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CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

ANNUAL REPORT

OF THE

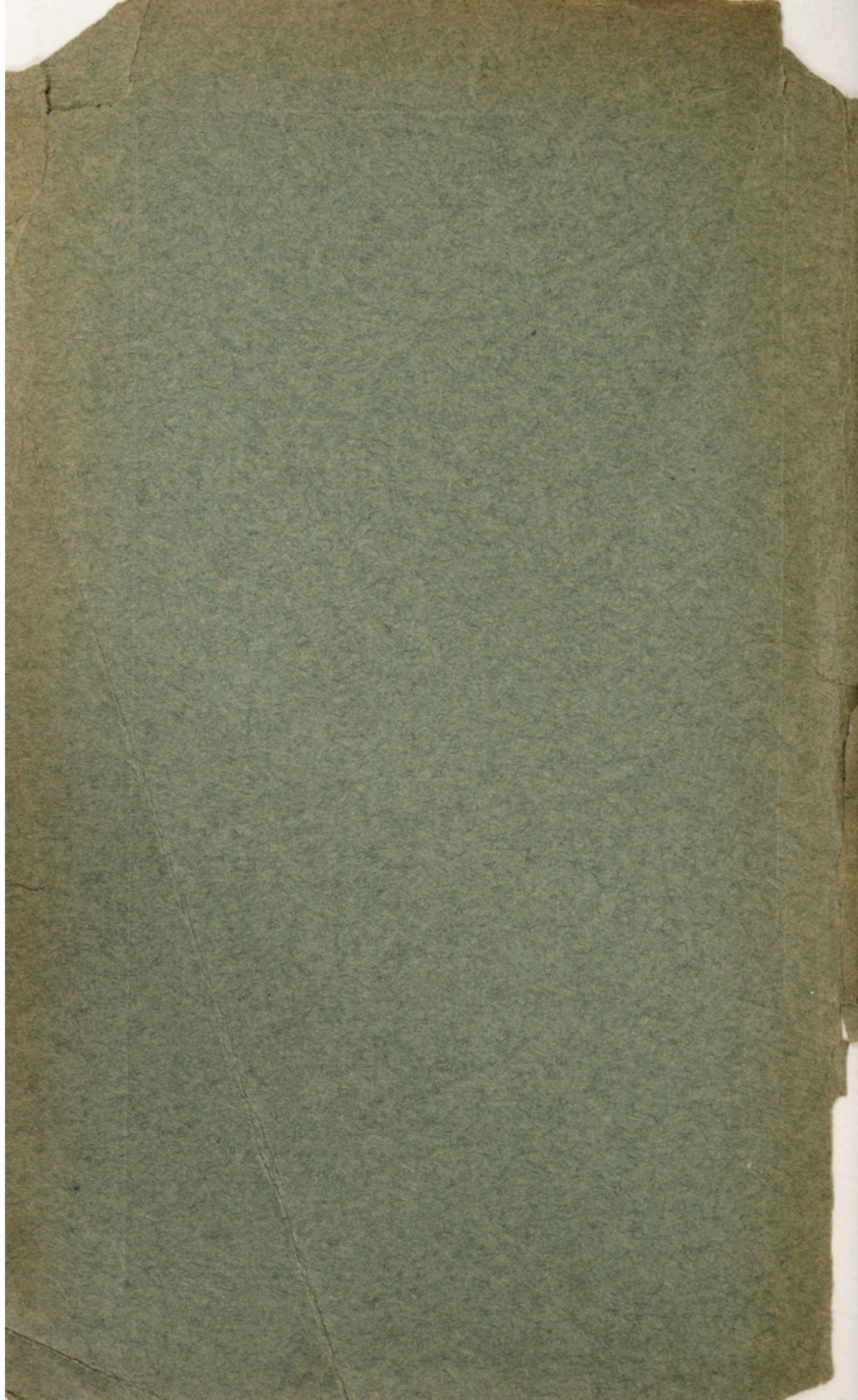
MEDICAL OFFICER OF HEALTH

ON THE

Sanitary Condition of the City

DURING THE YEAR

1912.



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*To Alderman Sir HENRY W. NEWTON, J.P.,
L.F.P.S., Chairman of the Sanitary Com-
mittee of the Corporation of Newcastle-
upon-Tyne.*

SIR,

Herewith we beg to submit to you our joint Report upon the health of the City during the year 1912.

We are glad to be able to state that the mortality figures continue to indicate a steady improvement in the physical well-being of the community, and in fact are evidence of a general healthiness previously unsurpassed. For a concise detailed description of this progress we would refer you to the large table on page 22A.

The estimated **Population** of the City at the middle of the year was 269,193.

The number of **Marriages** in the City during the year was 2,335.

The **Birth Rate**, while still unduly low, is slightly higher than in the previous year, being 26·7 per 1,000 population as compared with 26·5 in 1911.

The **Death Rate** from all causes is 14·3 per 1,000 population—the lowest yet recorded—as compared with 16·4 in 1911.

The **Infantile Mortality Rate** is equivalent to 101 deaths of infants under one year of age per 1,000 births, which is no less than 20 per cent. below

the previous lowest. The lack of sunshine and consequent low temperatures of the past summer and autumn materially contributed to this excellent record by inhibiting bacterial and fly life, and so preventing that excess of diarrhoeal disease which is unfortunately the usual concomitant of a warm summer.

In no section of preventive medicine have the efforts of an enlightened Sanitary Authority received greater reward than in this, for during the short period of the present century, which represents the duration of the special educational campaign against the influences that adversely affect child life, the death toll among the babies has been reduced by practically one half.

Much good undoubtedly accrues from the personal efforts of the Superintendent of Midwives and the Health Visitors. But in furtherance of these it has always been the policy of the Medical Officer of Health to encourage co-operation between the Health Department and all local agencies, charitable or otherwise, which are in any way interested in work among women and children, and accordingly every opportunity is taken of getting into touch with the mothers' meetings of the various religious bodies, girls' clubs, district nurses, workers of the Charity Organisation Society, Guild of Help, Royal Society for the Prevention of Cruelty to Children, Board of Guardians, Royal Victoria Infirmary, Children's Hospital, Poor Children's Holiday Association, and so forth. Special credit is due to the Mothers' and Babies' Welcome Society for the excellent work it is

doing through its two branches in Wharnccliffe Street and Norfolk Road, where cheap dinners are provided for poor mothers during their pregnant and nursing periods and where they are taught sewing, knitting, and simple cookery, and at the bi-weekly infant weighing receive instructions in the feeding and care of their babies. This Society originated five years ago as the result of the efforts of the Superintendent of Midwives, who acts as honorary secretary; funds are provided by voluntary subscription, and two visiting nurses are in its employ. It is an invaluable auxiliary to the Health Department.

The midwives, as the result of careful tuition, are able to render great assistance also by teaching the mothers whom they attend the principles of infant care in which they have themselves been thoroughly trained. They are encouraged to regard themselves in this respect as unofficial assistants to the Health Department, and there has never been any reason to regret this attitude towards them.

The influence of *housing* upon the Infantile Death Rate is shown in a statement on page 41. This is to the effect that while the Infantile Mortality for all babies in the City during the five years 1908-1912, was equivalent to 125 deaths per 1,000 births, that for those infants—the poorest and least favourably circumstanced—that came under the care of the Health Visitors was only 110. Of the latter, it was found that the death rate for those living in single room tenements was 128, for

those in two rooms 101, those in three rooms 111, and those in more than three rooms 96, per 1,000 births.

The **Infectious Diseases** show a somewhat greater prevalence as compared with recent years. The type in all, however, was mild, and the case-mortality low. Exclusive of Tuberculosis, 1,977 notifications were received from medical practitioners, as compared with 1,528 in the previous year. **Smallpox** and **Typhus** made no appearance. Since the passing of the Vaccination Act 1907, the number of infants exempted has steadily increased, though not, fortunately, to the extent seen in neighbouring districts. During the past year exemption certificates were granted in 14·6 per cent. of babies registered, thus considerably increasing the susceptible portion of the community. The opponents of vaccination have recently had an exceptional opportunity of stating their case before the Manx Legislature, which by a very large majority rejected a bill providing for exemption, and a perusal of the evidence in the blue book since issued gives rise to the wish that a similar opportunity could be given to the anti-vaccinators at Westminster with a view to the repeal of the English Act of 1907. **Scarlet Fever** was unusually common, and from the mildness of its symptoms is becoming increasingly difficult to diagnose; many cases must be missed altogether, and it is these probably that are chiefly causative of its spread. **Diphtheria**, unlike the other fevers, which on the whole are diminishing in number, continues to become commoner each year.

Improved methods of diagnosis account for the recognition of large numbers of slightly affected cases previously undetectable, but even allowing for this, the disease is more prevalent than ever before. Fortunately the fatality is little more than one sixth of what it was at one time. As in all periods of prevalence of infectious diseases of mild type, a considerable proportion of patients suffer from two or more affections concurrently, no less than 11·4 per cent. of all the cases at the City Hospital being found to be so affected on admission. An outbreak of **Measles** occurred in the latter months of the year, involving many deaths; the epidemic was the most severe since 1906. This disease is the one for which no really effective means of control has yet been discovered. In Newcastle the measures adopted are those recommended by the Medical Officers of the Local Government Board and Board of Education, these being the best available. As mentioned above, **Infantile Diarrhoea** was practically absent owing to the cold weather experienced throughout the summer and autumn. **Enteric Fever**, while showing an increase upon the previous year of four cases, continues to be of low incidence. Steady progress is being made with the conversion of dry closets to the water-carriage system. It is noteworthy that during 1912 enteric fever occurred just three times as frequently in houses having dry closets as in those with water closets. **Epidemic Cerebro-Spinal Meningitis** was reported in three cases only, and **Acute Poliomyelitis**, which became compulsorily

notifiable by Local Order on July 4th, in thirty, of whom two died. Sixteen cases of **Food Poisoning** occurred during March, all believed to be due to consumption of various articles from one pork shop. No proof could be obtained of this however. No deaths occurred.

Hospitals for Infectious Diseases.—

1,542 patients, representing 86·4 per cent. of the notified cases of the diseases admissible, were isolated at the City Hospital, Walker Gate. The case mortality was 5·3 per cent.

This being the largest number of patients ever admitted in one year, the accommodation was strained to its utmost, and proved inadequate. As in former years, it was found necessary to relieve the over-full Scarlet Fever pavilions by transferring some 528 uncomplicated mild convalescents to the Smallpox Hospital on the Town Moor, the wards of which were in occupation for this purpose from January to June, and from October to the end of the year.

Owing to the great difficulty experienced in obtaining nurses, the staff was short-handed almost throughout the year. A reconsideration of nurses' salaries has since occurred, and this has to some extent at least met the inconvenience arising from an undoubted shortage in the supply of nurses available.

Tuberculosis of the Lung became compulsorily notifiable in all classes of the community in Newcastle on Jan. 1st, 1912, under the Newcastle-upon-Tyne Corporation Act 1911. It had been estimated

that about 1,000 notifications would be received during the year, and the actual number proved to be 972.

To deal with these cases the Sanitary Committee had promoted a scheme for the establishment of a Tuberculosis Dispensary, with full staff consisting of Medical Officer, three Visiting Nurses, Inspector, Clerk, etc., in addition to the twenty beds maintained at Barrasford Sanatorium for poor citizens, and this scheme received the approval of the Council in March, 1912. The provision of Sanatorium Benefit under the National Insurance Act necessitated the reconsideration of the scheme, and permitted of its reconstruction as a joint arrangement between the Corporation and Insurance Committee upon a more complete and comprehensive basis. The general outline was agreed upon before the end of the year, but it was not found possible to get the Dispensary into operation before the following February, owing chiefly to the difficulty in obtaining premises. The Sanitary Committee have now decided to ask the consent of the Council to the erection of a hospital for the accommodation of sixty advanced cases of consumption, in addition to the provision under the joint scheme of the Dispensary, and sixty Sanatorium beds for adults and children in the early and curable stages of the disease. 68 patients were admitted to the Corporation beds at Barrasford Sanatorium during the year.

Disinfection.—The scheduling of Tuberculosis as an infectious disease has greatly increased the facili-

ties for disinfecting the houses, bedding and clothing of consumptives, and this has resulted in a considerable augmentation of the work of the staff. A special Inspector is now required for inspection and disinfection of premises where consumptives live, and a much greater quantity of material is taken to the disinfecting station at the City Hospital for steam treatment than previously, no less than 28,440 articles being so dealt with in 1912, as compared with 21,861 in 1911.

Special attention has been given to the question of the distribution of disinfectants from the Health Department; acting upon the report of the special "Lancet" Commission in 1909, only disinfectants of the highest proved efficacy are employed, and every precaution is taken to ensure that such as are given away are properly used.

Bovine Tuberculosis.—In the absence of the long-promised Government Milk and Dairies Bill, local powers for preventing the supply of tuberculous milk to the City continue to be inadequate. The Tuberculosis Order of 1913 has facilitated matters in regard to tuberculous cattle and carcasses, but the hands of Sanitary Authorities are still tied when they attempt to touch the milk.

Of 106 samples of milk examined for the presence of the tubercle bacillus, 11 were found to contain the germ. In each case the salesman, the farmer, and the local medical officer of health were communicated with. In each instance the affected herd was examined by a

veterinary surgeon, and any visibly affected animals excluded. In three herds the Tuberculin test was applied, and all reactors excluded. Until all suspects had been removed from the herd the entire milk supply from each affected farm *to Newcastle (!)* was entirely stopped. Between the exclusion of the suspects and the receipt of a clean bill from the bacteriologist, the milk was permitted to be sent to the City, on condition that it was carefully pasteurised before being retailed. But what becomes of the "excluded" cows?

Details of the above cases are appended in the Report.

Opinions of expert observers vary as to the proportion of infection which is bovine in origin. Prof. Delépine says that 22 per cent. of tuberculous persons at all ages suffer from the bovine form of the disease, and Mr. Stiles (Surgeon to the Children's Hospital, Edinburgh) declares that among children, 90 per cent. of the glandular, and 60 per cent. of the bone and joint infections are due to this type of bacillus also. Under these circumstances it is little short of a national disgrace that effective measures for protecting the community against this gravest of all the menaces to public health are so long delayed. Certain other cities have special local powers for self-protection, which owing to the alleged imminence of a national measure were refused to this City. The value of these "milk clauses" is amply shown by experience in Manchester, where in the 14 years since their operation there has been a

diminution of tuberculous milk samples to the extent of 66 per cent., together with a considerable reduction in the quantity of bacilli in the milk which is still infected. But—and here is the important point—there has been a coincident fall of nearly 50 per cent. in the mortality from Tuberculosis among children under five years of age, the period when the great majority of the infections are of the bovine type. It is noteworthy that in Newcastle a successful endeavour is being made by several of the large milk-retailing firms to obtain a supply entirely from tuberculin-tested herds, which milk, in spite of the large initial expense involved is being retailed at the ordinary price. Every credit is due to the managers of these firms, and the greatest possible encouragement should be accorded to them.

Food and Provisions.—Inspections under this head are carried out by the Veterinary Officer and his assistants, and by assistants of the Inspector of Nuisances who are specially detailed off for the purpose of taking samples for examination by the Public Analyst and the Bacteriologist.

The efficient performance of the first-named officer's duties is much hampered by the impossibility of anything like a thorough inspection of carcasses in the 110 private slaughter houses scattered all over the city. The absence of a public abattoir is one of the most serious blots upon the health administration of the town, and it is not to the credit of home methods that imported meat is a safer commodity than that raised and killed in this

country. In the dairy industry also there is very much to learn from such countries as Holland and Denmark, which are far ahead of Great Britain, at least in matters of cleanliness.

Recent years have brought a steady increase of responsibility to the Veterinary Officer ; his clerical work has become so great that it is encroaching seriously upon the time required for actual inspection. Further, the staff will require considerable augmentation if it is to cope in any way efficiently with the duties imposed by recent legislation.

It is satisfactory to note that as the result of unfavourable experience of the insurance of cows, the local Butchers' Association have now entirely deleted that class of animal from their scheme, the effect of which is that very few but young bullocks and heifers are now sold and killed in Newcastle, to the great improvement of the meat standard.

The number of Food Samples (931) taken by the Inspector of Nuisances for analysis shows a slight increase over the previous year, but only represents a proportion of 3·5 per 1,000 of population. Of the total number 7·4 per cent. proved not to be genuine, as compared with 9·4 per cent. in 1911.

Of the total milk samples taken, 8·6 per cent. were not genuine, as compared with 13·8 per cent. in the previous year.

3·5 per cent. of the milk, cream, butter, and mar-

garine samples contained boric acid preservatives, but only one in excessive quantity.

180 samples of milk were submitted to the Bacteriologist for examination for evidence of excremental pollution; 42 were reported as unsatisfactory, and immediate steps were taken to have the causes remedied.

The **Water Supply** continues to be of good quality, the chemical analysis being very satisfactory. 192 samples, from sources in all parts of the city, were examined bacteriologically for evidence of the presence of *bacillus coli communis* the original source of which is always animal or human. A very high standard is adopted for this purpose, and is of great value on account of its delicacy in showing the need for special precaution not indicated by the chemical analysis. 9 samples were returned as bad, and 43 as unsatisfactory. The Water Company are informed of each result and institute immediate inquiries as to possible sources of contamination. It is of interest to note that these lie most frequently in the fittings of the taps, etc., especially in the leather washers and collars.

Housing.—The work of inspection of dwelling houses has been carefully carried out by the Inspector of Nuisances and the District Inspectors. In pursuance of the recent policy of the Committee, special attention has been devoted to the cellar dwellings, of which a large number have been entirely closed, or otherwise satisfactorily remedied so that no underground room shall be used for sleeping purposes. Altogether 102

houses, containing 135 separate holdings, have been dealt with. Of these 64 houses, containing 81 holdings, were cellars. Action in each instance has been taken under the Newcastle Improvement Act 1882, Sec. 32.

At the time when the cellar dwellings were first systematically reported upon in October 1908, the total number in the City was 374 houses, containing 488 holdings. 246 houses have since been dealt with, the worst being taken first, leaving 128 houses, containing 171 holdings, still to be considered by the Committee. We cannot too strongly express the importance which we attach to the thorough treatment of this subject. In a growing city like Newcastle there is a tendency for the formerly fashionable central parts of the town to be deserted for the suburbs, leaving many large houses, with basement kitchens, to be converted into tenements. It should be the special care of the Sanitary Committee to prevent the misuse of the basements of such houses, and a strict watch has to be maintained upon them.

The question of the provision of a housing scheme to meet requirements arising from the Sanitary Committee's action is receiving very earnest attention at the present time.

Disposal of Refuse. — Considerable progress has been made in the conversion of dry closets to the water carriage system, 611 having been effected during the year, and all of them under Section 36 of the Public Health Act, 1875. About six-sevenths of the conveniences

in the City are now water closets, whereas in 1905, after the incorporation of Walker and Benwell, their number amounted to about three-fourths of the total.

District Inspection continues to be efficiently performed, and nuisances dealt with.

The Rag Flock Act has brought about a much needed reform, and will undoubtedly lead to a steady decrease of disease. A dozen samples, of which half proved unsatisfactory, were examined.

Smoke Nuisance.—Each year the records published by the Meteorological Office show that Newcastle has a lower average daily amount of sunshine than any other district reported upon.

It is not gratifying that this city should have to yield place to many others notable for their murkiness, and probably the general cloudiness characteristic of the north is partly the cause. There is no doubt, however, that smoke and dust play an important part in obscuring the sunlight, and this cause at least is largely remediable.

Unfortunately, the law specifically exempts from interference on the score of smoke nuisance mines and works where the smelting of ores and minerals is carried on, and also domestic chimneys. These exemptions practically cover all the sources of smoke nuisance in Newcastle and the neighbouring districts, in regard to which there is no question that the City is more sinned against than sinning.

Undoubtedly manufacturers and coal owners could do much to check the nuisance, and much improvement could be effected in regard to domestic fires as well by proper construction of grates and chimneys, and by a wiser selection of fuel, anthracite or gas being substituted for soft bituminous coal.

Motor cars are also, nowadays, frequently responsible for polluting the atmosphere of the streets with thick clouds of foul smoke; this the police are unable to cope with, on account of the necessity for proving that the mechanism of the motor is at fault.

Smoke production is commercially uneconomical, as well as hygienically objectionable.

The late Alderman Baty.—Your reporters have with the most profound regret to record the death of the highly respected Vice-Chairman of the Sanitary Committee, Alderman John Armorer Baty, which took place on 20th January, 1913. The support always given by the late Alderman to sanitary progress in every direction renders his decease a serious loss to the City. His kindly consideration for, and friendship with, ourselves will ever be remembered with respect and affection.

Staff of the Health Department.—During the past year a change has taken place in the personnel of the staff.

One of us (Henry E. Armstrong) resigned his position as Medical Officer of Health on 25th December, after a service of almost forty years, and was succeeded

by the other (Harold Kerr), his assistant for five and a half years, and deputy since July, 1911. It will be the earnest endeavour of your new chief officer to continue the work of his predecessor in a manner worthy of the confidence accorded him by your Committee and by the Council.

S. J. Clegg, M.B., Ch.B., D.P.H., was promoted from the position of Resident Medical Assistant at the City Hospital for Infectious Diseases, to that of Assistant Medical Officer of Health and Resident Medical Officer to the City Hospitals, and J. D. Ingram, M.B., Ch.B., D.P.H., has been since appointed in his place.

We have to record our acknowledgment of the excellent and loyal service rendered to the City by the respective staffs of the various divisions of the Department and Hospitals under our charge. Special mention should be made of those of the latter, who have experienced a year of exceptionally heavy strain.

