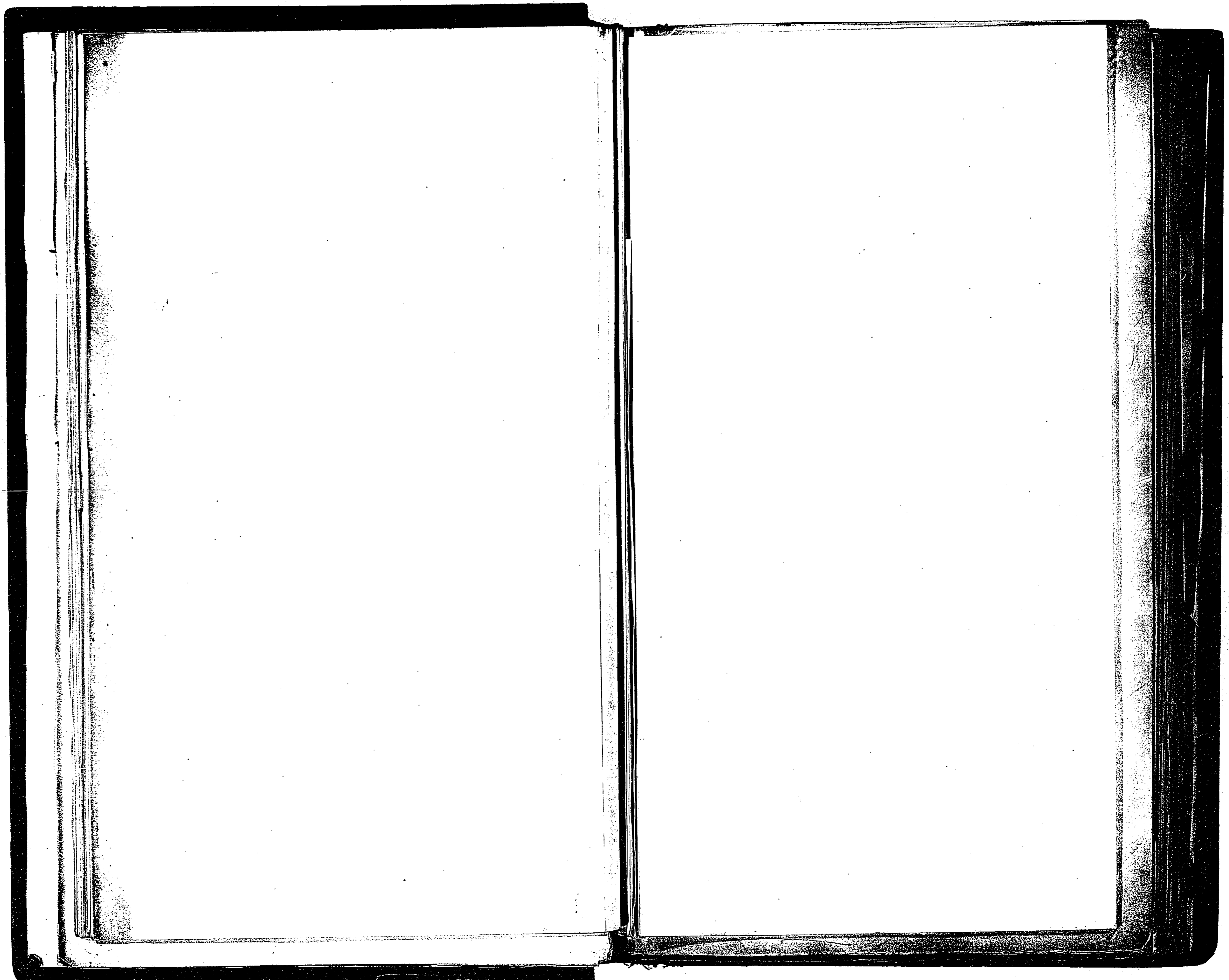
Typhus



BOROUGH OF NEWCASTLE UPON TYNE, 1875.

Fortnightly Diagram of Deaths from all causes at Seven Aetal periods with Temperatures.