We have the honour to be, Sir,

Your obedient servants,

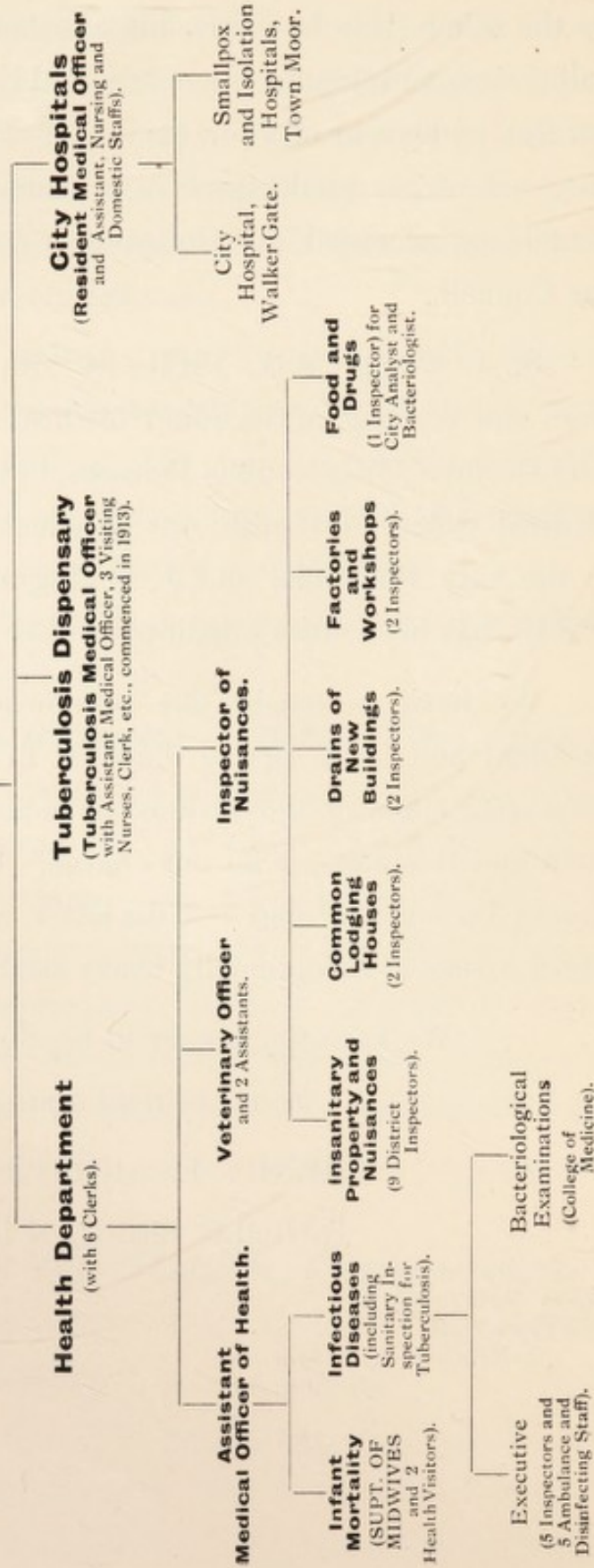
HENRY E. ARMSTRONG, D.Hy.

HAROLD KERR, M.D., D.P.H.

*Health Department,
Town Hall,
Newcastle-upon-Tyne,
30th June, 1913.*

TABLE SHEWING THE VARIOUS SECTIONS OF THE SANITARY COMMITTEE'S WORK WHICH IS UNDER THE DIRECT CHARGE OF THE MEDICAL OFFICER OF HEALTH.

Medical Officer of Health.



CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

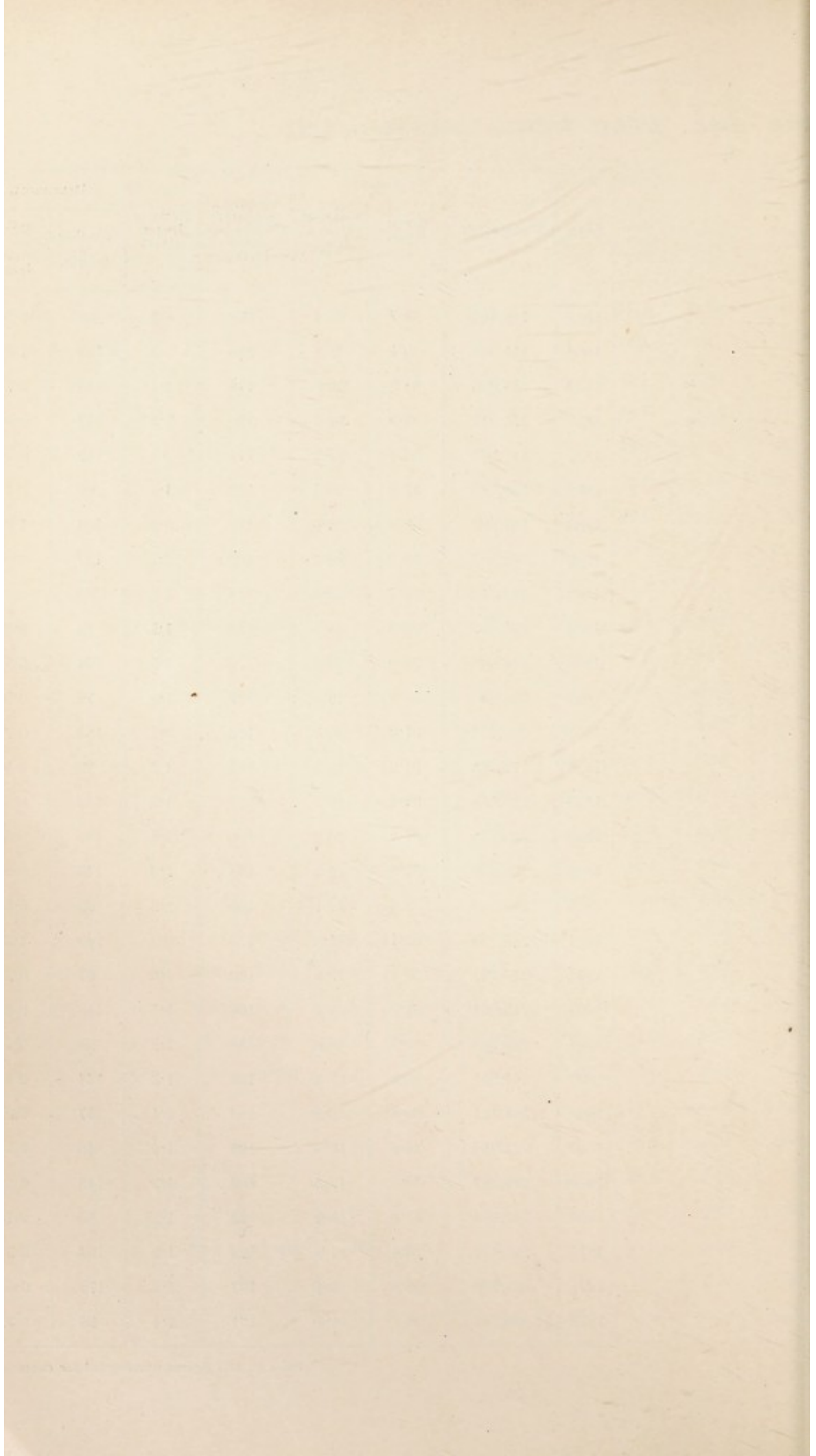
Health Report, 1912.

GENERAL STATISTICS.

THE UNIVERSITY OF CHICAGO

HEALTH REPORT 1912

GENERAL STATISTICS



GENERAL STATISTICS.

POPULATION.—As estimated by the Registrar General at the middle of the year 1912—**269,193.**

RETURN SHEWING THE POPULATION OF THE DIFFERENT PARISHES IN THE CITY, ACREAGE, POPULATION PER ACRE, &C., COMPILED FROM REGISTRAR GENERAL'S RETURNS (CENSUS, 1911).

Parish. (1911)	Population. (1911)	Gross Area.	Less for Open Spaces.			Nett Area.	Population Per Acre. (1911)
		Acres.	Acres.	Roods.	Poles	Acres.	
Fenham ...	1,049	434	10	0	0	424	2·47
Heaton ...	21,912	911	113	2	5	798	27·45
Jesmond ...	21,367	700	45	0	14	655	32·62
Walker ...	15,786	1,149	33	3	21	1,116	14·14
Byker ...	48,709	878	1	2	10	877	55·54
Elswick ...	58,352	784	52	1	2	732	79·71
St. Andrew's ...	16,522	1,650	1,111	1	14	539	30·65
St. John's ...	2,389	87	0	3	13	87	27·45
St. Nicholas' ...	1,190	44	0	1	36	44	27·04
Westgate ...	27,607	227	3	2	22	224	123·24
All Saints' ...	24,671	283	7	3	20	276	89·38
Benwell ...	27,049	1,305	20	1	8	1,285	21·05
TOTAL ...	266,603	8,452	1,400	3	15		

MARRIAGES.—**2,335** Marriages took place during the year.

BIRTHS.—7,194, equivalent to a rate of **26·7** per 1,000 population.

DEATHS (all causes)—4,221, equivalent to an uncorrected rate of 15·7 per 1,000, and, after deduction of the deaths of 529 non-citizens, and addition of 146 Newcastle residents who died elsewhere, to a corrected rate of **14·3** per 1,000 population.

11 deaths were *uncertified*.

INFANTILE MORTALITY.—727 Infants died before completing the first year of life, representing a rate of **101** deaths per 1,000 births.

ZYMOTIC DEATH RATE.—There were 370 deaths from the "Chief Zymotic Diseases" [Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever (Typhus, Simple Continued and Enteric) and Diarrhoea] which is equivalent to **1·4** deaths per 1,000 population.

TUBERCULOSIS.—494 persons died from various forms of Tuberculosis, 358 being from Pulmonary, and 136 from Other Forms. The equivalent death rates are All Forms **1·8**, Pulmonary **1·3**, and Other Forms than Pulmonary **0·5**, per 1,000 population.

For comparison of death rates with previous years see table page 22A.

For particulars of deaths, as to causes, age, and Ward distribution, see following tables.

TABLE I. OF LOCAL GOVERNMENT BOARD.

Vital Statistics of Whole District during 1912 and previous Years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Uncor-rected Number	Nett.		Number	Rate.	of Non-resi-dents regis-tered in the District	of Resi-dents not reg-istered in the District	Under 1 Year of Age.		At all Ages.	
			Number	Rate.					Number	Rate per 1,000 Nett Births.	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	268,721	8,210			4,831	18·0						
1907	272,969	8,093			4,594	16·8						
1908	277,257	8,382			4,801	17·3						
1909	281,584	7,682			4,459	15·9						
1910	285,951	7,543			4,252	14·9						
1911	267,261	7,089	7,082	26·5	4,667	17·5	448	165	973	137	4,384	16·4
1912	269,193	7,219	7,194	26·7	4,221	15·7	529	146	727	101	3,838	14·3

Area of District in acres (exclusive of area covered by water) 8,452. Total population at all ages at census 1911, 266,603.

TABLE II. OF LOCAL GOVERNMENT BOARD.

(See under **Infectious Diseases**, page 47.)

TABLE IV. OF LOCAL GOVERNMENT BOARD.

(See under **Infantile Mortality**, page 34.)

TABLE III. OF THE LOCAL GOVERNMENT BOARD.

RETURN OF CORRECTED (OR NET) DEATHS FROM ALL CAUSES AT AGE PERIODS
DURING THE 52 WEEKS ENDED 28TH DECEMBER, 1912.

CAUSE OF DEATH.	AGE PERIODS.									Deaths in Institutions in the City, of "Residents," or "Non-Residents."
	Under 1 year.	1 year and under 2.	2 years and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and above.	TOTAL.	
Enteric Fever	...	...	...	5	1	5	4	...	15	14
Measles	26	72	50	16	...	...	...	...	164	10
Scarlet Fever	2	3	14	12	1	1	1	...	34	35
Whooping Cough	20	10	8	...	...	...	...	...	38	...
Diphtheria	3	9	10	11	...	...	...	...	33	27
Croup	...	...	...	2	...	...	...	...	2	...
Influenza	2	...	...	1	...	6	4	5	18	...
Erysipelas	3	...	...	...	1	...	2	1	7	2
Other Epidemic Diseases	...	...	1	...	...	...	...	...	1	...
Pyæmia, Septicæmia	2	...	2	...	1	...	3	...	8	4
Tetanus	...	...	...	...	...	...	...	...	...	1
Mycoses	...	...	...	...	...	...	...	...	...	1
Pulmonary Tuberculosis	2	4	1	21	84	144	87	6	349	80
Acute Phthisis	...	1	1	2	1	2	2	...	9	5
Acute Miliary Tuberculosis	...	1	...	3	...	2	...	...	6	5
Tuberculous Meningitis	13	10	12	20	4	3	1	...	63	17
Tuberculosis of Peritoneum and Intestines	8	7	9	7	5	3	3	...	42	24
Tuberculosis of Spinal Column	...	...	1	1	3	2	1	...	8	3
Tuberculosis of Joints	...	...	...	...	...	2	1	...	3	3
Tuberculosis of Other Organs	...	...	...	...	...	5	1	1	7	5
Disseminated Tuberculosis	...	...	1	4	...	2	...	...	7	2
<i>Total Tuberculosis</i>	23	23	25	58	97	165	96	7	494	
Rickets, Softening of Bones	1	5	3	...	...	2	...	...	11	...
Syphilis	5	...	1	1	...	...	1	...	8	3
Other Venereal Diseases	1	...	...	...	...	...	...	...	1	1
Cancer of the Buccal Cavity	...	...	...	2	...	...	10	12	24	12
Cancer of the Stomach, Liver, &c.	...	...	...	...	...	5	45	32	82	33
Cancer of the Peritoneum, Intestines, and Rectum	...	1	...	...	1	5	31	22	60	37
Cancer of the Female Genital Organs	...	...	...	...	1	7	24	3	35	8
Cancer of the Breast	...	...	...	...	...	2	6	5	13	6
Cancer of the Skin	...	...	...	...	...	...	2	2	4	1
Cancer of other or unspecified organs	...	...	...	...	2	3	19	13	37	25
Other Tumours (situation undefined)	1	...	...	...	...	1	...	1	3	4
Rheumatic Fever	...	...	...	2	2	7	2	1	14	2
Chronic Rheumatism, Osteo-Arthritis	...	...	1	2	1	3	7	8	22	8
Gout	...	...	...	...	...	...	2	...	2	...
Diabetes	...	...	...	...	2	8	7	5	22	14
Exophthalmic Goitre	...	...	...	...	...	2	...	...	2	3
Addison's Disease	...	...	...	...	...	...	...	...	...	3
Leucocythæmia, Lymphadenoma	...	...	...	2	1	...	2	...	5	6
Anæmia, Chlorosis	...	...	...	...	1	3	11	2	17	8
Other General Diseases	1	...	...	1	2	...	...	...	4	3
Alcoholism (acute or chronic)	...	...	...	...	...	3	9	...	12	1
Encephalitis	...	...	...	...	2	...	1	1	4	4
Cerebro-Spinal Fever	...	...	1	...	1	...	...	...	2	1

TABLE III. OF THE LOCAL GOVERNMENT BOARD.—CONTINUED.

RETURN OF CORRECTED (OR NET) DEATHS FROM ALL CAUSES AT AGE PERIODS
DURING THE 52 WEEKS ENDED 28TH DECEMBER, 1912.

CAUSE OF DEATH.	AGE PERIODS.								TOTAL.	Deaths in Institutions in the City, of "Residents" or "Non-Residents."
	Under 1 year.	1 year and under 2.	2 years and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and above.		
Poliomyelitis	1	1	...	...	...	...	...	...	2	2
Meningitis, other forms or undefined	9	1	5	5	2	2	1	1	26	9
Locomotor Ataxy	...	...	...	...	...	1	3	1	5	2
Other Diseases of the Spinal Cord	...	...	1	...	1	2	4	3	11	7
Cerebral Hæmorrhage, Apoplexy	...	...	...	1	...	11	68	86	166	27
Softening of the Brain	...	...	...	...	...	2	4	7	13	2
Paralysis without specified cause	...	...	...	...	1	3	10	12	26	7
General Paralysis of the Insane	...	...	...	...	...	18	14	...	32	3
Other forms of Mental Alienation	...	...	...	...	1	...	...	...	1	...
Epilepsy	1	3	1	1	1	11	6	2	26	4
Convulsions (non-puerperal) (5 years and over)	...	...	...	...	1	...	...	...	1	1
Infantile Convulsions (under 5 yrs.)	57	6	5	...	...	...	...	...	68	2
Chorea	...	...	...	...	1	1	...	...	2	4
Hysteria, Neuralgia, Neuritis	...	...	...	...	...	...	1	...	1	1
Other Diseases of the Nervous System	...	...	...	1	2	3	7	...	13	10
Mastoid Disease	...	...	...	...	...	1	...	...	1	3
Other Diseases of the Ears	...	1	2	3	4	...	...	...	10	15
Pericarditis	...	...	...	...	...	1	1	...	2	1
Acute Endocarditis	1	...	...	1	2	1	4	3	12	7
Valvular Disease, Fatty Degeneration of the Heart	...	...	...	3	9	46	101	93	252	51
Other Organic Disease of the Heart	...	...	...	...	...	13	31	39	83	4
Angina Pectoris	...	...	...	...	...	1	10	6	17	1
Aneurism	...	...	...	...	...	...	4	1	5	5
Arterial Sclerosis	...	...	...	...	...	...	7	34	41	23
Other Diseases of Arteries	...	...	...	...	...	...	...	...	...	1
Cerebral Embolism and Thrombosis	...	...	...	...	2	2	1	5	10	5
Other Embolism and Thrombosis	...	...	...	...	...	1	1	1	3	1
Diseases of the Veins (Varices, Hæmorrhoids, Phlebitis, &c.)	...	...	...	...	...	1	2	3	6	2
Hæmorrhage; other Diseases of the Circulatory System	...	...	...	...	1	1	...	2	4	1
Diseases of the Larynx	2	3	1	1	1	...	1	...	9	2
Diseases of the Thyroid Body	...	...	...	...	...	...	...	2	2	...
Bronchitis	86	19	7	...	2	6	71	96	287	60
Broncho-Pneumonia	50	33	23	5	1	3	6	10	131	22
Lobar Pneumonia	2	2	5	2	7	13	16	6	53	14
Pneumonia (type not stated)	7	8	5	4	3	14	16	7	64	9
Pleurisy	2	2	2	4	1	3	4	3	21	21
Pulmonary Congestion, Pulmonary apoplexy	...	...	2	2	...	1	...	4	9	...

TABLE III. OF THE LOCAL GOVERNMENT BOARD.—CONTINUED.

RETURN OF CORRECTED (OR NET) DEATHS FROM ALL CAUSES AT AGE PERIODS
DURING THE 52 WEEKS ENDED 28TH DECEMBER, 1912.

CAUSE OF DEATH.	AGE PERIODS.								TOTAL.	Deaths in Institutions in the City, of "Residents" or "Non-Residents."
	Under 1 year.	1 year and under 2.	2 years and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and above.		
Asthma	...	...	...	...	...	2	5	6	13	2
Pulmonary Emphysema	...	...	...	...	...	1	3	3	7	...
Fibroid Disease of Lung	...	...	...	...	...	1	1	1	3	...
Other Diseases of the Respiratory System.	...	...	1	...	...	...	3	...	4	...
Diseases of the Pharynx, Tonsillitis	...	...	...	...	...	1	...	...	1	...
Diseases of Œsophagus	...	...	...	...	1	...	...	...	1	...
Perforating Ulcer of Stomach	...	...	...	...	1	4	9	1	15	6
Inflammation of Stomach.	2	1	...	1	...	...	2	5	11	5
Other Diseases of the Stomach	8	1	1	1	...	...	2	2	15	...
Diarrhœa and Enteritis	...	...	4	2	1	7	11	7	32	21
Epidemic or Zymotic Enteritis	41	13	...	...	...	...	...	...	54	6
Appendicitis	...	...	...	5	1	...	3	...	9	27
Hernia, Intestinal Obstruction	3	...	...	...	2	1	6	9	21	45
Other Diseases of the Intestines	...	...	...	...	...	2	5	1	8	4
Acute Yellow Atrophy of Liver	...	...	...	...	...	1	1	...	2	1
Cirrhosis of the Liver	...	...	...	...	...	4	10	5	19	5
Biliary Calculi	...	...	...	...	...	...	1	3	4	7
Other Diseases of the Liver	...	...	...	...	...	2	3	2	7	1
Peritonitis (cause unstated)	...	...	...	1	...	1	2	...	4	13
Other Diseases of the Digestive System	...	...	...	...	...	...	1	...	1	2
Acute Nephritis	...	...	...	3	5	7	19	14	48	21
Bright's Disease	...	...	...	1	3	7	36	29	76	26
Other Diseases of the Kidney and Annexa	...	...	...	...	1	1	1	3	6	7
Calculi of the Urinary Passages	...	...	...	...	...	...	1	...	1	2
Diseases of the Bladder	...	...	...	...	...	4	4	8	16	4
Diseases of the Urethra, Urinary Abscess, etc.	...	...	...	...	...	1	1	1	3	3
Diseases of the Prostate	...	...	...	...	...	...	2	7	9	6
Non-Veneral Diseases of Male Genital Organs	...	...	...	...	1	...	...	...	1	2
Uterine Hæmorrhage (non-puerperal)	...	...	...	...	...	...	...	...	...	1
Uterine Tumour (non-cancerous)	...	...	...	...	...	...	1	1	2	1
Other Diseases of the Uterus	...	...	...	...	...	2	...	1	3	4
Ovarian Cyst, Tumour (non-cancerous)	...	...	...	...	...	1	...	...	1	1
Accidents of Pregnancy	...	...	...	...	1	5	...	...	6	...
Puerperal Hæmorrhage	...	...	...	...	...	7	1	...	8	2
Other accidents of Childbirth	...	...	...	...	1	2	...	...	3	3
Puerperal Fever	...	...	...	...	1	4	...	...	5	1
Puerperal Albuminuria and Convulsions	...	...	...	...	1	5	...	...	6	1
Puerperal Phlegmasia Alba Dolens, Embolism and Sudden Death	...	...	...	...	...	1	...	...	1	...

TABLE III. OF THE LOCAL GOVERNMENT BOARD.—CONTINUED.

RETURN OF CORRECTED (OR NET) DEATHS FROM ALL CAUSES AT AGE PERIODS
DURING THE 52 WEEKS ENDED 28TH DECEMBER, 1912.

CAUSE OF DEATH.	AGE PERIODS.								TOTAL.	Deaths in Institutions in the City, of "Residents" or, "Non-Residents."
	Under 1 year.	1 year and under 2.	2 years and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and above.		
Senile Gangrene	...	...	...	...	...	...	...	10	10	4
Gangrene, other types	...	...	...	...	...	...	2	...	2	2
Carbuncle, Boil	...	...	...	...	...	1	...	1	2	...
Phlegmon, Acute Abscess	1	...	...	...	...	1	1	...	3	7
Diseases of the Integumentary System	5	...	...	...	...	...	...	1	6	1
Diseases of the Bones	...	...	...	4	...	...	...	...	4	8
Other Diseases of Locomotor System	1	...	...	...	...	2	1	...	4	...
Congenital Malformations	21	1	2	1	1	...	...	...	26	10
Premature Birth	139	...	...	...	...	...	...	...	139	8
Infantile Atrophy, Debility, and Marasmus	154	6	...	...	...	...	...	...	160	33
Icterus Neonatorum, Sclerema and Edema Neonatorum	9	...	...	...	...	...	...	...	9	1
Diseases of Umbilicus, etc.	1	...	...	...	...	...	...	...	1	...
Atelectasis	8	...	...	...	...	...	...	...	8	...
Injuries at Birth	7	...	...	...	...	...	...	...	7	...
Other diseases peculiar to early infancy	2	...	...	...	...	...	...	...	2	1
Lack of care	1	...	...	...	...	...	...	...	1	...
Old age	...	...	...	...	...	...	5	204	209	54
Suicide	...	...	...	...	5	9	15	3	32	4
Poisoning by Food	...	...	...	...	...	...	1	...	1	1
Other acute Poisonings	...	...	...	...	...	...	2	1	3	5
Burns (conflagration excepted).	1	1	10	8	1	3	1	...	25	29
Accidental Drowning	...	...	...	3	3	2	1	2	11	...
Injury by Firearms	...	...	...	...	...	...	...	...	...	1
Injury by Fall	...	...	...	2	3	6	6	4	21	14
Injury in Mines and Quarries	...	...	...	...	...	1	1	...	2	6
Injury by Machines	...	...	...	...	...	1	1	...	2	1
Injury by other crushing (Vehicles, Railways, Land-slides, etc.)	...	...	...	4	1	4	2	2	13	22
Starvation	...	...	...	...	...	...	...	1	1	1
Weather Agencies	...	...	...	...	...	...	1	...	1	...
Electricity (lightning excepted)	...	...	...	...	1	...	...	...	1	...
Other Violence	9	2	3	3	2	9	7	4	39	36
Dropsy	...	...	...	...	...	...	2	...	2	1
Syncope (aged 1 year and under 70)	...	...	...	...	...	...	2	1	3	...
Heart Failure Do.	...	...	...	...	...	3	5	9	17	1
Atrophy, Debility, Marasmus }	...	10	1	...	...	...	1	1	13	10
Teething Do.	6	...	...	...	...	...	...	1	7	...
Other ill-defined deaths	...	...	...	...	...	1	5	1	7	...
Cause not specified	...	...	...	...	...	...	4	1	5	...
TOTAL	727	236	198	187	197	507	883	903	3,838	1,241
Uncorrected	751	267	235	226	246	587	990	919	4,221	

TABLE SHOWING DISTRIBUTION OF BIRTHS AND DEATHS.

Registration Sub-districts and City.	Different Quarters of the Year.	Births Registered in 52 Weeks ended 28th December, 1912 (uncorrected).			Deaths Registered in 52 Weeks ended 28th December, 1912 (uncorrected).		
		Male.	Female.	Total.	Male.	Female.	Total.
Benwell	1st Quarter ...	107	102	209	45	24	69
	2nd " ...	106	109	215	32	31	63
	3rd " ...	106	96	202	29	16	45
	4th " ...	92	89	181	49	42	91
	Total ...	411	396	807	155	113	268
Elswick	1st Quarter ...	171	169	340	162	117	279
	2nd " ...	208	205	413	127	115	242
	3rd " ...	174	151	325	126	87	213
	4th " ...	168	177	345	125	144	269
	Total ...	721	702	1,423	540	463	1,003
St. Nicholas' ...	1st Quarter ...	104	116	220	50	74	124
	2nd " ...	122	101	223	40	31	71
	3rd " ...	123	98	221	52	39	91
	4th " ...	111	89	200	79	64	143
	Total ...	460	404	864	221	208	429
St. Andrew's ...	1st Quarter ...	93	108	201	177	134	311
	2nd " ...	85	83	168	157	103	260
	3rd " ...	99	72	171	139	120	259
	4th " ...	78	65	143	176	124	300
	Total ...	355	328	683	649	481	1,130
All Saints' ...	1st Quarter ...	110	126	236	51	39	90
	2nd " ...	116	111	227	41	36	77
	3rd " ...	107	114	221	32	29	61
	4th " ...	102	100	202	62	44	106
	Total ...	435	451	886	186	148	334
Byker	1st Quarter ...	268	249	517	99	99	198
	2nd " ...	288	258	546	76	71	147
	3rd " ...	237	228	465	73	75	148
	4th " ...	247	227	474	140	128	268
	Total ...	1,040	962	2,002	388	373	761
Walker	1st Quarter ...	65	78	143	38	39	77
	2nd " ...	75	72	147	32	32	64
	3rd " ...	76	57	133	31	27	58
	4th " ...	53	78	131	55	42	97
	Total ...	269	285	554	156	140	296
City	1st Quarter ...	918	948	1,866	622	526	1,148
	2nd " ...	1,000	939	1,939	505	419	924
	3rd " ...	922	816	1,738	482	493	875
	4th " ...	851	825	1,676	686	588	1,274
	Total ...	3,691	3,528	7,219	2,295	2,026	4,221

The Births represent a rate of 26·8, and the Deaths a rate of 15·7 per 1,000 estimated population.
The increase of Births over Deaths is 2,998 this year, as compared with 2,422 in 1911.



INFANTILE MORTALITY.

(SUPERINTENDENT OF MIDWIVES.)

INFANTILE MORTALITY
IN THE DISTRICT OF MIDWAY

INFANTILE MORTALITY.

SUMMARY OF BIRTHS, 1912.

	LEGITIMATE.			ILLEGITIMATE.			Grand Total.
	M.	F.	Total.	M.	F.	Total.	
Total Births in the Year	3,526	3,373	6,899	165	155	320	7,219
Net " "	3,517	3,353	6,870	167	157	324	7,194

DISTRIBUTION OF DEATHS.

REGISTRATION SUB-DISTRICTS.	Deaths of Children under 1 year of age.		Rates per 1,000 of Deaths under 1 year to Births registered.	
	1911.	1912.	1911.	1912.
Benwell	112	71	131	88
Elswick	186	135	133	95
St. Nicholas'	140	106	163	123
St. Andrew's	110	84	155	124
All Saints'	112	90	126	102
Byker	240	182	127	91
Walker	73	59	150	107
City	973	727	137	101

SUMMARY OF MORTALITY, 1901-1912.

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Death-rate of Infants under 1 year per 1,000 births ...	177	139	166	155	138	153	126	139	122	123	137	101
Death-rate of Infants under 3 months per 1,000 births ...	83·8	74·8	84·9	82·6	71·6	75·6	68·6	76·6	64·8	66·9	71·5	60·3
Death-rate of Infants from Premature Birth, per 1,000 births	20·1	20·7	25·1	20·9	19·7	22·0	21·2	24·8	19·8	18·8	21·7	19·3
Death-rate of Infants under 1 year per 1,000 births, from Premature Birth plus all Congenital Causes* ...	40·8	51·7	62·1	60·6	52·1	61·5	43·0	44·6	42·3	42·6	43·9	48·0
Death-rate of Infants under 1 year per 1,000 births, from Diarrhœa and all other Digestive Diseases† ...	45·7	12·8	26·9	21·8	22·4	35·2	12·7	24·8	13·5	16·7	25·1	7·8

Prior to 1911, figures uncorrected for cases belonging to other districts.

* "All Congenital Causes" includes Syphilis, Debility at Birth, Injury at Birth, Atelectasis, Malformation of Heart, Spina Bifida, Hydrocephalus, Imperforate Anus, Cleft Palate, Hare-Lip, other Congenital Defects, and other and undefined Accidents of Childbirth.

† "Diarrhœa and all other Digestive Diseases" includes Diarrhœa, Dysentery, Epidemic or Zymotic Enteritis, Thrush, Starvation, Want of Breast Milk, Rickets, Sore Throat, Quinsy, Diseases of Stomach, Enteritis, Cirrhosis of Liver, Obstruction of Intestine, Peritonitis, and other Diseases of Digestive System.

For particulars of deaths, as to causes and age distribution, see following page.

TABLE IV. OF THE LOCAL GOVERNMENT BOARD.

RETURN OF CORRECTED (OR NET) DEATHS UNDER ONE YEAR OF AGE
DURING THE 52 WEEKS ENDED 28TH DECEMBER, 1912.

CAUSE OF DEATH.	AGE PERIODS.										Deaths in Institutions in the City, of "Residents" or "Non-Residents."
	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	TOTAL under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	TOTAL under 1 year of age.	
Measles	...	...	...	...	...	...	1	11	14	26	...
Scarlet Fever	...	...	...	...	...	...	1	...	1	2	2
Whooping Cough	...	...	2	1	3	2	4	6	5	20	...
Diphtheria	...	...	...	...	...	...	...	1	2	3	3
Influenza	...	...	...	...	...	1	...	...	1	2	...
Erysipelas	...	...	...	...	...	1	...	1	1	3	...
Pyæmia, Septicæmia	...	...	...	1	1	...	...	1	...	2	1
Pulmonary Tuberculosis (not acute)	...	...	...	...	...	...	...	1	1	2	...
Tuberculous Meningitis	...	...	...	...	...	2	2	5	4	13	1
Tuberculosis of Peritoneum and Intestines	...	...	...	...	...	2	4	2	...	8	...
Rickets, Softening of Bones	...	...	...	...	...	...	1	...	...	1	...
Syphilis	...	...	...	...	...	3	2	...	...	5	2
Other venereal diseases	...	...	...	...	...	1	...	...	...	1	1
Other Tumours (situation undefined)	1	...	...	...	1	...	...	...	...	1	1
Other general diseases	1	...	...	...	1	...	...	...	...	1	...
Polioymelitis	...	...	...	...	...	...	...	...	1	1	1
Meningitis, other forms or undefined	...	...	...	...	...	2	3	1	3	9	3
Epilepsy	...	...	...	...	...	...	...	...	1	1	...
Infantile Convulsions	23	2	5	1	31	8	10	3	5	57	2
Mastoid Disease	...	...	...	...	...	...	...	...	...	...	1
Acute Endocarditis	...	...	...	...	...	...	...	1	...	1	...
Diseases of the Larynx	...	...	...	...	...	...	1	1	...	2	...
Bronchitis	3	4	2	2	11	20	26	17	12	86	3
Broncho-Pneumonia	...	...	...	1	1	14	9	10	16	50	2
Lobar Pneumonia	...	...	...	...	...	1	1	...	...	2	...
Pneumonia (type not stated)	...	...	...	1	1	1	4	...	1	7	...
Pleurisy	...	...	...	...	...	...	...	...	2	2	2
Inflammation of Stomach	...	...	...	...	...	2	...	...	...	2	...
Other diseases of the Stomach	2	...	...	...	2	2	3	1	...	8	...
Epidemic or Zymotic Enteritis	1	1	2	2	6	3	13	8	11	41	6
Hernia, Intestinal obstruction	...	...	...	1	1	1	1	...	...	3	4
Phlegmon, acute Abscess	...	...	...	...	...	...	1	...	...	1	...
Diseases of the Integumentary System	...	1	1	...	2	2	1	...	...	5	...
Other diseases of Locomotor System	1	...	...	...	1	...	...	...	...	1	...
Congenital Malformations... ..	9	1	4	1	15	5	...	...	1	21	7
Premature Birth	109	10	8	6	133	4	1	1	...	139	8
Infantile Atrophy, Debility, and Marasmus	45	8	15	13	81	31	25	9	8	154	29
Icterus Neonatorum, Sclerema and Cedema Neonatorum	5	3	1	...	9	...	...	...	...	9	1
Diseases of Umbilicus, etc	...	...	...	1	1	...	...	...	...	1	...
Atelectasis	7	...	...	...	7	...	1	...	...	8	...
Injuries at Birth	7	...	...	...	7	...	...	...	...	7	...
Other diseases peculiar to early infancy... ..	2	...	...	...	2	...	...	...	...	2	1
Lack of care	1	...	...	...	1	...	...	...	...	1	...
Burns (conflagration excepted)	...	...	...	...	...	...	...	1	...	1	...
Other violence	2	1	...	...	3	4	1	...	1	9	1
Teething	...	...	...	...	...	1	...	3	2	6	...
TOTAL	219	31	40	31	321	113	116	84	93	727	82
Uncorrected	224	31	39	31	325	119	119	92	96	751	...

*The Report of the Superintendent of Midwives
is as follows:—*

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

Herewith I beg to submit my Report for the year 1912.

MIDWIVES ACT, 1902.

Midwives Roll.—38 Midwives notified the Local Supervising Authority of their intention to practise. Of these 12 work entirely as monthly nurses, and 23 act as midwives and occasionally as monthly nurses. One of the monthly nurses has left the city since notifying. Two midwives are too old to practise.

A large proportion of the midwifery work in the city is performed by the Maternity Hospital.

Prosecution.—In November a woman was proceeded against by the Sanitary Authority for “habitually and for gain attending women in childbirth, otherwise than under the supervision of a qualified medical practitioner,” she not being a certified midwife.

Attendance on five recent cases was proved, but, although a blouse had been promised by one mother, some coals given by another, and some money lent by (and stated to have been repaid prior to the confinement to) a third, it was held that “gain” had not been established. The magistrates, while sympathising with the object of the Sanitary Authority to prevent such unsuitable persons practising midwifery, felt that they could not convict upon the evidence before them, and the case therefore failed.

The same woman was prosecuted in 1911 for a similar offence, and although it was proved on that occasion that one or two cases had been attended and fees paid, thus establishing “gain,” it was held that the instances were not sufficiently numerous to constitute “habitual attendance,” and the case was dismissed.

It is well-nigh impossible to obtain the necessary information from persons attended by these ignorant handy-

women, for the latter are invariably regarded as persecuted benefactresses, and popular sympathy is always with them.

In spite of unfavourable verdicts, however, attendances by unregistered women are rapidly becoming rarer wherever the Midwives Act is strongly administered, as in Newcastle.

Inspection.—128 visits were paid to the midwives at their homes, to inspect the hygienic condition of their dwellings, to see that their bags of appliances were complete and in compliance with the rules of the Central Midwives Board, that their chart books were filled in daily, recording the temperature and pulse of each patient, and that their registers were filled up correctly.

The number of visits paid varies from two or three to the more competent women, to seven or eight to those who require more supervision. It is satisfactory to record that the necessity for these visits becomes less and less each year, the midwives being anxious to improve themselves and attending lectures regularly, and it is found that those who do not attend the weekly meetings are the ones who need most supervision as regards their equipment and home conditions.

The midwives are encouraged to regard their work as a valuable corollary to that of the Health Department, and to extend their interest in their cases as much as possible. They receive systematic instruction in home hygiene and in the modern methods for the prevention of infantile mortality, and their influence is seen in the improved habits of their patients.

Many mothers engage the midwife some time before the confinement, thus giving an opportunity for the investigation of prenatal conditions, and for instruction in the care of the patient herself and in the welfare of the infant, special stress being laid upon the importance of breast feeding. Efficient preparations can thus be made, with the greatest advantage to both mother and child.

Births attended by Midwives.—1,763 live births and 24 still births were attended during the year.

Puerperal Septicæmia.—2 cases occurred during the year in the practice of two midwives.

Lectures to Midwives.—35 lectures were delivered by the Superintendent of Midwives, and were well attended. In addition to these, there were 7 addresses by medical men and others in connection with the Northumberland and Durham Midwives' Association, of which the Superintendent is honorary secretary, and these also were well attended by the Newcastle midwives.

Notices to Local Supervisory Authority from Midwives who had sent for medical help, 138. Details are as follows :—

Prematurity (5 cases of twins)...	36	Eclampsia	1
Immaturity	7	Contracted Pelvis	3
Infantile Convulsions	4	Abnormal Presentations	10
Ophthalmia Neonatorum	6	Icterus Neonatorum	1
Post-partum Hæmorrhage	4	Mothers' illness	7
Ante-partum Hæmorrhage	6	Septicæmia	2
Adherent Placenta	4	Uterine Inertia	24
Placenta Prævia	2	Inversion of Uterus	1
Inflamed Umbilicus	1	Ruptured perinæum	2
Rise of Temperature	15		
Abortion	2		138

Expectant Mothers.—114 were visited, and 73 attended the classes held every week at the Mothers' and Babies' Welcome and School for Mothers, and received instruction and advice. It is most important to reach the young mothers and encourage them to join the classes held for their benefit, and the results obtained with those who have attended these institutions certainly justify the wide extension of the movement. General public interest is being roused to the importance of securing healthy conditions for the mother and child, and the Superintendent of Midwives continually receives requests to give health talks to mothers' meetings, girls' clubs, etc. As far as possible, these requests are acceded to, and every effort is made to combat the often appalling ignorance which, in a great many cases, is alone responsible for the conditions which lead to a high infant mortality.

Leaflets ("Advice to Mothers").—8,000 were distributed during the year, many through the help of the numerous

voluntary workers in the city. Supplies of these are in the hands of the officials in charge of the maternity wards of the Union Infirmary, Day Nurseries, Mothers' Welcomes, and Mothers' Meetings, and also of the Midwives.

Interviews.—237 interviews have been held with Midwives and mothers in the office of the Superintendent of Midwives.

Baby Weighing.—833 babies have been weighed in the office, at the various Mothers' Meetings, and at the Mothers' Welcomes. The weighings provide valuable opportunities for giving practical advice to the mothers, and have a marked effect in stimulating their interest and rivalry in their children's progress.

NOTIFICATION OF BIRTHS ACT, 1907.

Notifications Received.—4,840 notifications of births have been received, out of a total of 7,219 registered. Particulars of those not notified were obtained from the registrars of the sub-districts at a later date, and consisted almost entirely of better-class cases under the care of private medical practitioners.

The following table shows from whom the notifications have been received :—

Notified by				Living Births.	Still Births.
Medical Practitioners...	...	...	...	1,890	80
Maternity Hospital	...	...	...	1,053	49
Union Infirmary	...	...	...	82	5
Midwives	...	...	...	1,763	24
Unregistered Women	...	...	...	—	—
Parents	...	...	...	52	—
Totals	...	...	...	4,840	158

Work of Health Visitors.—Of the births notified, 2,161 cases in the poorer parts of the City were visited as soon after birth as possible, and 1,490 were assigned to the two Health Visitors for regular revisitation until the infants attain the age of 12 months. In all 5,602 visits were paid by the Health Visitors.

Every endeavour is made by the two ladies to keep in touch with all the cases assigned to them for supervision, often at the cost of much weary travelling where removals have occurred. Many cases of neglect and cruelty are met with, and these are promptly reported, so that they may be dealt with by a hospital or private doctor, the Relieving Officer, or officer of the Royal Society for Prevention of Cruelty to Children. Frequently insanitary conditions are found in the homes, and these are brought to the notice of the Medical Officer of Health, who is also kept informed of the existence of non-notifiable infectious disease among the poorer classes.

Much interesting information is obtainable from the records of the visits, and the following are particulars regarding the babies, born in 1911, who reached their second birthday in 1912. 1,526 names had been entered on the lists of the Health Visitors, and of these 157 were lost sight of and could not be traced. Of the remaining 1,369, 132 died—*i.e.*, 96 deaths per 1,000 births, as compared with a mortality rate for the City generally of 101 deaths per 1,000 births.

This mortality rate is the lowest yet recorded, and is most satisfactory, considering that the supervision can be only partial at the best, and that the babies are those of the poorest and most ignorant class.

Now that the registered Midwives are well trained and reliable, attention to their cases is not so necessary as formerly, and the visits of the officers are almost entirely devoted to those infants whose circumstances and surroundings render their chances of survival extremely precarious, and whose mothers have no one at all to whom to apply for advice.

Influence of Housing Accommodation.—Of the infants visited by the officers of the Health Department who lived in single-roomed houses, the infantile mortality rate was 103 per 1,000 births; of those in two-roomed houses, 80 per 1,000 births; and of those in three-roomed houses, 54 per 1,000

births; only 25 babies, living in houses of more than three rooms, were visited, and of these, 1 died.

Parental Employment.—Only a small proportion of mothers are at work; the figures available do not point to the maternal employment exercising any particular influence upon the health of the infant.

Health of Mother.—Of 154 babies whose mothers were in bad health 20, or 130 per 1,000, died.

Attendance at Birth.—Of the midwives' cases, the mortality figure is 93 per 1,000 births. Of the babies whose advent was assisted by untrained handywomen, the mortality was at the rate of 100 per 1,000 births.

Feeding.—78 per cent. of the babies under observation were entirely breast fed (as compared with 73 per cent. in 1911), while 9 per cent. received artificial (in addition to breast) feeding before the age of 9 months, and less than 1 per cent. were entirely artificially fed. The death rate among those entirely breast fed reached the low figure of 81 per 1,000 births.

Illegitimacy.—The infantile mortality rate for legitimate children is 92 per 1,000, whereas that of the illegitimate babies is 237 per 1,000 births.

Sex.—The mortality rate among male infants was 102, and that among females 89, per 1,000 births.

It is to be noted that all the particulars given above are only in respect of infants visited by the officers of the Health Department, and do not refer to any others than those entered in their books for supervision.

I am, Sir,

Your obedient Servant,

ELIA RENAUD,
Superintendent of Midwives.

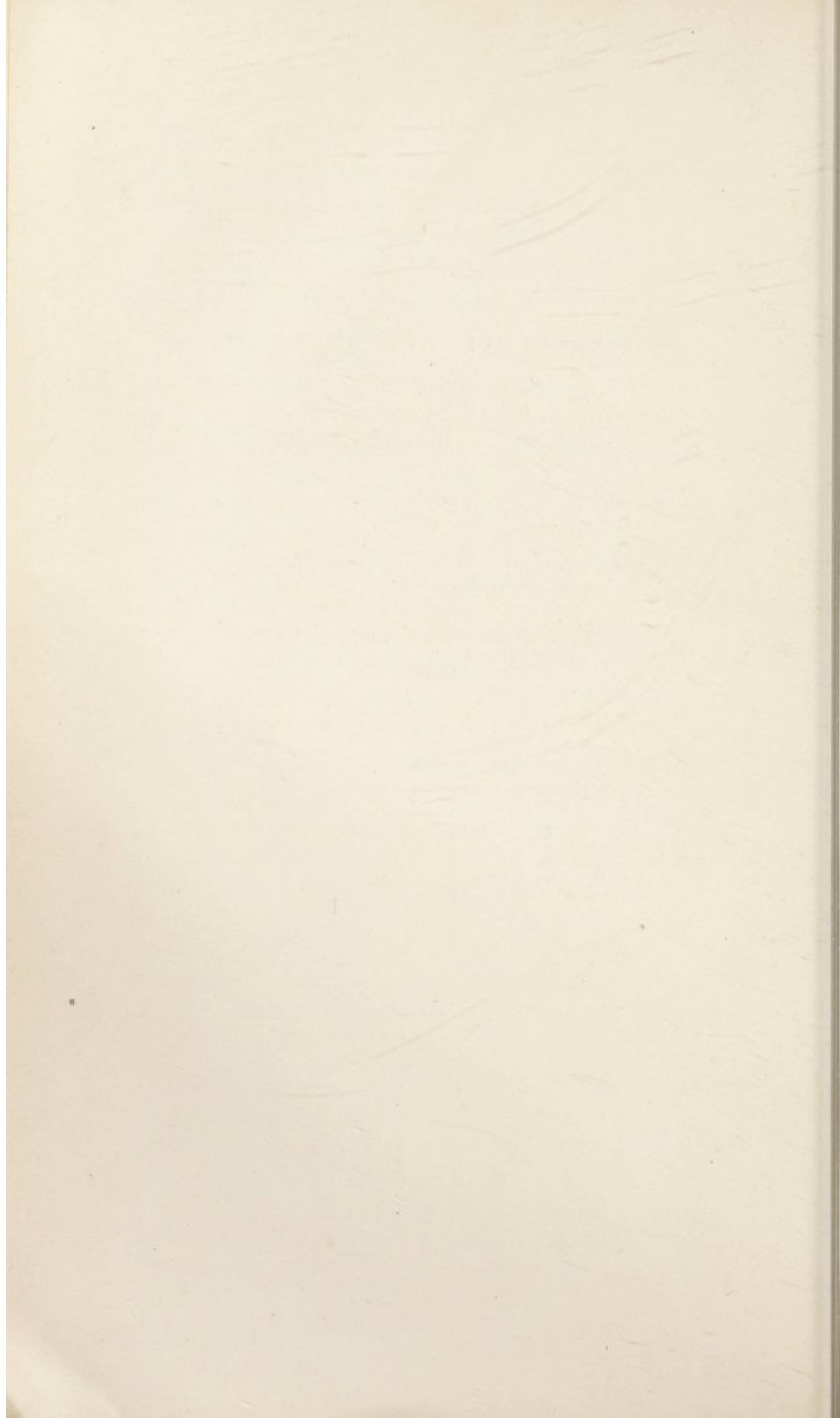
*Health Department,
Town Hall,
May, 1913.*

HOUSING AND THE INFANT DEATH RATE.