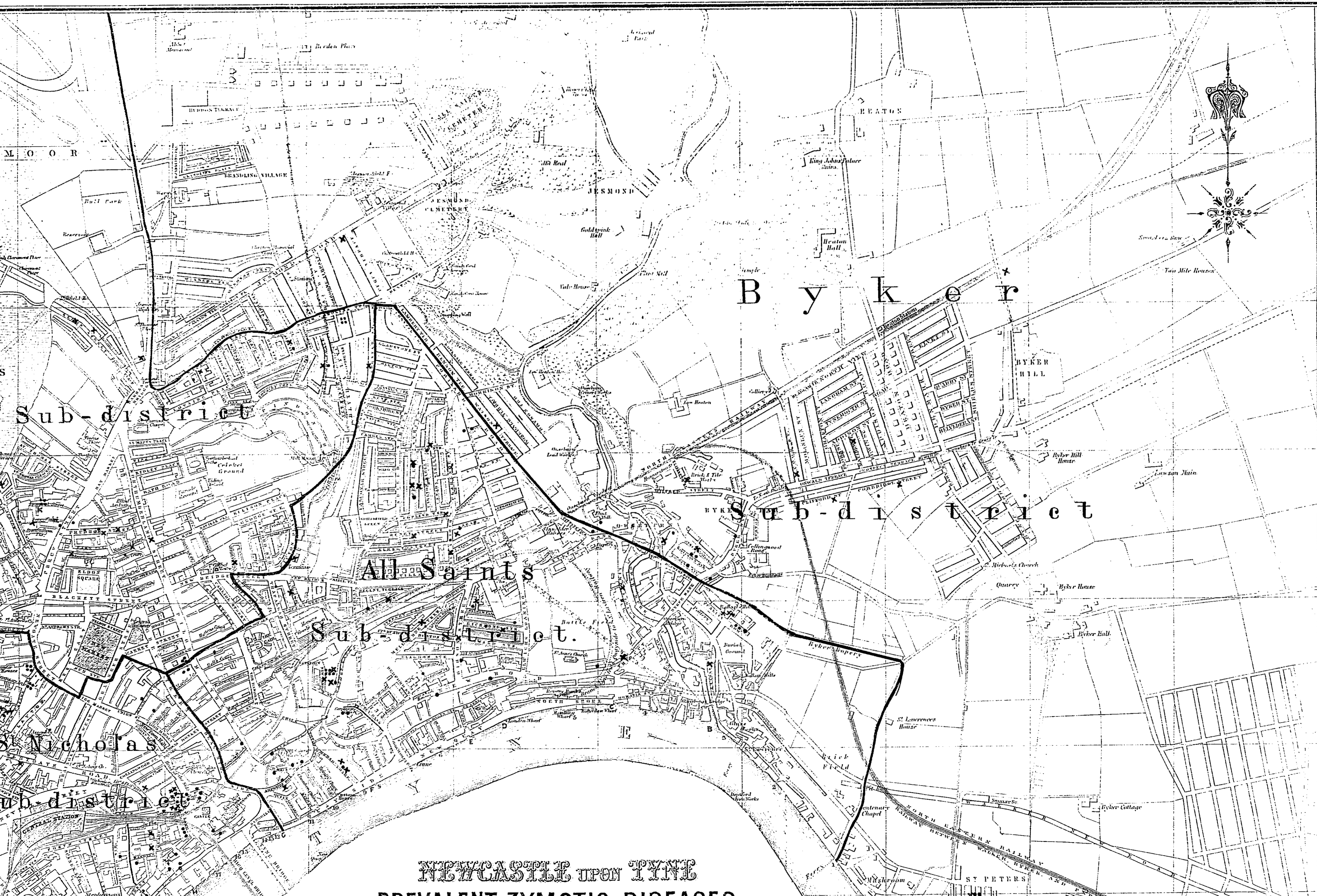




THE TOWN MOOR
SUN'S MOOR
CASTLE LEAZES
St Andrews Sub-district

Westgate
Sub-district

St Nicholas
Sub-district



NEWCASTLE UPON TYNE
PREVALENT ZYMOTIC DISEASES.
1875.