During the five years 1908-1912 there have been 37,915 births, and 4,737 deaths of infants under one year, giving an average annual infantile mortality rate of 125 deaths per 1,000 births. Of these, 6,333 infants were under the observation of the Health Visitors throughout their first year of life. Although these included the very poorest and most unfavourably circumstanced of all, only 702 died, which is equivalent to a rate of 110 deaths per 1,000 births.

The following is an analysis of the housing of the above 6,333 children, with the death rate for each class :—

YEAR.	LIVING IN							
	1 Room.		2 Rooms.		3 Rooms.		More than 3 Rooms.	
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
1908	247	32	515	57	312	32	13	2
1909	339	53	694	86	168	32	29	3
1910	536	62	723	68	51	4	7	2
1911	462	68	794	79	77	6	20	1
1912	465	48	746	60	110	6	25	1
5 Years ...	2,049	263	3,472	350	718	80	94	9
Death rate per 1,000 births visited. (5 Years).	128		101		111		96	



INFECTIOUS DISEASES.



INFECTIOUS DISEASES.

NUMBER OF CASES PER 1,000 POPULATION IN 1912.

DISTRICT.	ATTACK-RATE PER 1,000 POPULATION.						
	Small-pox.	Typhus.	Scarlet Fever.	Diphtheria.	Enteric Fever and Continued Fever.	Puerperal Fever.	Erysipelas.
England and Wales ...	0·00	0·00	2·98	1·24	0·23	0·06	0·63
75 County Boroughs ...	0·01	0·00	3·46	1·34	0·28	0·07	0·74
NEWCASTLE-UPON-TYNE ...	...	...	4·43	1·86	0·30	0·02	0·58
Hull ...	...	...	1·16	1·12	0·48	0·08	0·75
Leeds ...	...	...	2·75	1·59	0·16	0·07	0·64
Bradford ...	0·01	...	2·24	1·46	0·89	0·06	0·81
Sheffield ...	...	...	3·79	1·18	0·36	0·12	0·97
Manchester ...	0·00	...	2·92	0·80	0·38	0·19	0·61
Salford ...	...	...	2·36	1·05	0·35	0·11	0·77
Liverpool ...	0·00	0·01	3·80	1·31	0·13	0·05	1·15
Nottingham ...	0·02	...	4·31	1·47	0·30	0·02	0·77
Leicester ...	...	...	5·62	0·96	0·24	0·04	0·72
Stoke-on-Trent ...	...	...	2·96	2·19	0·60	0·14	0·70
Birmingham ...	...	...	7·05	1·17	0·13	0·09	0·91
Cardiff ...	...	...	2·59	2·94	0·31	0·06	0·93
Bristol ...	0·17	...	1·59	1·79	0·20	0·09	0·99
Portsmouth ...	...	...	5·99	4·48	0·67	0·03	0·68
London ...	0·00	0·00	2·51	1·57	0·16	0·08	0·91
Gateshead ...	...	...	2·65	1·08	0·14	0·01	0·49
South Shields ...	0·01	...	2·50	0·57	0·16	0·03	0·60
Tynemouth ...	0·02	...	3·37	1·07	0·19	0·03	0·78
Sunderland ...	...	0·05	1·51	1·08	0·30	0·06	0·40
Middlesbrough ...	...	...	5·11	0·96	0·19	0·03	0·50
County of Northumberland ...	...	...	4·89	1·47	0·38	0·04	0·55
County of Durham ...	0·00	...	6·08	1·34	0·39	0·03	0·64

"CHIEF ZYMOTIC DISEASES"—DEATHS.

REGISTRATION SUB-DISTRICTS AND CITY.																																
	BENWELL.				ELSWICK.*				ST. NICHOLAS†.				ST. ANDREW'S †				ALL SAINTS†.				BYKER.				WALKER.‡				CITY.			
	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.	1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Total.		
Smallpox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Measles ...	...	...	...	10 10	1 ...	22 23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet Fever (Scarlatina)	...	...	...	...	...	...	...	...	...	...	1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria and Membranous Croup }	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Whooping Cough ...	...	1 1	...	...	2 3 2 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Enteric (or Typhoid) Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Simple Continued or Ill- defined Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diarrhœa (including Dysentery, Epidemic or Zymotic Enteritis, and Intestinal Catarrh.) ...	...	2 1 3 2 8	6 3 7 6 22	1 ...	1 2 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
TOTALS ...	...	3 3 3 12 21	11 5 13 28 57	4 1 2 44 51	3 4 10 17 34	7 2 3 22 34	6 7 10 59 82	26 19 15 31	91	60 41 56 213 370	§																					

* Includes Union Workhouse.

† Includes Royal Victoria Infirmary and Fleming Memorial Hospital for sick children.

‡ Includes City Hospital for Infectious Diseases.

§ Representing a Rate of 1·4 per 1,000 population.

NOTIFIED CASES OF INFECTIOUS DISEASE, EXCLUSIVE OF TUBERCULOSIS.

AGES OF CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1912.
(TABLE II. OF LOCAL GOVERNMENT BOARD RETURNS).

NOTIFIABLE DISEASE.	AT AGES—YEARS.							Age not known.	TOTAL (ALL AGES).	
	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards		1912.	1911.
Diphtheria (including Membranous Croup).	11	153	249	57	27	4	...	...	501	507
Erysipelas ...	2	7	6	18	47	54	26	1	161	187
Scarlet Fever ...	18	281	760	84	39	1	...	1	1184	734
Typhus Fever ...	...	...	...	...	...	...	...	...	...	5
Enteric Fever ...	...	11	28	12	29	10	1	...	91	87
Puerperal Septicæmia ...	...	...	...	2	5	...	...	...	7	6
Epidemic Cerebro-Spinal Meningitis ...	...	3	...	...	...	...	...	...	3	2
Acute Poliomyelitis ...	9	17	4	...	...	...	...	...	30	...
TOTALS ...	40	472	1047	173	147	69	27	2	1,977	1,528

WARD DISTRIBUTION OF INFECTIOUS DISEASES. (TABLE II. OF LOCAL GOVERNMENT BOARD RETURNS).

DISEASES.	Benwell.	Fenham.	Elswick East.	Elswick North.	Elswick South.	Arthur's Hill.	Westgate North.	Westgate South.	St. Andrew's North.	St. John's.	St. Nicholas'	All Saints' West.	All Saints' East.	All Saints' North.	St. Andrew's South.	Jesmond.	Heaton.	Byker.	Walker.	TOTAL IN THE CITY.	
Smallpox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Typhus ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Continued																					
Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet Fever	69	57	46	84	142	92	52	23	49	3	9	134	33	5	95	128	152	110	1184		
Diphtheria (including Membranous Croup) ...	41	23	15	21	24	43	25	15	35	1	4	...	10	16	5	29	46	83	65	501	
Enteric (or Ty- phoid) Fever	18	...	2	...	9	8	4	3	7	...	...	2	4	2	4	4	3	11	10	91	
Puerperal Septicæmia	...	...	...	...	2	...	1	...	1	...	...	...	...	...	1	...	2	...	...	7	
Erysipelas ...	11	5	9	7	14	23	7	3	7	1	...	...	7	7	1	5	17	29	8	161	
Epidemic Cerebro- Spinal Meningitis ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	3	
Acute Polio- myelitis ...	3	3	3	...	4	...	...	...	2	1	1	...	...	...	4	2	7	...	...	30	
TOTAL	...	143	88	75	112	195	166	89	44	101	6	14	3	55	58	15	138	197	285	193	1977

For particulars of cases of **Tuberculosis**, see special section, pages 64 to 83.

HOUSEHOLDS AFFECTED WITH INFECTIOUS DISEASES.

DISEASES.	HOUSEHOLDS WITH							Public Institutions.	TOTAL.
	Single Cases.	2 Cases each.	3 Cases each.	4 Cases each.	5 Cases each.	7 Cases each.	8 Cases each.		
Smallpox ...	...	...	...	...	...	...	...	...	...
Scarlet Fever ...	720	137	34	10	2	...	...	10	913
Diphtheria (including Membranous Croup Enteric (or Typhoid) Fever ...	390	26	7	1	...	...	...	7	431
Puerperal Fever ...	55	4	2	...	...	1	1	3	66
Erysipelas ...	7	...	...	...	...	...	...	...	7
Epidemic Cerebro-Spinal Meningitis...	145	...	...	...	...	...	...	16	161
Poliomyelitis...	3	...	...	...	...	...	...	...	3
	28	...	...	...	...	...	...	2	30
TOTAL ...	1,348	167	43	11	2	1	1	38	1,611

* See page 50.

SCHOOLS AND INFECTIOUS DISEASES.—Through the courtesy of the Secretary and of the Principal Medical Officer to the Education Committee, it has been possible to prepare the following statement, shewing the number of households affected with Scarlet Fever and Diphtheria per hundred scholars (calculated upon the average attendances).

SCARLET FEVER AND DIPHTHERIA IN SCHOOLS.

School.	Per cent. of Households infected with	
	Scarlet Fever.	Diphtheria.
Arthur's Hill ...	0.9	0.7
Atkinson Road...	2.2	1.2
Bath Lane ...	2.5	0.9
Bentinck ...	1.4	0.1
Blenheim Street	1.2	0.4
Bolam Street ...	1.6	0.8
Chillingham Road	1.7	0.8
Canning Street	3.0	1.2
Clarence Street	0.2	0.2
Diana Street ...	2.3	1.5
Denton Road ...	—	—
Delaval ...	1.1	0.7
Elswick Road ...	3.0	0.4
Elswick Works	3.5	0.6
Heaton Park Road	2.1	1.0
Mitford Street ...	8.0	1.3
North Heaton ...	1.4	0.7
North View ...	4.2	1.1
Ouseburn ...	0.6	0.3
Raby Street ...	1.3	1.0
Royal Jubilee ...	1.2	1.0
Shieldfield ...	0.8	0.1
South Benwell ...	2.1	1.2
Spital Tongues	2.0	2.7
Saint Peter's ...	0.7	0.7
Sandyford Road	1.2	0.8
Todd's Nook ...	2.0	1.3
Victoria Jubilee	0.9	0.7
Walker East ...	2.0	0.6
Walker West ...	1.9	0.5

Walker Gate ...	...	...	...	4.5	8.0
Welbeck Road ...	...	...	...	2.5	0.6
Westmorland Road ...	...	...	...	4.3	0.4
Westgate Hill ...	...	...	...	2.3	1.2
West Jesmond ...	...	...	...	3.7	0.3
Wingrove ...	...	...	...	1.7	0.4

The Medical Officer of Health continues to inform principals of schools of the presence of infectious diseases in the homes of their pupils, as also of the cessation of infection. A daily return of cases in the homes of scholars is also forwarded to the Principal Medical Officer of the Education Committee.

Of the households infected with Scarlet Fever, 820 contained scholars of one or other of 75 different schools in the City. Scholars of 27 of the largest elementary schools resided in upwards of 10 of such households during the year, the largest number of such households from which children attended any one school being 48.

In two schools there was infection in the households of the scholars during twelve months of the year, in four schools during eleven months, in four schools during ten months, and in six schools during nine months.

School Closure.—Owing to the prevalence of *Scarlet Fever* among school children during the last quarter of 1911, it was decided on the advice of the Medical Officer of Health and the Principal School Medical Officer not to re-open the Council schools after the Christmas holidays until 29th January. This period was extended in the case of 11 schools for another week, and in the case of 5 of these for still another week, all, with the exception of sections of two schools, being open by 12th February. These two sections were re-opened on the 19th and 26th February respectively.

Most of the private schools, Sunday schools, Bands of Hope, and other organised aggregations of children were also voluntarily stopped; it was regrettable, however, that the picture-halls continued to collect together large numbers of children during the period of the outbreak.

An outbreak of *Diphtheria* occurred in connection with the Walker Gate Council School in October and November, 19 cases being notified in all. Six cases, including one teacher, were reported between October 3rd and 21st, and all contacts and suspects among scholars and staff were bacteriologically

examined, and one "carrier" discovered. Six fresh cases occurred shortly afterwards, and as the result of further swabbing six more "carriers" were found. Owing to the fact that the disease was of somewhat severe type in those cases who were clinically affected, it was decided to close the school for a period of three weeks from 8th November. On re-opening, swabs were examined from all teachers and scholars, all of whom were found to be free from the infection. No further cases occurred.

The importance of routine examination of swabs from the throats and especially the noses of all contacts as a preventive measure cannot be over-estimated. Many cases are thus discovered who, although not showing any visible symptoms themselves, are "carriers" of diphtheria germs, often of virulent type, and are capable of giving rise to what might prove to be a fatal attack of the disease in others, and it has been found repeatedly that such "carriers" are the chief means by which infection is spread.

PUBLIC INSTITUTIONS AND INFECTIOUS DISEASE.

The following notifications were received during the year:—

INSTITUTIONS, &c.	Scarlet Fever.	Enteric Fever.	Diph- theria.	Ery- sipelas.	Acute Poliomye- litis	TOTAL.
Royal Victoria Infirmary ...	10	...	3	5	...	18
Fleming Memorial Hospital, North Road... ..	12	1	6	...	2	21
Children's Hospital, City Road	4	...	4	...	...	8
St. Vincent's Home	1	...	...	...	...	1
Workhouse	4	5	3	11	...	23
City Hospital for Infectious Diseases..(Staff)	2	...	8	...	...	10
Throat and Ear Hospital ...	1	...	...	...	...	1
Military Barracks	2	1	9	...	...	12
Deaf and Dumb Institution ...	1	...	1	...	...	2
St. Cuthbert's Grammar School	1	...	...	...	...	1
Total	38	7	34	16	2	97*

* Does not include any cases belonging to the City which could properly be assigned to their homes

MILK SUPPLY IN RELATION TO INFECTIOUS DISEASE.

The source of the milk supply was ascertained in every case of fever and diphtheria. In no case was there reason to suspect that the milk was responsible for the conveyance of infection.

Four cases of Scarlet fever occurred on two farms in the city from which milk is supplied ; one case died almost immediately, the other three were removed to hospital. No case occurred among the customers of the dairymen concerned.

One milk-salesman, and two children of another, both employés of one of the large dairy companies, contracted scarlet fever. All were removed to hospital, and there was no further spread of the disease.

At the present time there exist in Newcastle no less than 704 small general shops in which milk is retailed. None of these is a fit place for dealing with so easily contaminable a commodity as milk, but there is no way of preventing them. As the law stands, every milk shop must be registered, and the Local Authority cannot refuse to register it, no matter how insanitary and unsuitable it is for the purpose. The keeper requires no licence, and provided there is no actual nuisance in the shop, nothing whatever can be done to limit this dangerous trade. When the "Milk and Dairies Bill" becomes law, a remedy may be provided for this highly unsatisfactory state of affairs.

SCARLET FEVER.

Notifications of 1,184 cases were received during the year, and there were 34 deaths, which is equivalent to a mortality among the verified cases of 2·9 per cent. The type of disease was mild on the whole.

DIPHTHERIA.

501 cases were notified during the year, and 33 died, a case mortality of 6·9 per cent. among the verified cases, the lowest yet reached.

While the death-rate from this disease shows little or no

increase during the last thirty years, each successive year brings a steady increase in the number of cases, and a decrease in the fatality. How much this last circumstance depends upon the earlier use of improved methods of treatment cannot be accurately estimated, but the subjoined statement at least indicates that the free distribution of **Antitoxin** to the medical practitioners in the city, first commenced in April 1910, has been accompanied by a marked fall in the proportion of deaths.

Year.	DIPHTHERIA CASES. (All Forms.)	
	Number.	Case Mortality.
1909	456	12·7%
*1910	443	9·0%
1911	507	7·5%
1912	501	6·6%

* Antitoxin first distributed gratis April, 1910.

Distribution of *Antitoxin* was as follows :—

Number of medical practitioners who made application for Antitoxin	...	...	...	...	...	...	66
Number of phials of Antitoxin supplied	...	...	...	...	...	...	337
Number of cases of Diphtheria notified	...	...	...	...	...	...	501
Number of cases of Diphtheria removed to Hospital	...	...	...	...	...	...	410
Number of Hospital cases in which Antitoxin was injected prior to admission	...	...	...	...	...	...	198

MEASLES.

A considerable outbreak of this disease occurred during the winter months 1912-1913. The only means available of judging of the prevalence of measles or any other non-notifiable disease is by the number of deaths registered each week.

Epidemics of measles often appear to start about the west end of the city, and gradually travel east, as was the case in 1912. All the schools were about equally affected; the uselessness of school-closure for the prevention of spread of measles after the occurrence of a number of cases, having been proved over and over again, this measure was not resorted to, but the principle of exclusion of all children who are members of the same family as sufferers, or who have

been otherwise exposed to infection, was adopted, with the exception that children over eight years of age who had already had measles, and were not attending a Department admitting infants, were not excluded. The reason for this is that experience has shown that infection is practically always incurred by direct contact with an actual sufferer and that if all susceptible contacts—*i.e.* those who have not had measles—are excluded, there is little fear of infection being conveyed by non-susceptibles. But since it is difficult to be certain of the measles-history of young children, all under eight years of age are regarded as susceptibles.

Even this method is far from perfect, and the only means of really checking the disease would seem to be by closing down a class entirely, immediately upon the occurrence of the first case. If this were done, the infant classes in some schools would never be open at all!

The following table shows the deaths from measles in each month and their age distribution:—

DEATHS FROM MEASLES.

MONTH, 1912.	YEARS OF AGE.							TOTAL.
	0-1.	1-2.	2-3.	3-4.	4-5.	5-10.	Over 10.	
January ...	—	—	1	—	—	—	—	1
February ...	—	1	—	—	—	—	—	1
March ...	—	—	—	—	—	—	—	—
April ...	—	—	—	—	—	—	—	—
May ...	—	—	—	—	—	—	—	—
June ...	—	—	—	—	—	—	—	—
July...	—	—	—	—	—	—	—	—
August ...	—	1	—	—	—	—	—	1
September ...	—	2	—	—	—	—	—	2
October ...	3	15	4	3	1	3	—	29
November ...	8	29	9	6	5	7	—	64
December ...	15	24	11	4	6	6	—	66
Whole Year...	26	72	25	13	12	16	—	164

The death-rate from measles in 1912 is equivalent to 0·61 per 1,000 population.

The outbreak continued until May of the present year (1913), and for convenience the above table is continued on next page.

MONTH, 1913.	YEARS OF AGE.							TOTAL.
	0-1.	1-2.	2-3.	3-4.	4-5.	5-10.	Over 10.	
January ...	10	10	7	3	3	1	—	34
February ...	1	3	3	1	—	—	—	8
March ...	4	3	—	—	—	—	—	7
April ...	1	—	1	—	—	—	—	2
May ...	2	1	—	—	—	—	—	3

WHOOPIING COUGH.

38 deaths, all under 4 years of age, occurred from whooping cough. The particulars are as follows:—

MONTH.	YEARS OF AGE.				TOTAL.
	0-1.	1-2.	2-3.	3-4.	
January ...	2	—	—	1	3
February ...	2	—	1	—	3
March ...	2	1	—	—	3
April ...	2	—	—	1	3
May ...	—	2	—	—	2
June ...	—	1	1	—	2
July ...	1	—	—	—	1
August ...	3	3	1	—	7
September ...	4	1	—	1	6
October ...	1	—	—	1	2
November ...	1	2	—	—	3
December ...	2	—	1	—	3
Whole Year ...	20	10	4	4	38

ENTERIC FEVER.

91 cases were notified during the year, including 16 which formed part of an outbreak of 26 cases occurring between 4th December, 1911, and 1st March, 1912, at Delaval Terrace, a special note upon which was made in last year's Report. There were 15 deaths, giving a death rate of 0·06 per 1,000 population, and a case mortality of 16·7 per cent.

The 91 cases occurred as follows:—7 were in Institutions, and 84 occurred in 63 households, of which 44 had water closets and 19 had dry closets, the attack rate per 1,000 households being 0·9 where there were water closets, and 2·7 where there were dry closets. That is to say the risk of acquiring enteric fever is three times as great for people living in dry-closet houses as for those with water-closets.

DIARRHŒA.

The autumn of 1912, on account of its cold and inclement weather, has been notable for the almost complete absence of epidemic diarrhœa. Only 20 deaths were registered from this cause during the whole year, as compared with 186 in 1911.

FOOD POISONING.

During the months of March, 16 cases of Ptomaine Poisoning occurred in 4 households.

9 of the cases were stated to be the result of eating "pig's cheek," and 7 were believed to be due to some "ham and tongue" purchased in the same shop.

Owing to delay in the information reaching the Health Department, no samples of the suspected articles could be obtained, and careful inquiry made at the shop, which was found to be exceptionally clean and well conducted, failed to reveal the cause of the infection. No deaths occurred.

TYPHUS.

No case of this disease occurred during the year.

SMALLPOX

was also entirely absent. The following are the particulars, courteously furnished by the Clerk to the Guardians, of infant **Vaccination** in Newcastle during recent years. (Walker, which belongs to the Tynemouth Rural area for registration purposes, is not included.)

Year.	Births Registered.	Successful Vaccinations.	Unsuccessful Vaccinations.	Exemption Certificates	
				Number.	Percentage to Total Births.
1905	7,958	7,264	27	65	0·8
1906	7,721	6,733	28	92	1·2
1907	7,610	6,702	16	94	1·2
*1908	7,747	6,414	20	449	5·8
1909	7,180	5,667	30	517	7·2
1910	7,023	5,532	22	683	9·7
1911	6,604	5,002	24	767	11·6
1912	6,715	4,625	18	982	14·6

* Vaccination Act, 1907, came into force.

ERYSIPELAS.

161 cases of this disease were notified, and there were 9 deaths.

PUERPERAL SEPTICÆMIA.

Inquiries were made concerning 7 cases, 2 of which occurred in the practice of midwives.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

3 notifications were received during the year, 1 being in the Benwell district and 2 in Byker. 1 patient died, the other 2 were removed to hospital and recovered. Examination of the cerebro-spinal fluid of the latter two confirmed the diagnosis.

ACUTE POLIOMYELITIS.

Owing to recent prevalence of this disease throughout the country, it was made compulsorily notifiable in Newcastle, by local order, on July 4th.

During the ensuing six months 30 cases came under observation. Of these, 6 were cases of some months standing, 3 made a complete recovery, 20 were left with a greater or less degree of paralysis, 2 died, and 5 were lost sight of.

Most of the patients were under three years of age, and males were affected to a slightly greater extent than females.

The circumstances were specially investigated in 27 households. In these there was an average of 2.6 children under twelve years per house, and 2.9 persons over twelve. In no instance was a second case noted in one house, although none of the sick rooms was efficiently isolated, the majority of the patients being nursed in the kitchen, to which the rest of the family had free access. No over-crowding in the affected households was noted, and the ventilation in each case was good. In only two instances were there dry closets.

Ten of the dwellings were situated on or adjacent to roads on which there is a considerable amount of traffic, or in association with back streets that were none too clean.

Flies were not present in any great number owing to the coldness of the weather.

CITY HOSPITALS FOR INFECTIOUS DISEASES.

Accommodation.

NAME AND SITUATION OF HOSPITAL.	TOTAL AVAILABLE BEDS.
City Hospital for Infectious Diseases, Walker Gate...	172
Smallpox and Isolation Hospitals, Town Moor ...	172

CITY HOSPITAL, WALKER GATE.

Admissions during the year—1,542.

RATE PER CENT. OF CASES REMOVED TO HOSPITAL TO CASES NOTIFIED
IN 1890, AND DURING EACH OF THE YEARS 1901-1912.

	1890	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
Scarlet Fever..	18·4	40·0	41·9	44·3	57·1	50·1	53·2	64·8	73·6	78·6	84·5	83·8	88·0
Diphtheria ...	8·3	28·8	24·1	24·5	35·8	36·8	37·4	51·4	68·1	76·1	80·1	80·5	81·8
Enteric Fever..	38·9	44·7	50·9	58·7	53·3	52·0	78·6	62·1	82·9	82·3	90·5	92·0	91·2
All cases of the above to- gether with Continued & Typhus Fever	21·3	39·7	42·0	45·1	46·0	47·8	56·6	59·9	72·6	78·0	83·0	83·1	86·4

Owing to the great pressure upon the accommodation during a large part of the year, an endeavour was made to encourage the friends in a number of instances to contrive to isolate their patients at home; in few cases was the attempt successful, hospital treatment being nearly always demanded. The cases whose removal to hospital is most usually resisted are those whose home conditions absolutely preclude any possibility of efficient isolation.

Diseases and Mortality Rates.

MORTALITY OF CASES TREATED IN HOSPITAL AS COMPARED WITH CASES TREATED
AT HOME, DURING 1912.

DISEASE.	HOSPITAL. (Verified Cases.)			HOME.		
	Total Cases.	Deaths.	Case Mortality per cent.	Total Cases.	Deaths.	Case Mortality per cent.
Scarlet Fever ...	1018	34	3·3	142	4	2·8
Diphtheria ...	383	27	7·0	91	7	7·7
Enteric Fever ...	82	13	15·8	8	2	25·0

Diseases Admitted.

Admitted as		After observation proved to be																						
	No. of Cases.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Measles.	Scarlet Fever Contact.	Tonsillitis.	Vincent's Angina.	Erythema.	Purpura Hemorrhagica.	Copiba Rash.	Simple Laryngitis.	Bronchitis.	Broncho-Pneumonia.	Epidemic Cerebro-Spinal Meningitis.	Tuberculous Meningitis.	Postbasal Meningitis.	Potomane Poisoning.	Acute Rheumatism.	Carcinoma Uteri.	Gastro-Enteritis.	Otitis Media.	Irritative Desquamation.	
Scarlet Fever	...	1,042	1,008	2	2	2	6	...	11	...	...	...	2	...	...	...	1	...	1	1	...	3	1	1
Diphtheria	...	410	10 381	...	2	...	10	1	...	1	...	3	1	1	...	...	...	...	...	...	...	...	...	
Enteric Fever	...	83	...	80	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	
Measles	...	3	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Typhus Fever	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
Epidemic Cerebro-Spinal Meningitis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	
Scarlet Fever Contact	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
TOTALS	...	1,542	1,018 383	82	7	3	16	1	11	1	1	3	3	1	2	1	1	1	1	1	1	3	1	1

DISEASES.	ADMISSIONS.										DEATHS.															
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Scarlet Fever	135	100	81	62	75	70	69	69	73	108	88	88	1,018*	5	4	2	2	2	1	2	2	4	4	7	3	34
Diphtheria	45	36	33	34	27	21	21	30	35	29	47	25	383+	2	2	2	2	4	1	1	1	3	1	4	4	27
Enteric Fever	16	13	3	7	9	5	2	6	1	9	2	9	82	2	2	2	2	2	1	1	2	3	3	1	1	13
Measles	...	...	...	...	...	...	...	...	...	1	1	5	7	...	...	...	...	...	...	...	...	...	...	1	...	1
Scarlet Fever Contact	1	...	2	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonsillitis	2	1	2	1	1	1	3	1	...	1	1	2	16	...	...	...	...	...	...	...	...	...	...	...	...	...
Vincent's Angina	...	...	...	...	1	...	1	...	2	...	1	2	11	...	...	...	...	...	...	...	...	...	...	...	...	...
Erythema	3	1	...	...	...	...	1	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1
Purpura Hemorrhagica	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Copaiba Rash	...	...	...	...	...	...	1	...	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Simple Laryngitis	1	...	...	...	...	...	1	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	1	...	...	...	...	...	1	...	...	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Broncho-Pneumonia	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	1
Epidemic Cerebro-Spinal Meningitis	...	1	...	...	...	...	...	...	1	...	...	...	2	...	1	...	1	...	...	...	...	...	...	...	...	1
Tuberculous Meningitis	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1
Postbasal Meningitis	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1
Ptomaine Poisoning	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Rheumatism	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1
Carcinoma Uteri	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Gastro-Enteritis	...	...	...	...	...	...	...	...	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	1
Otitis Media	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
Irritative Desquamation	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	204	152	122	105	114	98	100	109	112	150	141	135	1,542	9	9	5	5	8	3	4	7	7	5	12	8	82

* Includes 2 Probationers.

† Includes 6 Probationers, 1 Ward Maid, and 1 Laundress.

NOTE.—The deaths given above for each month refer to patients admitted during that month only, and have no reference to the actual number of deaths in that month.

Of the foregoing, the following **died within 24 hours of admission**—Scarlet Fever 4, Diphtheria 7, Enteric Fever 1, Epidemic Cerebro-Spinal Meningitis 1, and Post-basal Meningitis 1, Total 14.

**Present Death Rate compared with those
of previous years—**

RETURN SHEWING THE NUMBER OF CASES OF
SCARLET FEVER, DIPHTHERIA, AND ENTERIC FEVER ADMITTED TO HOSPITAL,
AND MORTALITY RATES PER CENT.

1890-1896.

YEAR.	NUMBER OF CASES ADMITTED TO HOSPITAL.			NUMBER OF DEATHS.			CASE MORTALITY, PER CENT.		
	Scarlet Fever.	Diph- theria.	Enteric Fever.	Scarlet Fever.	Diph- theria.	Enteric Fever.	Scarlet Fever.	Diph- theria.	Enteric Fever.
1890	114	15	80	2	1	14	1·8	6·7	17·5
1891	110	10	67	5	6	6	4·5	60·0	8·9
1892	244	18	26	8	5	5	3·3	27·8	19·2
1893	202	15	49	5	2	6	2·5	13·3	12·2
1894	230	8	60	6	3	13	2·6	37·5	21·7
1895	319	41	75	10	10	21	3·1	24·4	28·0
1896	289	28	78	7	—	14	2·4	—	18·0
	1,508	135	435	43	27	79	2·8	20·0	18·2

1906-1912.

1906	442	133	52	7	27	9	1·4	20·3	17·3
1907	390	177	35	14	17	6	3·6	9·5	17·1
1908	283	220	88	7	21	5	2·5	9·5	5·7
1909	623	334	56	26	31	12	4·2	9·3	21·4
1910	465	317	47	11	29	5	2·4	9·1	10·6
1911	605	375	68	14	33	11	2·3	8·8	16·2
1912	1,018	383	82	34	27	13	3·3	7·0	15·8
	3,826	1,939	428	113	185	61	3·0	9·5	14·3

Diphtheria.—*Cases in Hospital.*—Of the 383 patients in Hospital, 317 were faucial, pharyngeal, or nasal cases, and of these 18, or 5·7 per cent., died. 65 were also laryngeal or tracheal, and of these 9, or 13·9 per cent., died. Tracheotomy was performed on 22 patients, of whom 5, or 22·7 per cent., died. 1 of the cases was non-clinical, being merely a “carrier” of the diphtheria bacillus. It is of interest to note that of 38 cases in which the nasal passages were involved 11 died.

Of the 27 deaths, 7 were of patients practically moribund on admission, who died within 24 hours.

As hitherto, the patients sent to Hospital came, generally speaking, from much less favourable surroundings than those treated at home, and suffered from a severer type of the disease.

Antitoxin is administered to all cases of Diphtheria admitted to Hospital which have not received the remedy at home. Owing to the free supply of Antitoxin to private medical practitioners, patients receive the treatment earlier than previously.

Cases of **Mixed Infection.**—176 patients sent into Hospital, or 11·4 per cent., were found on admission to be suffering from two or more distinct infectious diseases, as follows:—

Scarlet Fever and Diphtheria	...	...	...	76
Scarlet Fever and Measles	...	...	...	7
Scarlet Fever and Varicella	...	...	...	10
Scarlet Fever and Pertussis	...	...	...	2
Scarlet Fever and Phthisis	...	...	...	12
Scarlet Fever and other Tuberculous Diseases	...	...	...	3
Scarlet Fever and Enteric Fever	...	...	...	1
Scarlet Fever and Ringworm	...	...	...	8
Scarlet Fever and Impetigo	...	...	...	1
Scarlet Fever and Scabies	...	...	...	5
Scarlet Fever and Ophthalmia	...	...	...	2
Scarlet Fever and Vaginitis	...	...	...	3
Scarlet Fever and Vincent's Angina	...	...	...	1
Scarlet Fever and Gastro-Enteritis	...	...	...	1
Scarlet Fever, Pertussis, and Phthisis	...	...	...	1
Diphtheria and Scarlet Fever	...	...	...	15
Diphtheria and Measles	...	...	...	6
Diphtheria and Varicella	...	...	...	3
Diphtheria and Pertussis	...	...	...	1
Diphtheria and Phthisis	...	...	...	1
Diphtheria and Ringworm	...	...	...	4
Diphtheria and Scabies	...	...	...	1
Diphtheria and Meningitis	...	...	...	1
Diphtheria and Syphilis	...	...	...	1
Diphtheria, Varicella, Pertussis, and Pneumonia	...	...	...	1
Diphtheria, Pertussis, and Measles	...	...	...	1
Diphtheria, Scarlet Fever, and Measles	...	...	...	1
Enteric Fever with Phthisis	...	...	...	6
Enteric Fever with Syphilis	...	...	...	1

Expenses of Maintenance.—Of the patients admitted, the expense of maintenance is charged as under:—

	Cases.
To the Newcastle Sanitary Authority	1,540
To private guarantors	2
Total	<u>1,542</u>

BACTERIOLOGICAL LABORATORY, CITY HOSPITAL.—

The following examinations were made in connection with the patients in the wards:—

Swabs from Diphtheria cases	1,119
Swabs from Scarlet Fever cases, for presence of	
Diphtheria germs	284
Blood for Widal reaction (Enteric Fever) ...	14
Urine for Bacillus Coli	4
Cerebro-Spinal Fluid, for Meningococcus ...	5
Pus (various sources), for organisms	20
Ear Discharges	5
Eye Discharges	2
Mouth Infections—deposits	3
Hair for Ringworm	3
TOTAL	<u>1,459</u>

Swabs were examined from the throats of all scarlet fever cases which exhibited excessive local inflammation, or any membranous exudate, and 26 per cent. were found to be positive; also from noses where there was purulent discharge, and 53 per cent. of these were positive, *i.e.*, contained diphtheria bacilli.

SCARLET FEVER PREVALENCE AND STAFFING DIFFICULTIES.

Owing to the unusually large number of cases of Scarlet Fever admitted, the average number of patients (all diseases) under treatment at one time was much higher than in previous years, the lowest being 132, and the highest 277. The accommodation for scarlet fever was quite insufficient to meet the requirements, and recourse had to be had to the

Smallpox and Isolation Hospitals on the Town Moor, which were in use for some 528 clean convalescent cases of scarlet fever from 23rd October, 1911, to 11th June, 1912, and again from 8th October, 1912, to 18th March, 1913.

As shown in a previous table, no less than 11·4 per cent. of all cases proved on admission to be suffering from two or more infectious diseases, necessitating extensive use of the isolation wards, and so greatly increasing the administrative work. During the exceptionally busy periods in the spring and autumn many of the younger nurses left, on account of the very heavy work. Considerable difficulty was experienced in replacing them, owing to the low wage offered, and to a general shortage of nurses throughout the country.

The Sanitary Committee, however, have since reconsidered the scale of salaries, and this, together with a decrease in the number of patients admitted, has overcome the difficulty for the present at least.

AVERAGE STAY IN HOSPITAL DURING LAST SIX YEARS.

Year.	All Cases.		Scarlet Fever.		Diphtheria.		Enteric Fever.		Other Diseases.	
	No.	Average Stay in Days.	No.	Average Days.	No.	Average Days.	No.	Average Days.	No.	Average Days.
1907	647	52·4	390	59·7	177	42·4	35	39·9	46	39·2
1908	614	48·4	283	56·3	220	40·0	88	48·5	25	31·8
1909	1,090	49·2	623	54·3	334	41·6	56	45·9	78	42·8
1910	912	44·4	465	51·3	317	37·2	47	46·4	83	32·5
1911	1,110	45·6	605	50·5	375	41·9	68	44·4	62	20·2
1912	1,542	45·8	1,018	46·1	383	45·7	82	46·2	59	20·9

" RETURN " CASES OF SCARLET FEVER, Year 1912.

SCARLET FEVER.	" Infecting " Cases.		" Return " Cases.		" Infecting " Cases.	
Total Admissions.	No.	Per-centage.	No.	Per-centage.	Average Days in Hospital.	Average Day of Disease when Discharged.
1,018	47	4·6	52	5·1	49·9	51·6

THE SEASONAL OCCURRENCE WAS AS FOLLOWS:—

Quarter.	Total Scarlet Fever Admissions.	" Infecting " Cases.		" Return " Cases.	
		No.	Percentage.	No.	Percentage.
January to March ...	316	16	5·0	19	6·0
April to June ...	207	8	3·8	9	4·3
July to September ...	211	9	4·2	9	4·2
October to December ...	283	14	4·9	15	5·3

" Return " Cases for Years 1906-1912.

Year.	Total Scarlet Fever Admitted.	" Infecting " Cases.		" Return " Cases.	
		No.	Percentage.	No.	Percentage.
1906	442	7	1·6	10	2·3
1907	390	11	2·8	17	4·4
1908	283	4	1·4	5	1·8
1909	623	23	3·7	30	4·8
1910	465	18	3·9	20	4·3
1911	605	26	4·3	30	4·9
1912	1,018	47	4·6	52	5·1

TUBERCULOSIS OF THE LUNG.

The following is a summary of the notifications received under the Newcastle-upon-Tyne Corporation Act, 1911, of which the section providing for compulsory notification of all cases of Tuberculosis of the Lung came into force on 1st January, 1912, together with the work done in connection therewith.

PARTICULARS OF NOTIFIED CASES.	Quarter ending—				Total for Year.
	March 31st.	June 30th.	Sept. 30th.	Dec. 31st.	
Private Cases of Medical Practitioners ...	190	58	80	78	406
Public Institution Cases ...	177	130	91	89	487
Information obtained from Death Returns, Insurance Committee, or from other sources	15	18	13	33	79
TOTAL ...	382	206	184	200	972

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total for Year.
Deaths:—					
Private Cases of Medical Practitioners	46	43	29	40	158
Public Institution Cases ...	50	53	37	60	200
TOTAL	96	96	66	100	358

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total for Year.
Total Notifications:— (i.e., counting all re-notifica- tions and cases of which in- formation was only received from the Death Returns, or through other sources) ...	450	279	255	265	1249
Notified once	382	206	184	200	972
" twice by different doctors	51	54	44	43	192
" three times " "	16	12	13	18	59
" four " " "	1	5	9	3	18
" five " " "	...	2	4	...	6
" six " " "	...	...	1	...	1
" seven " " "	...	...	...	1	1

Notifications under the Tuberculosis Regulations, 1908 and 1911.

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year.
Notified under Form A. (These notifications are included in total notifications) ...	32	35	46	33	146
Notified under Form B. (These notifications are included in total notifications) ...	8	4	5	1	18

Age of Persons notified.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Whole Year.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	...	...	1	1	...	...	...	...	1	1
Above 1 yr. and under 5 yrs..	2	3	...	1	3	...	6	3	11	7
" 5 yrs " 15 "	15	23	24	27	18	21	15	23	72	94
" 15 " 25 "	52	43	19	22	19	19	23	21	113	105
" 25 " 45 "	85	64	42	31	38	29	51	29	216	153
" 45 " 65 "	38	30	22	7	20	10	17	19	97	56
Aged 65 and upwards ...	3	3	1	1	3	2	1	...	8	6
Age not known	14	7	5	2	2	...	2	...	23	9
TOTALS {	209	173	114	92	103	81	115	85	541	431
	382		206		184		200		972	

Ward Distribution of the Cases notified:—

WARD.	Population of Ward (census 1911).	Cases Notified in Ward.	Average per 1,000 of Population.
Benwell	17,265	56	3·24
Fenham	10,833	35	3·23
Elswick East	9,833	33	3·35
Elswick North	16,309	53	3·25
Elswick South	17,510	85	4·85
Arthur's Hill	22,501	97	4·31
Westgate North... ..	11,820	52	4·39
Westgate South... ..	8,960	55	6·13
St. Andrew's North	11,735	32	2·72
St. John's	1,772	3	1·69
St. Nicholas	1,294	4	3·09
All Saints' West	2,515	20	7·95
All Saints' East	12,388	53	4·27
All Saints' North	11,372	44	3·86
St. Andrews' South	2,716	8	2·94
Jesmond	21,374	49	2·29
Heaton	30,077	83	2·75
Byker	40,543	158	3·89
Walker	15,786	52	3·29
In City	266,603	972	3·64

Included in All Saints' West Ward are 6 persons who gave their place of residence as Lodging Houses in the City.

Thus the **Wards in which Consumption is most rife** are All Saints' West, Westgate South, Elswick South, Westgate North, Arthur's Hill, All Saints' East, Byker, and All Saints' North, in order of demerit.

One Special Inspector was appointed to visit the houses of notified cases, not the private patients of medical practitioners, to inquire into the sanitary circumstances, advise as to precautions, and to disinfect after all deaths and removals, and wherever else requested.

The following are the particulars of the work done, and information obtained, by this officer:—

Occupation of Patients.

Trade or Occupation.	No.	Trade or Occupation.	No.	Trade or Occupation.	No.
Housewives	78	Brought forward ...	386	Brought forward ...	440
Scholars	60	Patternmakers ...	3	Cooper	1
Labourers	57	Pottery Workers ...	3	Draughtsman ...	1
Engineers	22	White Lead Workers	3	Dentist	1
Domestic Servants ...	21	Waitresses	3	Governess	1
Clerks	15	Butchers	2	Journalist	1
Machinemen	15	Chemists	2	Leather Finisher ...	1
Shop Assistants ...	12	Electric Works ...	2	Metal Cleaner ...	1
Cartmen	11	Grocers	2	Milkman	1
Hawkers	8	Gardeners	2	Musician	1
Miners	8	Hairdressers ...	2	Mattress Maker ...	1
Charwomen	9	Insurance Agents ...	2	Newsagent	1
Barmen	7	Messengers	2	Nurse	1
Riveters	6	Pipemakers	2	Plater	1
Tailors	5	Postmen	2	Plasterer	1
Cabinet Makers ...	4	Rag Sorters	2	Student	1
Dressmakers	4	Rabbit-down Workers	2	Stableman	1
Joiners	4	Seamen	2	Stocking Knitter ...	1
Laundresses	4	Strikers	2	Sugar Boiler	1
Painters	4	Stonemasons	2	Tinsmith	1
Porters	4	Teachers	2	Tripe Preparer ...	1
Printers	4	Travellers	2	Telegraphist	1
Bakers	3	Architect	1	Winder (Armature) ...	1
Bookbinders	3	Blacksmith	1	Whitesmith	1
Bricklayers	3	Boilermaker	1	Warehouseman ...	1
Electricians	3	Boxmaker	1	No	
Moulders	3	Bottlewasher ...	1	Occupation { Males . 27 } { Females 47 }	74
Plumbers	3	Boot Repairer ...	1	Occupation { Males . 46 } { Females 16 }	62
Packers	3	Cattle Drover ...	1		
Policemen	3	Conductor	1		
Carried forward ...	386	Carried forward ...	440	Total cases visited ...	600

Notices Prohibiting Spitting.—1,000 posters—"Do Not Spit"—were placed prominently on all the advertising stations in the City, and remained for one month.

SANATORIUM TREATMENT.

68 cases were admitted to the 20 beds maintained by the Corporation at Barrasford Sanatorium.

There were 121 applicants examined by the Sanatorium Medical Board, of whom 67 were passed and admitted, together with 1 passed in the previous year, and awaiting admission; 2 were passed, but had to await admission until the present year; 42 were rejected, 7 withdrew their applications, and the consideration of 3 was deferred.

Of the 72 patients discharged from the Sanatorium up to December 31st, 66 showed improvement of greater or less degree, 3 were not improved, 2 left prematurely, and 1 had died.

527 days' treatment stood to the credit of the Corporation to be carried forward to 1913.

BARRASFORD SANATORIUM.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FROM 15th JANUARY TO 31st MARCH, 1912.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
		CASES REMAINING UNDER	TREATMENT AT	DATE OF LAST	REPORT:	15TH JANUARY, 1912.	
194	Mrs. E. S. ...	East Parade, Newcastle	14 Oct., 1911	15 Feb., 1912	32	11 lbs.	Very fair progress. Capable of light household duties.
195	Miss M. E. B.	Hammond Street, Newcastle	28 " "	27 Jan., "	12	23 "	Fair progress. Capable of light work.
196	T. B. T. ...	Langhorn Street, Newcastle	28 " "	27 " "	12	5 "	Activity of disease—very marked on admission—much lessened by treatment.
198	F. G. ...	Byker Bank, Newcastle	11 Nov., "	10 Feb. "	26	8 "	Has not done as well as his sister—also a Corporation case—who is now very well nearly two years after leaving here.
199	H. C. ...	North View, Newcastle	18 " "	17 " "	33	24 "	Should do well with care.
200	J. G. H. ...	Bothal Street, Newcastle,	18 " "	24 Jan., "	9	lost 1 lb.	Left prematurely owing to further development of tuberculous disease.
201	T. B. ...	Trewitt Road, Newcastle	18 " "	17 Feb., "	33	14 lbs.	Good progress. Capable of work.
202	J. McD. ...	Shields Road, Newcastle	25 " "	24 " "	40	14 "	A severe case with throat lesion. Improved.
203	L. J. M. ...	(Elvet Street, Newcastle	2 Dec., " 24 Feb., 1912	23 Jan., " 30 Mar., "	8 35	lost $\frac{1}{2}$ lb.	Activity of disease lessened. Capable of light work.
204	T. P. ...	Sidney Grove, Newcastle	2 Dec., 1911	2 " "	47	8 lbs.	Good progress. Capable of work.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FROM 15TH JANUARY TO 31ST MARCH, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
		CASES REMAINING UNDER	TREATMENT AT	DATE OF LAST	REPORT:	15TH JANUARY, 1912.	
205	F. P.	... Hawick Crescent, Newcastle	23 Dec., 1911	30 Mar., 1912	75	19 lbs.	Good progress. Capable of work.
206	F. H. W.	... Ash Street, Newcastle	28 " "	28 " "	73	19 "	Good progress. Capable of work.
207	W. J. J.	... Avondale Road, Newcastle	11 Jan., 1912	23 " "	68	12 "	Progress good at first, latterly not so good.
208	N. F. B.	... Kingsley Terrace, Newcastle	11 " "	16 Jan., "	1	—	Left owing to distaste for Sanatorium life.
209	L. L.	... Conyers Road, Newcastle	13 " "	(still in)	76	4 "	Good progress. Capable of work.
210	J. B.	... Janet Street, Newcastle	13 " "	Do.	76	—	Good progress. Capable of work.