CASTLE LEAZES
St Andrews Sub-district

Westgate

St Nicholas

Sub-district

All Saints
Sub-district

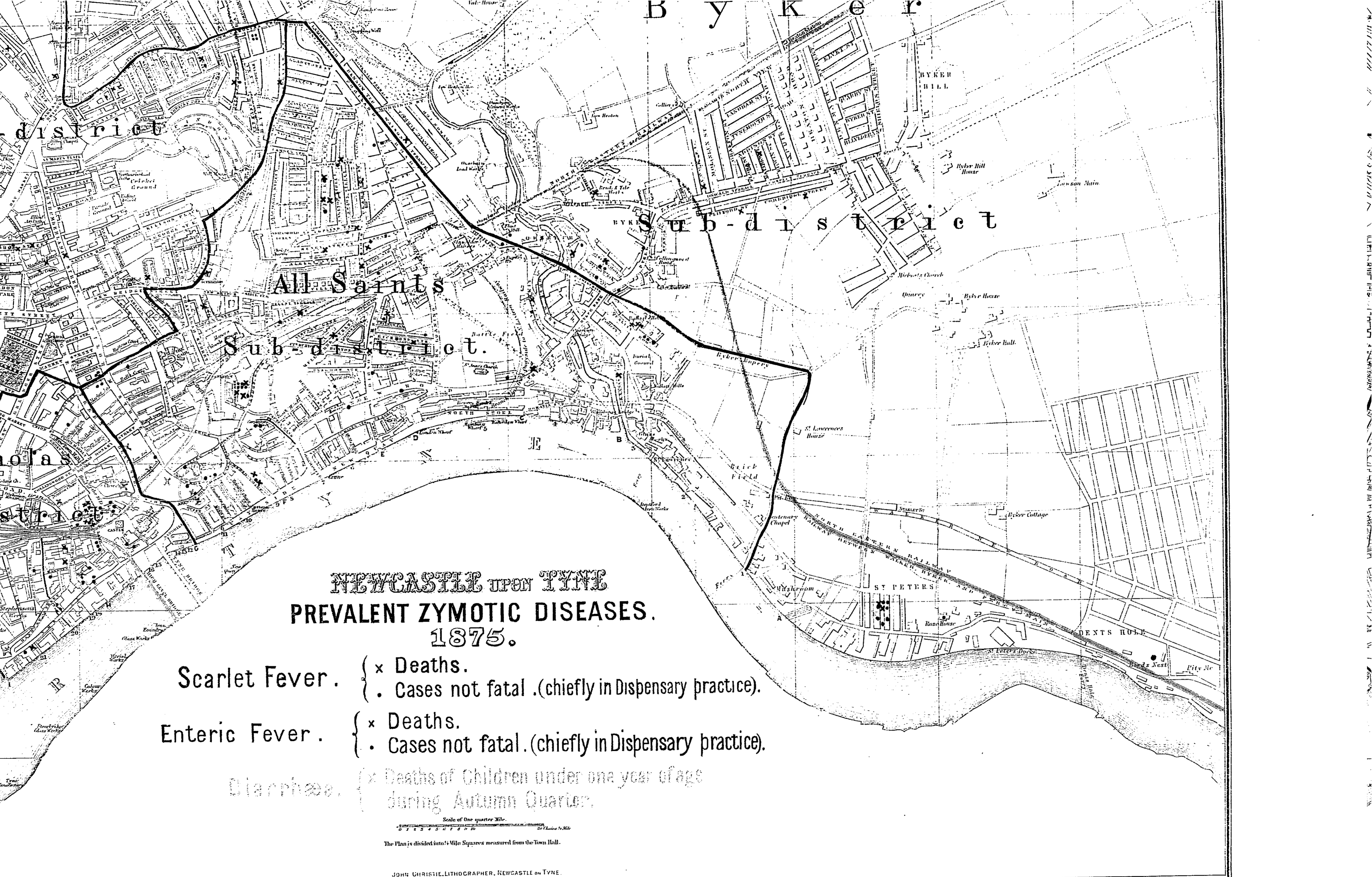
NEW
PREVALE

Scarlet Fever. {

Enteric Fever. {

Diarrhoea. {





**NEWCASTLE UPON TYNE
PREVALENT ZYMOTIC DISEASES.
1875.**

- Scarlet Fever. {
 - × Deaths.
 - Cases not fatal. (chiefly in Dispensary practice).

- Enteric Fever. {
 - × Deaths.
 - Cases not fatal. (chiefly in Dispensary practice).

- Diarrhoea. {
 - × Deaths of Children under one year of age during Autumn Quarter.

Scale of One quarter Mile.
 0 1 2 3 4 5 6 7 8 9 10
 The Plan is divided into 1/4 Mile Squares measured from the Town Hall.