MEDICAL REPORTS ON NEWCASTLE CORPORATION CASES ADMITTED FROM THE 15TH JANUARY TO 31ST MARCH, 1912.

211	C. G.	... Back Hammond Street Newcastle	20 Jan., 1912	30 Mar., 1912	70	11 lbs.	Left prematurely owing to calls of business; good progress, capable of work.
212	Miss M. S.	... Leazes Terrace, Newcastle	20 " "	(still in)	71	3 "	Good progress. Capable of light work.
213	T. S.	... Atkinson Road, Newcastle	20 " "	23 Jan., "	3	—	Left owing to objection to stay in bed; in spite of much persuasion.
214	A. L.	... Byron Terrace, Newcastle	27 " "	(still in)	64	14 lbs.	Good progress. Capable of work.
215	Miss A. T.	... Melbourne Street, Newcastle	27 " "	Do.	64	12 "	Doing well.

CASES ADMITTED FROM THE 15TH JANUARY TO 31ST MARCH, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
216	C. W. R.	Goldspink Lane, Newcastle	27 Jan., 1912.	(still in)	64	2 lbs.	A severe, acute case; is making slight progress.
217	A. D.	Stanton Street, Newcastle	10 Feb., "	Do.	50	10 "	Good progress; capable of work.
218	Miss I. P.	Diana Street, Newcastle	10 " "	Do.	50	9 "	Very fair progress.
219	Miss M. B.	Middle Street, Walker	17 " "	Do.	43	12 "	Very fair progress.
220	J. R.	Belsay Place, Newcastle	24 " "	Do.	36	3 "	Good progress.
221	J. R.	College Yard, Newcastle	24 " "	Do.	36	13 "	Good progress.
222	Mrs. I. B.	Pitt Street, Newcastle	24 " "	Do.	36	5 "	Activity of the disease slowly lessening.
223	W. L.	Benson Road, Newcastle	2 Mar., "	Do.	29	10 "	Good progress.
224	T. S.	Stepney Lane, Newcastle	2 " "	Do.	29	14 "	Good progress.
225	E. H. H.	North View Terrace, Newcastle	2 " "	Do.	29	11 "	Good progress.
226	Mrs. M. E. B.	Langhorn Street, Newcastle	9 " "	Do.	22	Not weighed	Little progress as yet.
227	Mrs. E. B.	Paces Buildings, Newcastle	9 " "	Do.	22	5 lbs.	Fair progress.
228	Mrs. C. B.	Prudhoe Place, Newcastle	9 " "	Do.	22	$\frac{1}{2}$ "	Some progress.

CASES ADMITTED FROM THE 15TH JANUARY TO 31ST MARCH, 1912.—*Continued.*

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
229	J. R.	..	23 Mar., 1912	(still in)	8	Not yet weighed.	Good progress so far.
230	T. T.	Crawhall Road, Newcastle	23 .. "	Do.	8	Do.	
231	T. O.	Bolam Street, Newcastle	23 .. "	Do.	8	Do.	
232	J. B.	Elswick Road, Newcastle	30 .. "	Do.	1	Do.	

Less—Balance in hand from last Report ...		Total ...	1,421	SUMMARY OF CASES	
Add—Allowance for time elapsing between the discharge of one Patient and the admission of another, 3 days each, 17 Patients ...		...	929	SUBMITTED TO MEDICAL BOARD.	
Number of days to 31st March, 1912, for which payment is due ...		...	492	Applications received ...	36
		...	51	Passed and admitted as above	22
		...	543	Less—Applicant passed and awaiting admission as per last analysis ...	1
		...	...	Rejected ...	21
		...	...	Withdrawn ...	12
		...	...	Deferred ...	2
		...	...	...	1
		...	...	...	36

ARMSTRONG, *Chairman.*
O. W. OGDEN, *Hon. Secretary.*

10th April, 1912.

BARRASFORD SANATORIUM.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 30TH JUNE, 1912.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
		CASES REMAINING UNDER	TREATMENT AT	DATE OF LAST	REPORT:	31ST MARCH	1912.
209	L. L.	Conyers Road, Newcastle	13 Jan., 1912	13 April, 1912	13	4 lbs.	A case that stood full exercise and work well here.
210	J. B.	Janet Street, Newcastle	13 " "	13 " "	13	1 "	A chronic case with much disease which has nevertheless quickly and continuously improved. Now capable of work.
212	Miss M. S.	Leazes Terrace, Newcastle	20 " "	19 " "	19	4 "	
214	A. L.	Byron Terrace, Newcastle	27 " "	26 " "	26	17 "	Very good progress though no slight case. Employed here on outdoor painting.
215	Miss A. T.	Melbourne Street, Newcastle	27 " "	4 May, "	34	15 "	Good progress. Fit for outdoor work.
216	C. W. R.	Goldspink Lane, Newcastle	27 " "	27 April, "	27	1 "	A severe complicated case with very slow improvement.
217	A. D.	Stanton Street, Newcastle	10 Feb., "	11 May, "	41	15 "	Very good progress. Fit for work.
218	Miss I. P.	Diana Street, Newcastle	10 " "	11 " "	41	7 "	Improvement more in general than in pulmonary condition.
219	Miss M. B.	Middle Street, Newcastle	17 " "	18 " "	48	18 "	The same.
220	J. R.	Belsay Place, Newcastle	24 " "	25 " "	55	5 "	A chronic case with facial lupus. Improved and gone back to work.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 30TH JUNE, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
		CASES REMAINING UNDER	TREATMENT AT	DATE OF LAST	REPORT:	31ST MARCH, 1912.	
221	J. R.	College Yard, Newcastle	24 Feb., 1912	25 May, 1911	55	19 lbs.	Very good progress. Employed here on outdoor painting.
222	Mrs. I. B.	Pitt Street, Newcastle	24 " "	23 " "	53	10 "	Improvement more in general than in lung condition.
223	W. L.	Benson Road, Newcastle	2 Mar., "	1 June, "	62	17 "	Very good progress, capable of resuming occupation.
224	T. S.	Stepney Lane, Newcastle	2 " "	30 Apr., "	30	19 "	Improvement in the short time here. Dismissed.
225	E. H. H.	North View Terrace, Newcastle	2 " "	2 June, "	63	7 "	Very good progress. Employed here on outdoor work.
226	Mrs. M. E. B.	Langhorn Street, Newcastle	9 " "	8 " "	69	lost weight	A serious case that improved none.
227	Mrs. E. B.	Paces Buildings, Newcastle	9 " "	8 " "	69	22 lbs.	Some improvement.
228	Mrs. C. B.	Prudhoe Place, Newcastle	9 " "	8 " "	69	lost weight	No improvement.
229	J. R.	Crawhall Road, Newcastle	23 " "	22 " "	83	8 lbs.	An advanced case but improved. Fit for insurance work.
230	T. T.	Bolam Street, Newcastle	23 " "	22 " "	83	17 "	Good improvement; fit for light work.
231	T. O.	Elswick Road, Newcastle	23 " "	22 " "	83	20 "	Very good progress; fit for work on pit-bank.
232	J. B.	Shuttleworth Street, Newcastle	30 " "	29 " "	90	20 "	Very good progress; fit for work.

CASES ADMITTED DURING THE QUARTER ENDING 30TH JUNE, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
233	Mrs. M. M. ...	Morton Street, Byker	6 April, 1912	(still in)	85	8 lbs.	Very good progress. On full exercise.
234	G. W. C. ...	Loadman Street, Newcastle	6 " "	(still in)	85	6 "	Disease only sub-quiet. Formerly had tuberculous disease elsewhere.
235	R. C. ...	Welbeck Road, Newcastle	20 " "	(still in)	71	13 "	Progress slow.
236	A. E. L. ...	East End Police Station, Newcastle	20 " "	(still in)	71	18 "	Good progress and throat better.
237	R. H. L. ...	Conyers Road, Newcastle	27 " "	(still in)	64	12 "	Good progress but for slight relapse as to the emphysema he formerly had.
238	T. T. ...	Mill Lane, Newcastle	27 " "	(still in)	64	9 "	Slow progress.
239	I. B. ...	Callerton Place, Newcastle	11 May, "	(still in)	50	11 "	Very good progress. On full exercise.
240	J. T. H. ...	Rosedale Terrace, Newcastle	25 " "	(still in)	36	14 "	The same.
241	D. F. ...	Clydesdale Road, Newcastle	6 June, "	12 June, 1912	6	—	Highly neurotic; left owing to inability to settle down.
242	Miss L. R. ...	Railway Street, Newcastle	8 " "	15 " "	7	—	The same. Her mother begged her in vain to stop.
243	Mrs. M. B. ...	Grace Street, Newcastle	15 " "	(still in)	22	7 lbs.	Is doing well.
244	P. McL. ...	Albion Row, Newcastle	15 " "	(still in)	15	9 "	Good progress and now on walking exercise.
245	J. J. ...	Mansfield Street, Newcastle	15 " "	(still in)	15	9 "	The same.
246	A. A. ...	Farrdale Road, Newcastle	22 " "	(still in)	8	3 "	The same.

CASES ADMITTED DURING THE QUARTER ENDING 30TH JUNE, 1912.—*Continued.*

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
247	J. H. L.	Stanhope Street, Newcastle	22 June, 1912	(still in)	8	4 lbs.	Good progress.
248	W. B.	Sutton Street, Newcastle	22 " "	(still in)	8	4 "	The same.
249	Miss E. M. A.	Buddle Street, Newcastle	24 " "	(still in)	6	—	Is improving a little.
250	Miss M. K.	Carville Road, Newcastle	24 " "	(still in)	6	—	Good progress.
251	Miss M. E. McG.	Beech Street, Newcastle	24 " "	(still in)	6	—	Good progress.
252	T. R.	Ash Street, Newcastle	29 " "	(still in)	1	—	

				SUMMARY OF CASES			
				SUBMITTED TO MEDICAL BOARD.			
<i>Add</i> —Allowance for time elapsing between the discharge of one Patient and the admission of another, 3 days each, 24 Patients				Total ...	1,760	Applications received ...	38
Total number of days for 20 Patients for Quarter ending 30th June, 1912				...	72	Passed and admitted as above	20
<i>Excess forward to next Quarter</i>				...	1,832	Rejected ...	13
				...	1,820	Withdrawn ...	4
				...	12	Deferred ...	1
				...	...	...	38

ARMSTRONG, *Chairman.*
O. W. OGDEN, *Hon. Secretary.*

6th August, 1912.

BARRASFORD SANATORIUM.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 30TH SEPTEMBER, 1912.

No.	Patient's Initials	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
CASES REMAINING UNDER TREATMENT AT DATE OF LAST REPORT: 30TH JUNE, 1912.							
233	Mrs. M. M. ...	Morton Street, Byker	6 Apr., 1912	6 July, 1912	6	8 lbs.	Very fair progress.
234	G. W. C. ...	Loadman Street, Newcastle	6 " "	6 " "	6	2 "	General condition slightly improved, but not otherwise.
235	R. C. ...	Welbeck Road, Newcastle	20 " "	20 " "	20	9 "	Fair progress.
236	A. E. L. ...	East End Police Station, Newcastle	20 " "	17 Aug., "	48	15 "	Improved; but disease not yet quiescent.
237	R. H. L. ...	Conyers Road, Newcastle	27 " "	27 July, "	27	12 "	Good improvement.
238	T. T. ...	Mill Lane, Newcastle	27 " "	27 " "	27	14 "	Improved; but more in general than in pulmonary condition.
239	I. B. ...	Callerton Place, Newcastle	11 May, "	10 Aug., "	41	13 "	Very good progress.
240	J. T. H. ...	Rosedale Terrace, Newcastle	25 " "	24 " "	55	19 "	The same.
243	Mrs. M. B. ...	Grace Street, Newcastle	8 June, "	7 Sept., "	69	24 "	Very great improvement.
244	P. McL. ...	Albion Row, Newcastle	15 " "	14 " "	76	17 "	The same.
245	J. J. ...	Mansfield Street, Newcastle	15 " "	9 " "	71	28 "	Improvement rather more in general than in pulmonary condition.
246	A. A. ...	Farndale Road, Newcastle	22 " "	21 " "	83	5 "	Very good progress.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 30TH SEPTEMBER, 1912.—Continued.

N.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
CASES REMAINING UNDER TREATMENT AT 30TH JUNE, 1912.							
247	J. H. L.	Stanhope Street, Newcastle	22 June, 1912	21 Sept., 1912	83	14 lbs.	Very good progress.
248	W. B.	Sutton Street, Newcastle	22 " "	21 " "	83	18 "	Good progress.
249	Miss E. M. A.	Buddle Street, Newcastle	24 " "	22 July, "	22	2 "	A temporary improvement effected.
250	Miss M. K.	Carville Road, Newcastle	24 " "	23 Sept, "	85	14 "	Great improvement, but needs, like so many others, change of occupation (florist).
251	Miss M. E. McG.	Beech Street, Newcastle	24 " "	23 " "	85	17 "	Great improvement.
252	T. R.	Ash Street, Newcastle	29 " "	28 " "	90	13 "	Great Improvement.
CASES ADMITTED DURING THE QUARTER ENDING 30TH SEPTEMBER, 1912.							
253	J. S.	Carloli Street, Newcastle	13 July, 1912	(still in)	79	14 lbs.	Improvement more in general than in lung condition.
254	G. L.	Blenheim Street, Newcastle	13 " "	(still in)	79	24 "	The same.
255	Miss M. M. H.	Canterbury Street, Byker	13 " "	(still in)	79	11 "	Activity of the disease still present, although less than on admission.

CASES ADMITTED DURING THE QUARTER ENDING 30TH SEPTEMBER, 1912.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress during Treatment, and Remarks.
256	J. O'N.	Whitfield Road, Scotswood	20 July, 1912	22 Aug., 1912	33	8 lbs.	A temporary improvement effected.
257	J. H.	Alma Street, Newcastle	25 " "	(still in)	67	16 "	A case with a long history. Progress on the whole, good.
258	F. R. W.	Farndale Road, Newcastle	27 " "	(still in)	65	17 "	Disease not yet quiescent.
259	W. M.	Elswick Street, Newcastle	27 " "	(still in)	65	24 "	A throat case. Considerable improvement.
260	Mrs. R. H.	Raby Street, Byker	27 " "	(still in)	65	8 "	Considerable improvement.
261	W. A.	Strathmore Crescent, Newcastle	3 Aug., "	(still in)	58	14 "	Great improvement, maintenance of which depends on care after discharge.
262	W. C.	Tynemouth Road, Newcastle	3 " "	(still in)	58	—	Disease not yet quiescent.
263	L. L.	Conyers Road, Newcastle	3 " "	(still in)	58	4 "	Considerable improvement.
264	S. B.	Osborne Road, Newcastle	8 " "	(still in)	53	5 "	The same.
265	J. E.	Wingrove Avenue, Newcastle	17 " "	(still in)	44	6 "	Disease not yet quiescent.
266	J. G. K.	Northern Counties Club, Newcastle	17 " "	(still in)	44	10 "	Great improvement.
267	G. C. W.	Rosewood Crescent, Walker Gate	24 " "	(still in)	37	14 "	Considerable improvement.

CASES ADMITTED DURING THE QUARTER ENDING 30TH SEPTEMBER, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
268	H. H.	Walker Road, Walker	24 Aug., 1912	3 Sept., 1912	10	—	Left early owing to home-sickness.
269	W. H. L.	Grove Street, Newcastle	24 „ „	(still in)	37	9 lbs.	Improved, but a severe case.
270	T. N.	Northbourne Street, Newcastle	7 Sept., „	(still in)	23	8 „	Improved.
271	W. M.	Sopwith Street, Newcastle	7 „ „	(still in)	23	—	No improvement as yet.

Total ... 1,954

Add Excess brought forward from last Quarter ...
 Allowance for time elapsing between the discharge of one Patient and the admission of another, 3 days each, 20 Patients ...

SUMMARY OF CASES
SUBMITTED TO MEDICAL BOARD.

12	Applications received ...	34
60	Passed and admitted as above	19
	Rejected ...	14
	Awaiting Admission ...	1
		34

Deduct Total Number of days for 20 patients for Quarter ending 30th September, 1912 ...

186

Excess forward to next Quarter ...

GEORGE HARE PHILIPSON, Knight, Chairman.
O. W. OGDEN Hon. Secretary.

7th October, 1912.

BARRASFORD SANATORIUM.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 31ST DECEMBER, 1912.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment and Remarks.
		CASES REMAINING UNDER TREATMENT AT		DATE OF LAST	REPORT:	30TH SEPTEMBER, 1912.	
253	J. S.	... Carloli Street, Newcastle	13 July, 1912	(still in)	92	8 lbs.	Did well until getting a hamorrhage, the effects of which he is now shaking off.
254	G. L.	... Blenheim Street Newcastle	13 " "	12 Oct., 1912	12	27 "	Fairly good progress, but improvement more in general than in lung condition.
255	Miss M. M. H.	... Canterbury Street, Newcastle	13 " "	12 " "	12	11 "	Improvement in general condition only.
257	J. H.	... Alma Street, Newcastle	25 " "	(still in)	92	8 "	Considerable improvement.
258	F. R. W.	... Farndale Road, Newcastle	27 " "	(still in)	92	19 "	Considerable improvement.
259	W. M.	... Elswick Street, Newcastle	27 " "	26 Oct., 1912	26	34 "	Excellent progress both in throat and lungs.
260	Mrs. H.	... Raby Street, Byker	27 " "	26 " "	26	11 "	Considerable improvement.
261	W. A.	... Strathmore Crescent, Newcastle	3 Aug., "	2 Nov., "	33	19 "	Great benefit if he will be careful of his way of life after discharge.
262	W. C.	... Tynemouth Road, Newcastle	3 " "	8 Oct., "	8	$\frac{1}{2}$ "	Slight improvement only.

MEDICAL REPORT ON NEWCASTLE CORPORATION CASES FOR QUARTER ENDING 31ST DECEMBER, 1912.—Continued.

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
		CASES REMAINING UNDER TREATMENT AT	DATE OF LAST	REPORT:	30TH SEPTEMBER, 1912.		
263	L. L.	Conyers Road, Newcastle	3 Aug., 1912	2 Nov., 1912	33	7 lbs.	Much improved.
264	Miss S. B.	Osborne Road, Newcastle	8 " "	8 Oct., "	8	8 "	Considerable improvement.
265	J. E.	Wingrove Avenue, Newcastle	17 " "	22 " "	22	8 "	Considerable improvement.
266	J. G. K.	Northern Counties Club, Newcastle	17 " "	16 Nov., "	47	14 "	Great improvement.
267	G. C. W.	Rosewood Crescent, Walkergate	24 " "	(still in)	92	25 "	Disease rather obstinate.
269	W. H. L.	Grove Street, Newcastle	24 " "	8 Oct., 1912	8	12 "	Great improvement.
270	T. N.	Northbourne Street, Newcastle	7 Sept., "	(still in)	92	14 "	Great improvement.
271	W. M.	Sopwith Street, Newcastle	7 " "	9 Oct., 1912	9	4 "	(Died).
CASES ADMITTED DURING THE QUARTER ENDING 31ST DECEMBER, 1912.							
272	Mrs. G. D.	Bolam Street, Newcastle	5 Oct., 1912	4 Nov., 1912	30	—	Had to leave owing to difficulties at her home.
273	J. J. G.	George Street, Newcastle	12 " "	(still in)	80	23 lbs.	Excellent progress both in throat and lungs.

CASES ADMITTED DURING THE QUARTER ENDING 31ST DECEMBER, 1912.—*Continued.*

No.	Patient's Initials.	Address.	Date of Admission.	Date of Discharge.	Days under Treatment to Date of this Report.	Gain in Weight.	Progress under Treatment, and Remarks.
274	Mrs. N. F. ...	Victoria Street, Newcastle	12 Oct., 1912	(still in)	80	11 lbs.	Improvement slow.
275	J. E. U. ...	Amble Grove, Newcastle	26 " "	(still in)	66	8 "	No improvement; not fit to be discharged.
276	Miss M. C. T.	Beresford Road, Byker	26 " "	(still in)	66	4 "	Some improvement.
277	J. W. ...	Richard Street, Newcastle	23 Nov., "	(still in)	38	8 "	Good progress.
278	Miss I. R. F.	Fuller Road, Byker	7 Dec., "	(still in)	24	7 "	Good progress.

Days under Treatment to date of this Report ... 1,088

Add Excess brought forward from last Quarter ... 186
 Allowance for time elapsing between the discharge of one Patient and the admission of another, 3 days each, 13 Patients ... 39

Deduct Total Number of days for 20 Patients for Quarter ending 31st December, 1912 ...

Number of days for which treatment has not yet been received ...

SUMMARY OF CASES SUBMITTED TO MEDICAL BOARD.		
Applications received ...	...	13
Passed and admitted as above	7	
Less Passed in last Quarter	1	
Rejected ...	...	6
Withdrawn ...	...	3
Deferred ...	...	1
Passed and awaiting admission	...	1
	...	2
	...	13

GEORGE HARE PHILIPSON, Knight, *Chairman.*
 O. W. OGDEN, M.D., *Hon. Secretary.*

14th January, 1913.

DISINFECTION.

1,977 cases of notifiable and 336 of non-notifiable infectious disease have been inquired into by the special inspectors, and the houses or rooms connected therewith disinfected by spraying with formalin. In connection with cases of tuberculosis, 481 houses, including 969 rooms, were similarly disinfected.

In every instance the bedding and other infected articles were removed to the Disinfecting Station at the City Hospital, Walker Gate, and after sterilisation by steam, returned to the owners.

INFECTED ARTICLES PURIFIED IN THE DISINFECTING APPARATUS AT THE
CITY HOSPITAL FOR INFECTIOUS DISEASES, WALKER GATE, AND THE
ISOLATION HOSPITAL, TOWN MOOR.

ARTICLES FROM CITY.		ARTICLES—HOSPITAL PROPERTY.	
1912.	1911.	1912.	1911.
28,440	21,861	4,187	4,874

INFECTED ARTICLES DESTROYED AND REPLACED BY THE HEALTH
DEPARTMENT.

	1912.	1911.
Half Straw Mattresses	66	34
Flock Bed	1	...

Orders for goods to the value of £1 18s. 9d. were also given in replacement of similar articles destroyed by order of the Medical Officer of Health.

Fluid disinfectant, in pint tins, and disinfectant soap, in pound bars, were given out free on the order of the special inspectors, for home use in connection with infectious disease. Every precaution was taken to ensure that the material so dispensed was properly and economically used.

Disinfectants Distributed.

FROM	FOR INFECTIOUS DISEASES.		FOR PHTHISIS.	
	FLUID. (1 pint tins.)	SOAP. (1 lb. bars.)	FLUID. (1 pint tins.)	SOAP. (1 lb. bars.)
Health Department	1,270	1,033	630	352
Corporation Yard, Benwell ...	270	270	60	60
Corporation Yard, Walker ...	137	183	36	54
TOTAL	1,677	1,486	726	466

BACTERIOLOGICAL INVESTIGATIONS.

The following is a summary of the Bacteriological investigations carried out on behalf of the Health Department of the Newcastle Corporation by Professor H. J. Hutchens, at the University of Durham College of Medicine, Newcastle.

2,800 specimens were submitted for examination. The nature of the investigations, and the results obtained, were as follows :—

	DIPHTHERIA.			TUBERCULOUS PHTHISIS.			ENTERIC FEVER.		
	Total.	Posi- tive.	Nega- tive.	Total.	Posi- tive.	Nega- tive.	Total.	Posi- tive.	Nega- tive.
No. of Examina- tions ...	1,151	308	843	1,038	267	771	133	53	80

Water :—

	Total.	CLASS I. Satis- factory.	CLASS II. Doubtful.	CLASS III. Unsatis- factory.	CLASS IV. Bad.
No. of Examina- tions ...	192	44	96	43	9

Milk :—

	Organisms, other than Tubercle Bacilli.			Tubercle Bacilli.		
	Total.	Satis- factory.	Unsatis- factory.	Total.	Tub. Bac. found.	Tub. Bac. not found.
No. of Examina- tions ...	180	138	42	106	11	95

H. J. HUTCHENS,
Bacteriologist.

*University of Durham College of Medicine,
Newcastle-upon-Tyne,
27th February, 1913.*

**BOVINE TUBERCULOSIS,
AND THE INSPECTION OF MEAT
AND PROVISIONS**

(VETERINARY INSPECTOR).

FOOD AND DRUGS

(INSPECTOR OF NUISANCES).

BOVINE TUBERCULOSIS,
AND THE INSPECTION OF MEAT
AND PROVISIONS

FOOD AND DRUGS

BOVINE TUBERCULOSIS, AND THE INSPECTION OF MEAT AND PROVISIONS, AND FOOD AND DRUGS.

TUBERCULOUS MILK.

106 samples of milk, collected by the *Assistant Inspectors of Nuisances* were examined by the Bacteriologist for the presence of tubercle bacilli, and in 11 instances the milk was found to be infected, as shown in the report of the latter, above.

The details of the action taken in each case are as follows:—

Identifica-
tion No.

178. *Wigton*.—Sample collected January 24th. The Dairy Company in the City from whom the milk was obtained immediately stopped the supply, and arranged for the testing of the herd with tuberculin. Of 63 cows tested, 8 reacted and 1 was suspicious. These animals were removed from the herd and the cowsheds disinfected. Check samples collected at the Dairy after the removal of the affected animals were found free from tubercle bacilli.

184. *Lockerbie*.—Sample collected February 7th. The Dairy Company stopped the supply, and under the supervision of their manager the cows were tested. As a result, 13 cows were excluded from the herd as reactors, or as being suspicious.

39. *Racks, Dumfriesshire.*—Sample collected September 11th. The Medical Officer of Health for Dumfriesshire was communicated with. The herd was tested with tuberculin and several cows excluded. Further samples of the milk were then taken and on examination found to be free from tubercle bacilli.
46. *Newcastle.*—The sample was collected on October 16th, at a cowkeeper's premises in the City. The cows were examined by the Veterinary Officer, but only two were found suspicious. Samples of milk from these and from the mixed milk of the herd were examined by means of inoculations into guinea pigs, but the result was negative. The cowkeeper, in addition to his milk business, is a dealer in cows, and about the time the tuberculous sample was obtained several animals had passed through the byres. In view of the negative result of the supplementary tests, it would appear that the tuberculous milk was from one of the latter, and the affected animal (unknown) is probably still producing milk somewhere, which is a serious danger to the consumers.
51. *Brampton.*—Sample collected October 23rd. The County Medical Officer of Health for Cumberland was asked, if possible, to secure the testing of the cows with tuberculin. The dairyman in Newcastle in the meantime stopped the supply. After the lapse of four months no report as to the action taken had been received from the Cumberland authorities, though reminders were sent. Eventually the dairyman in the City received a certificate from the Royal Veterinary College that an inoculation test of the milk, after the removal from the herd of suspicious cows, shewed that there were no tubercle bacilli in the milk. A similar test of the milk by the City Bacteriologist also shewed no bacilli.

Identifica-
tion No.

67.	<i>Stocksfield.</i> —	Sample collected	December 4th.
69.	<i>Low Row.</i> —	„	„ 4th.
71.	<i>Acklington.</i> —	„	„ 11th.
73.	<i>Burgh-on-Sands.</i> —	„	„ 11th.
75.	<i>Hexham.</i> —	„	„ 18th.
76.	<i>Blackhill.</i> —	„	„ 18th.

In each of these cases the County Medical Officer of Health concerned was communicated with, with a view to the herds being tested with tuberculin. The dairymen in Newcastle in the meantime seeing that the supplies were either stopped or sterilized before sale. Check samples, after the removal of suspicious cows, all proved negative, with the exception of No. 73, and in this case the check sample was also found to contain tubercle bacilli. The cows were afterwards again examined, with the result that some were removed from the herd. A further check sample has been taken, but the result is not yet known.

*Report of the
Veterinary Officer, Inspector of Meat, etc.*

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

I have the honour to present this my sixth annual Report to the Sanitary Authority for the City and County of Newcastle-upon-Tyne concerning the duties performed in my section of the Health Department during the year ending 31st December, 1912.

DISEASES OF ANIMALS.

During the year, eighteen outbreaks of scheduled contagious diseases, in which 126 animals were either affected or exposed to infection, occurred within the city, as compared with three outbreaks the previous year. Details of the various outbreaks will be found in my annual Report under the Diseases of Animals Acts.

**THE DAIRIES, COWSHEDS, AND MILKSHOPS ORDERS,
1885-1899.**

There are 37 dairymen within the city who occupy 44 cowsheds on 37 premises, and possess a total of 465 milch-cows. 340 visits have been made to the cowsheds and dairies by the Inspectors during the past twelve months for the purpose of inspecting the buildings, utensils, etc., as to structural repair, sanitation, general cleanliness, etc.

During the year it has been found necessary, on several occasions, to direct the occupiers' attention to the dirty condition of not only the buildings but also the animals. Such cleansing requirements have been complied with, making legal proceedings unnecessary.

In some cases structural alterations have been carried out in regard to the cowsheds for the improvement of cubic capacity, light, ventilation, etc. Other premises requiring improvements are being dealt with.

During the year three milch-cows were found diseased, two of them being affected with Tuberculosis. In the latter

cases the milk supply was stopped. In all cases the necessary cleansing and disinfection of the premises followed. Other abnormal conditions affecting the udder of dairy cattle have been dealt with from time to time, and samples of milk—four in number—have been drawn and submitted for inoculation into guinea pigs, but in each case with a negative result.

Owing to increased duties, due to the recent outbreaks of Foot and Mouth Disease and the frequent occurrence of outbreaks of other diseases scheduled under the Diseases of Animals Acts, it has been impossible to examine all the cows within the registered cowsheds for the detection of Tuberculosis—even once during the year.

Unless the dairy herds are subjected to veterinary examination at least once a month, the public can have no safeguard as to the wholesomeness of its milk supply. The new Tuberculosis Order of 1913 issued by the Board of Agriculture and Fisheries gives the necessary powers to the Veterinary Inspector of the Local Authority to deal with suspected cows, in order to determine whether or not they are:—giving tuberculous milk, suffering from tuberculosis of the udder, or are emaciated with tuberculosis. All that remains, in order to carry out inspection of the dairy herds to the extent its importance and urgency warrants, is the employment of adequate veterinary assistance.

MEAT, PROVISIONS, FISH, FRUIT, Etc.

During the year 1912, besides foreign meat and other foodstuffs, some $247\frac{3}{4}$ carcasses of home-killed animals have been condemned and destroyed within the city as being unfit for human consumption as compared with 225 carcasses the previous year.

Of the $247\frac{3}{4}$ carcasses, $76\frac{3}{4}$ were condemned on account of tuberculosis.

During the year 1912, the number of cattle insured by the Newcastle, Gateshead and District Butchers' Association was $14,971\frac{1}{2}$, being a decrease of 821 on the previous year. And

during the same period that Association paid to its members no less than £1,004 18s. 4d. as compensation in respect of claims for carcasses condemned on account of tuberculosis, that being exactly £250 17s. 5d. more than was paid for the same purpose the previous year.

Although the Association some time ago deleted the cow-class from their Insurance Scheme, another class known as the "Heifers of Class 2" has been retained at a serious loss to the Association, for during the year it was necessary to levy a call of £1 1s. 9d. per head on those heifers to clear that class of its liabilities. These animals, although termed heifers, are in reality cows that have borne either one or more calves. But, as they are presented at the market in such condition as to age, quality and appearance as would be termed prime, it would appear to be difficult—in many cases at least—for the butcher to distinguish them from pure heifers. Under these circumstances the Association have difficulties as to where to draw the line. The disease (tuberculosis) on the other hand has no difficulty in drawing the unseen line, for when these cows (Heifers Class 2) are slaughtered the post mortem findings generally show a larger percentage of them to be diseased than is the case regarding pure heifers. Such is just exactly what is to be expected, for cows have invariably been exposed during life to greater chances of infection.

Now that the principal of compensating the owner and producer of diseased cattle has been established by means of the Tuberculosis Order of 1913, and has been put into operation, that fact alone should be ample evidence to the meat traders in this country that the subject which has been barred—and honestly barred at that—against them at all times, has at last had an entrance for a just claim for consideration forced open. And that subject obviously is the "Warranty Question."

As soon as ever legislation compels the owners of farms to put their premises into a good, sound sanitary condition, so that animals may be reared under proper conditions, and

sanction has been given to spend public money to deal with the disease in the living animal, and also to compensate the owners, then the meat traders will have a moral and ought to have a legal right to demand from the vendor a warranty with all apparently healthy cattle they purchase in the open market.

NUMBER OF VISITS AND INSPECTIONS OF PREMISES
DURING THE YEAR 1912.

Slaughter Houses.	Meat, &c., Market.	Fruit, &c., Market.	Fish Market.	Meat, Provision, Fruit, Fish, Wholesale and Retail and Shops.	Cold Stores.	Sausage &c., Factories.	Goods Stations.	Wharves.	Knackers' Yard.
10,071	582	579	849	904	43	114	11	436	12

FOREIGN MEAT.

During the year 1912 some 233 vessels carrying meat and other foodstuffs from South America, Denmark, Sweden, Norway, and other countries, arrived at the Quayside. Of these, 18 were large South American frozen meat boats. During the year 45 vessels were boarded and 436 visits to the wharves were made, and of the 2,297 casks and other packages containing meat, etc., opened, minute examinations were made in each case.

Numerous samples—particularly brine—have been taken during the year and submitted to the Public Analyst for analysis, and all have been found free from any harmful preservative.

Foreign Meat arriving by Rail.—The quantity of frozen and chilled meat arriving within the City appears—owing to new imports from Australia—to be slightly on the increase. Great improvements as to the condition of the carcasses when put on the market in this country have taken place in recent years. In many cases, although frozen meat has already travelled thousands of miles, the carcasses as placed in the shops in the City appear cleaner than many of those from animals actually slaughtered within the City.

Foreign Meat arriving by Vessels.—During the year 196 foreign fresh (unfrozen and unchilled) carcasses of beef

were imported, as compared with none last year. The consignments of fresh pork are much smaller than those of the previous year, whereas those of green bacon are larger by about 60,000 sides for the same period.

The consignments of frozen beef are much heavier, the lamb carcasses imported number about the same, whilst mutton carcasses are rather fewer in number as compared with the previous year.

It is with pleasure that I am able to acknowledge the courteous and prompt manner in which the Customs officials have, from time to time, reported the arrival of foreign meat vessels and their detention of certain foodstuffs for inspection and certification.

FOREIGN MEAT ARRIVING BY VESSEL AND LANDED AT THE
NEWCASTLE-UPON-TYNE QUAYSIDE.

FRESH.					
BEEF.		PORK.			MUTTON.
Sides of Beef..	392	Carcasses ...	...	115	Casks ... 28
	Casks.	Sides (Green Bacon)	316,420		Intestine ... 89
Checks	...	Feet	...	3,935	
Udders	...	Maws	...	3,382	
Meat ...	45	Tongues	...	200	
Offal ...	41	Heads	...	4,641	
		Pork	...	16	
		Tails	...	8	

FROZEN.					
BEEF.			MUTTON.	LAMB.	
Hind-quarters	...	25,096	Carcasses	53,867	Carcasses 7,776
Fore-quarters	...	63,398			
Flitches or Half-Fores	...	14			
	Packages.			Packages.	
Hearts	...	1,778	Legs	...	276
Tails	...	460	Loins	...	90
Skirts	...	732	Shoulders	...	421
Tongues	...	777	Heads	...	768
Livers	...	947	Kidneys	...	395
Kidneys	...	150			
Tripe	...	988			
Cheeks	...	603			
Suet	...	497			

OTHER GOODS.				
Smoked Sausage	...	...	Cases.	60
Sweetbread	...	...	...	20
Hams	...	...	Casks.	2
Beef	...	...	Tins.	1,185
Beef Trimmings	...	...	Case.	1
Mussels	...	...	Bags.	50

The following *packages of foreign meat and other food-stuffs were seized and destroyed* in accordance with the Foreign Meat and Unsound Food Regulations :—

Putrefactive Decomposition.				Unsound.	
Beef Trimmings	...	...	Bags.	Biscuits	Tins.
Mussels	...	...	1	...	24
	...	...	20	Tomatoes	110
Cows' Udders	...	...	Barrels.		
Pig Maws	...	...	3		
	...	...	1		

The following were *seized and re-exported* at the senders' expense in accordance with the Foreign Meat Regulations :—

FOREIGN MEAT OF CLASS I. (SCRAP MEAT).
2 Boxes of Diaphragm.

Of all the meat and other foods seized and condemned on account of unfitness for human consumption, all were destroyed with the consent of the owner except the following, which were *destroyed by order of a Justice of the Peace* :—

Beef...	...	...	...	...	8 Quarters.
Pears	...	...	...	...	10 Barrels.
Apples	...	...	...	...	20 Stones.
Tomatoes	...	...	...	...	110 Tins.

CARCASSES, ETC., DESTROYED AS BEING UNFIT FOR HUMAN CONSUMPTION DURING THE YEAR 1912.

	Carcasses.				Heads.		Hearts.		Livers.	Lungs.	Kidneys.		Plucks.		Tongues.	Tripe.	Offal.	Cooked Meat.
	Beef.	Veal.	Mutton.	Pork.	Ox.	Sheep.	Ox.	Pig.	Ox.	Ox.	Ox.	Pig.	Sheep.	Pig.	Ox.	Ox.		
Tuberculosis ...	67 + 23	1	...	3	5	...	3	..	4	17	...	...	...	...	...	...	2	...
Swine Erysipelas ...	qrs.	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia ...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Pleurisy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pericarditis ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Nephritis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis ...	...	...	...	...	...	...	...	...	9	...	2	...	...	...	...	...	...	...
Echinococcus.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Veterinorum	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...
Hydatids { Cysticercus.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tenuicollis	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...
Pyæmia ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscesses ...	...	...	10 lbs.	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Emaciated ...	3	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congestion ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Imperfectly Bled	...	2	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Traumatism ...	79 lbs.	...	leg.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Died in transit ...	...	2	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Putrefactive.	24 + 254	...	7 + 154	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Decomposition	lbs.	9	16	...	...	2	...	...	8	...	...	...	...	...	15	59 lbs.	700 lbs.	40 lbs.

FRUIT, FISH, POULTRY, ETC., DESTROYED AS BEING UNFIT FOR HUMAN CONSUMPTION DURING THE YEAR 1912.

	POULTRY, PIGEONS, AND GAME.	FISH.		FRUIT.	VEGETABLES.	PROVISIONS.
		Shell Fish.	Other than Shell Fish.			
Putrefactive Decomposition	Rabbits - - - 12					Bacon - 5 tons.
	Turkey - - - 1					
	Pigeons - - - 18	Prawns 370 lbs	Fresh Haddocks 322 lbs.			
	Ducks - - - 64	Mussels 2,702 "	Halibut - - - 70 "			
	Hares - - - 6	Crabs 224 "	Ling - - - 1,166 "			
	Geese - - - 20	Oysters 56 "	Kippers - - - 126 "			
Unsound ...			Herrings - - - 3,395 "			Cheese - 9 lbs.
			Plaice - - - 147 "			
Unseasonable (unclean) ...			Findon Haddocks 966 "			Carrots - 99 $\frac{3}{4}$ cwts. Celery - 160 bunches
				Dates - - - 56 lbs. Cherries - 64 baskets Strawberries 532 lbs. Apples - - - 406 " Plums - - - 10 " Pears - - - 702 " " - - - 10 barrels		
			Trout - - - 1,819 lbs.			

PROSECUTIONS DURING YEAR 1912.

For depositing within the city four quarters of beef (extensively diseased) which had been neatly stripped and so prepared as to give the outward appearance that of a healthy carcass, a butcher—residing some 60 miles from the city—was fined £5 and costs. For a similar offence concerning the deposit of four quarters of beef, a butcher and a farmer (both residing some 20 miles from the city) were each fined £10 and costs.

I have the honour to be, Sir,

Your obedient Servant,

Health Department,
Town Hall,
Newcastle-on-Tyne,
May 15th, 1913.

THOMAS PARKER, F.R.C.V.S.
Veterinary Officer,
Inspector of Meat, &c.

FOOD AND DRUGS ADULTERATION.

The total number of samples (of all kinds) obtained by the *Inspector of Nuisances* for analysis during the year was 931, against 881 in the previous year. For details see pages 102-9. Of this total, only 600 were submitted for analysis to the Public Analyst, the remainder being milk samples, which, on being tested in the offices of the Health Department, were found to be genuine. The number of *milk samples* taken was 636. 54 of these were certified to be below the standard fixed by the "Sale of Milk Regulations, 1901," and 1 contained an artificial colouring matter (viz., Annatto).

Of the total number of samples taken (931), 248 were collected "informally," chiefly through the agency of hired persons, viz. :—

Butter 36	Blackcurrant Jam ... 1	Marmalade 1
Margarine 30	Vinegar 13	Raspberry Jam ... 1
Lard 19	Mustard 4	Cream of Tartar ... 9
Baking Powder ... 10	Semolina 6	Tartaric Acid 8
Ground Rice 10	Cream 2	Gregory's Powder... 2
Condensed Milk ... 10	Ground Almonds ... 3	Camphorated Oil ... 5
Ground Ginger ... 7	Sugar 3	Sweet Spirits of
Corn Flour 6	Cocoa 3	Nitre 7
Sago 5	Tapioca 1	Tincture of Rhubarb 5
Black Pepper 5	Flour 4	Syrup of Rhubarb ... 3
White Pepper 6	Farola 1	Olive Oil 5
Rice 1	Chicken and Ham	Glycerine 4
Tea 1	Paste 1	Paregoric 5
New Milk 1	Cheshire Cheese ... 1	White Precipitate
Coffee 1	Golden Syrup 1	Ointment 1

The percentage of samples not genuine to the total number taken is 7·4 (compared with 9·4 for the previous year), and the percentage of milk samples below standard to the total number of milk samples obtained is 8·6 (as against 13·8 in 1911). The total number of samples taken is at the rate of 3·5 per 1,000 of the population (estimated) of the City for the year 1912.

Preservatives in Food.—Of the total number of samples taken for analysis (931), only 44 (or 4·7 per cent.) were certified to contain preservative. The articles in question being—Margarine (32), Butter (8), and Cream (4). The preservative, in each case, consisted of boric acid, and in all but one instance was within the limit allowed, the exception being a sample of Cream which contained 0·35 per cent. of boric acid, being in excess of the limit (0·25 per cent.) recommended by the Departmental Committee on Food Preservatives (1909). This being an informal sample, a subsequent sample, taken formally, contained only 0·14 per cent. of boric acid, and no further action was taken in the matter.

Cream.—Since the samples were purchased, new Regulations of the Local Government Board have come into force, prohibiting the addition of any preservative substance to Cream containing less than 35 per cent. of milk-fat, and requiring, in the case of Cream above that standard containing a preservative, that the receptacle be distinctly labelled to that effect.

Margarine Act, 1887.—34 samples of Margarine (included in the foregoing total) have been purchased and analysed. All were found to be genuine, except that 32 contained small quantities of boric acid (as above). In seven instances, samples were delivered to the purchaser in a paper not marked “Margarine” as required by the Act. See page 110.

Margarine Warehouses.—88 visits have been made to the margarine warehouses. No contravention of the law as to the marking of packages containing margarine was found.

FOOD AND DRUGS ADULTERATION ACTS.

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
New Milk ...	636	581 genuine.		
		1 deficient in milk-fat 3·3%, and in non-fatty solids 1·6%	33	Vendor cautioned.
		1 deficient in milk-fat 13·3%	53	From one vendor, who was summoned. Cases dismissed on payment of costs. (The milk in these cases was stated to have been supplied by the vendor of samples Nos. 58 and 66).
		1 deficient in milk-fat 10·0%	59	
		1 deficient in milk-fat 20·0%	58	From one vendor, who was summoned. Case dismissed on payment of costs. <i>Appeal to Cow.</i> —At the request of this vendor, 2 samples were taken at his farm, after seeing the cows milked. These samples proved to be genuine.
		1 deficient in milk-fat 6·6%	66	
		1 deficient in milk-fat 10·0%	61	From one vendor, who was cautioned. (Milk stated to have been supplied by vendor of No. 70).
		1 deficient in milk-fat 3·3%	71	
		1 deficient in milk-fat 5·0%	70	Vendor cautioned.
		1 deficient in non-fatty solids 5·4%	92	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 5·3%	99	Vendor summoned. Fined £5 and costs.
		1 deficient in milk-fat 3·3%	102	Subsequent sample genuine. Vendor cautioned.
		1 contained an artificial colouring matter, viz., annatto.	107	Subsequent sample genuine. Vendor cautioned.
Carried forward ...	636	Amount of penalties carried forward ...	...	£5 0 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	636	Amount of penalties brought forward ...	...	£5 0 0
New Milk (contd.) ...		1 deficient in milk-fat 6·6%	131	Subsequent sample genuine. Vendor cautioned.
		1 deficient in milk-fat 6·6%	186	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 5·6%	187	Vendors summoned. Case withdrawn on payment of costs.
		1 deficient in milk-fat 10·0%	201	From one vendor, who was cautioned (having recently been fined £5 and costs respecting sample No. 99).
		1 deficient in milk-fat 3·3%	207	
		1 deficient in non-fatty solids 5·8%	253	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 4·9%	265	From one vendor, who was summoned. Cases dismissed on proof of warranty, defendant paying costs. (Milk obtained from vendor of sample No. 277.)
		1 deficient in milk-fat 9·0%	278	
		1 deficient in milk-fat 10·0%	277	Vendor summoned. Case dismissed on proof of warranty. (Milk obtained from vendor of No. 295.)
		1 deficient in milk-fat 33·3%	295	Vendor summoned. Case dismissed on proof of warranty. <i>Note.</i> —The giver of the warranty was subsequently proceeded against, the case being dismissed on payment of costs.
Carried forward ...	636	Amount of penalties carried forward ...	...	£5 0 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	636	Amount of penalties brought forward ...	...	£5 0 0
New Milk (contd.) ...		1 deficient in non-fatty solids 3·4%	303	From one vendor, who was summoned. Cases withdrawn on payment of costs. (Milk obtained from vendor of sample No. 341.)
		1 deficient in non-fatty solids 2·2%	311	
		1 deficient in non-fatty solids 2·3%	341	
		1 deficient in non-fatty solids 3·1%	353	Vendor summoned. Fined 10/- and costs.
		1 deficient in milk-fat 6·6%	367	From one vendor, who was cautioned.
		1 deficient in milk-fat 4·0%	370	
		1 deficient in milk-fat 10·0%	373	Subsequent sample genuine. Vendor cautioned.
		1 deficient in milk-fat 3·3%	378	Subsequent sample genuine. Vendor cautioned.
		1 deficient in milk-fat 16·6%	399	Vendor summoned. Fined 10/- and costs.
		1 deficient in milk-fat 30·0%	406	Vendor summoned. Fined 10/- and costs.
		1 deficient in non-fatty solids 2·3%	460	From one vendor. No action taken.
		1 deficient in non fatty solids 0·5%	482	
		1 deficient in milk-fat 10·0%	500	From one vendor. Explanation accepted by Sanitary Committee.
		1 deficient in milk-fat 5·0%	508	
		1 deficient in milk-fat 1·6%	507	No action taken.
		1 deficient in milk-fat 18·3%	551	From one vendor, who was summoned. Cases dismissed on proof of warranty.
		1 deficient in milk-fat 20·0%	563	
Carried forward ...	636	Amount of penalties carried forward ...	...	£6 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	636	Amount of penalties brought forward ...	...	£6 10 0
New Milk (contd.) ...		1 deficient in milk-fat 5.0%	622	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 4.7%	636	Subsequent sample genuine. No further action taken.
		1 deficient in non-fatty solids 3.3%	655	Subsequent sample genuine. No further action taken.
		1 deficient in milk-fat 3.3%, and in non-fatty solids 6.3%	782	From one vendor, who was cautioned.
		1 deficient in non-fatty solids 4.8%	793	
		1 deficient in non-fatty solids 9.1%	788	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 15.3%	868	From one vendor, who was summoned. Fined 20/- and costs in each case.
		1 deficient in non-fatty solids 10.3%	875	
		1 deficient in non-fatty solids 9.4%	871	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 2.3%	874	From one vendor, who was cautioned.
		1 deficient in non-fatty solids 1.6%	881	
		1 deficient in non-fatty solids 3.3%	915	From one vendor, who was cautioned.
		1 deficient in non-fatty solids 2.6%	919	
		1 deficient in non-fatty solids 3.5%	928	Subsequent sample genuine. Vendor cautioned.
		1 deficient in non-fatty solids 1.9%	929	From one vendor, who was cautioned.
		1 deficient in milk-fat 5.0%	931	
Carried forward ...	636	Amount of penalties carried forward ...	...	£8 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotationary No. of sample.	Proceedings taken and result.
Brought forward ...	636	Amount of penalties brought forward ...	...	£8 10 0
Butter ...	54	53 genuine.		
		1 contained 100% of margarine. (Informal sample.)	51	Formal sample taken, which was genuine.
Gregory's Powder ...	3	2 genuine.		
		1 contained carbonate of magnesia instead of calcined magnesia, and was thus deficient in magnesia by about 50% (Informal sample.)	475	Formal sample taken, which was genuine.
Spirits of Nitre	9	6 genuine.		
		1 deficient in ethyl nitrite 30% (Informal sample.)	476	Formal sample obtained. (See No. 511.)
		1 deficient in ethyl nitrite 79%	511	Vendor cautioned.
Sweet Spirits of Nitre ...		1 deficient in ethyl nitrite 48.6% (Informal sample.)	754	Formal sample obtained, which was genuine.
Lard ...	21	17 genuine.		
		1 contained beef stearin over 5.0% (Informal sample.)	435	The Town Clerk was instructed to ask each of the vendors for an explanation as to the presence of the beef stearin in the lard.
		1 contained beef stearin over 10% (Informal sample.)	443	
		1 contained beef stearin over 10% (Informal sample.)	444	
		1 contained beef stearin at least 10%	486	
Carried forward ...	723	Amount of penalties carried forward ...	...	£8 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	723	Amount of penalties brought forward ...	...	£8 10 0
Cream...	4	1 genuine (except that it contained boric acid 0·16%). (Informal sample.)	566	Within the limit allowed. No further action taken.
		1 genuine (except that it contained boric acid 0·35%). (Informal sample.)	591	Formal sample obtained. (See No. 593.)
		1 genuine (except that it contained boric acid 0·14%).	593	Within the limit allowed. No action taken.
		1 genuine (except that it contained boric acid 0·16%).	594	Within the limit allowed. No action taken.
Coffee...	2	1 genuine.		
		1 contained 46% chicory.	771	The mixture being "declared," no action was taken.
Malt Vinegar...	13	12 genuine.		
		1 deficient in acetic acid 8·3%. (Informal sample.)	824	Formal sample to be taken.
Sago ...	5	3 genuine.		
		1 consisted entirely of tapioca.	844	No action taken.
		1 consisted entirely of tapioca.	847	No action taken.
Blackcurrant Jelly ...	1	Contained very little, if any, blackcurrant, and had been made almost wholly from the juices of other fruits, chiefly gooseberry.	905	The Town Clerk was instructed to send a letter of caution to the vendor, and to ask him for an explanation.
Carried forward ...	748	Amount of penalties carried forward ...	...	£8 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	748	Amount of penalties brought forward ...	...	£8 10 0
Blackcurrant Jam ...	6	All genuine.		
Condensed Milk ...	10			
Margarine ...	34			
Cheshire Cheese ...	1			
Flour ...	4			
Ground Rice ...	10			
Semolina ...	6			
Corn Flour ...	6			
Baking Powder	10			
Ground Almonds ...	3			
Ground Ginger	7			
White Pepper	6			
Black Pepper	5			
Tapioca ...	1			
Farola ...	1			
Rice ...	1			
Tea ...	1			
Sugar ...	3			
Cocoa ...	3			
Marmalade ...	1			
Mustard ...	4			
Carried forward ...	871	Amount of penalties carried forward ...	...	£8 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1912.

Articles taken for Analysis.	Total No. of samples taken.	Result of Analysis.	Rotational No. of sample.	Proceedings taken and result.
Brought forward ...	871	Amount of penalties brought forward ...	...	£8 10 0
Golden Syrup	1	All genuine.		
Raspberry Jam	1			
Chicken and Ham Paste	1			
Tincture of Rhubarb ...	5			
Syrup of Rhubarb ...	3			
Tartaric Acid	8			
Camphorated Oil... ..	5			
Olive Oil	5			
Glycerine	4			
Cream of Tartar ...	9			
Paregoric	5			
White Precipitate Ointment	1			
Beer	6			
Rum	3			
Whisky	3			
Total ...	931	Total amount of penalties ...	...	£8 10 0

FOOD AND DRUGS ADULTERATION ACTS.—*Continued.*

ACTION TAKEN WITH RESPECT TO OFFENCES OTHER THAN ADULTERATION.

Offence.	No. of Cases.	Proceedings taken, etc.
<i>Margarine Act, 1887, Sec. 6.</i> Margarine delivered to purchaser in paper not marked "Margarine."	7	In 2 cases vendors cautioned, and in 1 vendor summoned (having been prosecuted with regard to a similar offence in 1911). Fined 5/- and costs. Four were informal samples. In 1 case, a formal sample was obtained, and in this instance also the sample was handed to the purchaser in a paper not marked "Margarine" in accordance with the Act. No further action was taken. In 2 instances formal samples afterwards taken were properly labelled, and in the remaining case a further sample could not be obtained owing to the business being discontinued.
<i>Sale of Food and Drugs Act, 1899, Sec. 9.</i> Names and addresses of vendors not inscribed upon their milk-cans, etc.	9	In 8 cases the vendors were cautioned, and in the remaining case the vendor was summoned and fined 5/- and costs. (Defendant was the vendor of deficient milk sample No. 399.)
Total ...	16	Amount of penalties, £0 10 0

NUISANCES, HOUSING,
FACTORIES AND WORKSHOPS,

ETC.

(INSPECTOR OF NUISANCES.)

FACTORIES AND WORKSHOPS
IMPROVING HOUSING

NUISANCES, HOUSING, FACTORIES AND WORKSHOPS, etc.

The following is the Report of the Inspector of Nuisances.

TO THE MEDICAL OFFICER OF HEALTH.

SIR,

I beg to submit to you my fifth report of the work done in my section of the Health Department, viz., that for the year ended 31st December, 1912, which, together with the section on Food and Drugs Adulteration above, is as follows:—

The ever-increasing duties of the Inspectorial Staff have been faithfully carried out during the year. Although it is impossible to adequately describe, by means of tables of figures, every detail of the work done, the consequent sanitary improvements effected, etc., the information given in the various tables will shew, as far as it is possible to do so, the extent and nature of the work which has been carried on. A large number of houses has again been dealt with as unfit for habitation. This has occupied a considerable amount of the time, both of one officer, who for a considerable period was engaged specially upon this work, and of the District Inspectors in general.

NUISANCE ABATEMENT.

The total number of notices served during the year is 8,173, of which 7,686 were informal and 487 statutory.

Magisterial Proceedings.—It is again satisfactory to be able to state that in very few instances has it been necessary

to resort to legal proceedings in order to obtain the abatement of nuisances, &c. In the great majority of cases where official notices were not at once complied with, reminding letters or personal calls upon the persons concerned, resulted in the work required being carried out.

CONVERSIONS OF DRY CLOSETS.

The Inspector of Nuisances, with the energetic co-operation of his assistants, has, in addition to his other duties, been specially engaged during the year in securing the abolition of "dry" closets. In all, 611 such conveniences have been removed and replaced by water closets, against 361 in the previous year. Of this total (611), 259 were pail-closets, 56 midden-privies (chiefly in Benwell and Walker), and 296 "cell" privies (all in the two districts mentioned). In the Inspector's opinion, this is very satisfactory. The work is being continued, and the inspector is hopeful that his efforts will be equally successful during the present year. It is satisfactory for him to have to state that this work was accomplished in all but two instances without having to resort to legal proceedings. In addition to the numbers previously mentioned, 115 dry-ashpits have been removed, and replaced by ash-tubs or galvanised iron dustbins.

There is still in use in the City a large number of these so-called "dry" ashpits, (*i.e.* ashpits without privies attached). Some years ago, in order to induce owners to abolish these ashpits and substitute portable dustbins, the Sanitary Committee decided to supply the first "bin" free of charge, which practice is still carried out, 731 such dustbins having been given during the year in cases where ashpits, privies, &c., have been abolished. So far as the dry ashpits are concerned, it was hoped that greater advantage would have been taken of the Corporation's offer than has proved to be the case, as the substitution of dustbins is undoubtedly a great sanitary improvement. The Inspector's efforts in this direction will be continued during the year.

The following table, prepared by the Medical Officer of Health, shows the incidence of Enteric Fever in relation to the proportion of dry and water closets in the City, over a number of years:—

ENTERIC FEVER IN RELATION TO THE ELIMINATION OF THE CONSERVANCY
SYSTEM OF DISPOSAL OF EXCRETA DURING THE LAST 22 YEARS

YEAR.	CITY ENGINEER'S CENSUS OF		ENTERIC FEVER.	
	Number of Dry Closets in the City.	Number of Water Closets in the City.	No. of Cases.	Attack Rate per 1000 population.
1891	8,244	21,966	134	0·71
1892	8,640	24,749	97	0·50
1893	8,566	25,822	141	0·73
1894	8,515	26,997	164	0·81
1895	8,661	27,848	213	1·03
1896	8,867	28,977	176	0·83
1897	8,982	29,931	138	0·63
1898	9,317	31,158	307	1·38
1899	7,689	33,030	133	0·58
1900	7,966	33,708	79	0·34
1901	7,956	34,408	76	0·35
1902	7,863	35,323	57	0·26
1903	7,613	36,661	75	0·34
1904	7,313	37,985	30	0·13
1905	9,741*	42,175	50	0·19
1906	9,501	43,348	70	0·26
1907	9,237	43,460	66	0·24
1908	9,109	44,803	111	0·40
1909	8,781	45,468	74	0·26
1910	8,428	46,458	63	0·22
1911	7,959	47,681	87	0·33
1912	7,166	48,788	91	0·34

* The large increase in the number of dry closets in 1905 is due to the incorporation of Walker and Benwell in November, 1904, these districts having a privy-box system.

The proportion of Dry Closets to Water Closets has thus fallen from 1 to 2·66 in 1891 to 1 to 6·8 in 1912.

SMOKE NUISANCE.

Smoke Inspections.—The following are particulars as to smoke observations made :—

No. of chimneys watched.	No. of observations made.	No. of chimneys from which black smoke issued in such quantity as to be a nuisance for periods of over 5 minutes in the aggregate during one hour.	No. of times when smoke issued so as to be a nuisance.	No. of notices served for the abatement of smoke nuisances.		No. of Prosecutions.
				Informal.	Statutory	
88	143	15	40	14	—	—

OFFENSIVE TRADES.

The following are the numbers and classes of offensive trades carried on within the City :—

Specified in Section 112, Public Health Act, 1875.—

Blood Boiler (0), Bone Boilers (3), Fellmonger (0), Soap Boilers (2), Tallow Melter (0), Tripe Boilers (8).

Declared by Local Authority, confirmed by Local Government Board (in accordance with Section 51, Public Health Acts Amendment Act, 1907).—Rag and Bone Dealers (22), Dealers in Hides and Skins (4), Dealer in blood or other putrescible animal products (1), Blood Dryer (0), Fat Melter or Fat Extractor (2), Glue and Size Maker (1), Gut Scrapers (2). Fish Friers (130).

The latter business was, at the beginning of 1912, declared to be an offensive trade. This includes all the fried-fish shops in the City. These have been systematically inspected, and, in September last, a report on their condition and on the conduct of this trade in general, was submitted to the Sanitary Committee by the Inspector of Nuisances.

The following businesses have not yet been declared to be offensive trades, but the premises where they are carried on are also inspected, viz. :—Tanners (2), Fish Curers (4), Manure Manufacturers (3).

SUMMARY OF NUISANCES, &c., FOR THE ABATEMENT OF WHICH NOTICES
WERE SERVED DURING 1912.

Foul privies and ashpits (to replace with water-closets)...	{ Privies	77
	{ Ashpits	49
Defective "cell" privies in Benwell and Walker (to replace with water-closets)		734
Foul or defective ashpits not connected with privies (to remove and provide tubs or dust bins, or to provide doors and coverings) ...		104
Insufficient water-closet or privy accommodation (additional water-closets ordered)		19
Defective or insufficient ashtubs or dust bins (to provide new or additional)		945
Defective water-closets (to repair)		583
Water-closets without water supply (to provide water)		143
Choked water-closets (to cleanse—mostly served on tenants) ...		294
Dirty water-closets (to cleanse—all served on tenants)		324
Defective pail-closets (to repair, provide new pails, &c.)		373
Foul pail-closets (to replace with water-closets)		488
Dirty privies (to cleanse—all served on tenants)		52
Defective drains (to repair, or construct new drains)		398
Choked drains, etc. (to cleanse)		1,285
Defective or choked sinks, waste pipes, soilpipes, vent shafts, etc. (to repair or cleanse)		294
Sink wastepipes not trapped, &c... ..		108
Want of or defective pavement in yards and passages (to provide or repair)		173
Dirty rooms (to be cleansed)		139
Damp rooms		64
Overcrowding (to abate)		103
Dirty yards and passages (to cleanse)		576
Animals, pigeons, and fowls improperly kept (to remove)		258
Offensive accumulations (to remove)		241
Accumulations of manure (to periodically remove)... ..		38
Want of or defective manure pits (to provide or repair)		15
Broken roofs and want of or defective or choked spouting (to repair, provide, or cleanse)		443
Want of water (to provide supply)		289
Smoke nuisances (to abate)		14
Want of proper ventilation to tenement rooms owing to window cords being broken (to provide proper sash cords)		49
Defective "waste" waterclosets (to remove, and provide w.c.'s with flushing cisterns, &c.)		30
Pig styes defective		2
Defects in Council Schools	Yards or conveniences dirty	3
	Defective drains	12
	Choked drains	2
	Want of or defective pavements of yards, &c.	2
	Defective w.c.'s	6
	Waste pipes untrapped	3
	Urinals defective, without water supply, &c.... ..	2
	Defective or choked vent-shafts, waste pipes, &c.	6
	Insufficient surface drainage	1
	Defective or choked spouting	2
Structural defects in houses (broken plaster, floors, stairs, &c.) ...		224
Water supply to sinks, &c., derived from feed cisterns		18
Food manufactured or stored for sale under improper conditions ...		10
Bedding in dirty condition (to cleanse)		8
Slop water thrown into privy pails or ashtubs		24
Filth thrown on streets		11
Want of or defective sanitary conveniences in public-houses (to provide or repair)		5
Sale of Ice Cream	Premises in dirty condition	3
	Name and address of vendor not inscribed on barrow	2
Want of drainage		3
Unsuitable premises used as stable		1
Want of under floor ventilation... ..		17
Fried Fish Shops.—Want of cleanliness, &c.		3
Shed occupied as a dwelling		1
Offensive trades established without consent		2
Unclassified minor nuisances (to abate)		58
Total		9,133

DETAILS RELATING TO CERTAIN WORKS CARRIED OUT IN THE ABATEMENT OF
NUISANCES AND TO INSPECTIONS MADE DURING 1912.

Length in yards of old drains removed	...	...	...	...	4,025
" " new " constructed	...	...	...	...	6,146
New trapped gullies provided to drains	...	...	...	...	774
Combined privies and ashpits removed	{	privies	...	...	* 56
		ashpits	...	...	* 37
Cell-privies removed (in Benwell and Walker Districts)	...	...	...	...	296
Water-closets provided	...	...	...	...	† 635
Pail-closets removed	...	...	...	...	259
Defective water-closets removed, and closets of better design substituted	...	...	...	...	63
Dust bins substituted for dry ash-pits where water-closets existed, and provided in cases where pail-closets, &c., have been replaced by water-closets	...	...	...	...	‡ 731
No. of drains tested	...	...	...	...	1,377
No. of tests of above drains made by smoke and water	...	...	...	...	1,934
No. of inspections from complaints made at office (verbally or by letter)	...	...	...	...	1,093
No. of tenement inspections made	...	...	...	...	24,689
No. of contraventions of Tenement Bye-laws for which notices have been served to obtain remedy	...	...	...	...	§ 2,419
Inspections of houses made from complaints received outdoors or nuisances discovered in the districts, including a large number of minor nuisances, such as choked drains and dirty yards, the abatement of which was accomplished at the time of visit, and without legal notice	...	...	...	...	9,448
Inspections to learn if works ordered were in progress	...	...	...	...	9,907
Supervisions of work in progress	...	...	...	...	4,909
Common yards and courts in the worst localities specially visited on Friday afternoons and Saturday mornings to obtain weekly cleansing of same	...	...	...	...	32,939
Inspections after infectious disease	...	...	...	...	1,582
Inspections of milk shops and ice creameries	...	...	...	...	1,759
" bakehouses	...	...	...	...	283
" offensive trades	...	...	...	...	912
" wholesale margarine warehouses	...	...	...	...	88
" as to limewashing of tenements	...	...	...	...	7,050
" of schools	...	...	...	...	190

* Some ashpits have more than one privy attached.

† 20 of these were provided on premises where the accommodation was previously insufficient.

‡ Free dust bins given by Corporation in each case.

§ In addition to this number, the District Inspectors have daily had premises cleansed on verbal order.

SUMMARY OF LEGAL PROCEEDINGS ORDERED TO BE TAKEN BEFORE THE
MAGISTRATES FOR THE ABATEMENT OF NUISANCES, ETC.,
DURING THE YEAR 1912.

NATURE OF COMPLAINT.	No. of Cases.	How DISPOSED OF.
Defective Drains	4	Work done without the summonses being applied for.
Choked Drains	2	Obstruction removed without the summonses being applied for.
<i>Public Health Act, 1875, Sec. 36 :—</i>		
Houses without sufficient water closets, &c., (foul privies, to replace by proper water closets)	16	In one case, the owner was summoned, fined 20/- and costs, and the work was subsequently done; in another instance, a summons was issued, and the owner fined 5/- and costs, an extension of time (not yet expired) being afterwards granted by the Sanitary Committee. In the remaining 14 cases, the work was done without the summonses being applied for.
Defective Water Closets (to repair).	1	Work done without the summons being applied for.
Ashtubs defective or insufficient in number.	4	Tubs provided without the summonses being applied for.
<i>Newcastle-upon-Tyne Improvement Act, 1899, Sec. 46 :—</i>		
Want of Water Supply.	7	Water supplied without the summonses being applied for.
<i>Newcastle-upon-Tyne Bye-laws, (Oct.) 1866, No. 3 :—</i>		
No proper receptacle for dung in connection with stable.	1	A moveable receptacle was provided, and arrangements made for frequent removal; summons not issued.
<i>Tenement Bye-laws :—</i>		
Contravention of Bye-law 12 (Insufficient w.c. accommodation)	3	In two cases, additional w.c.'s were provided, and in the other the number of tenants were reduced so as to comply with the Bye-law. Summonses not issued.
<i>Carried forward ...</i>	38	Amount of Penalties <i>carried forward</i> — £1 5s. 0d.

SUMMARY OF LEGAL PROCEEDINGS ORDERED TO BE TAKEN BEFORE THE
MAGISTRATES FOR THE ABATEMENT OF NUISANCES, ETC.,
DURING THE YEAR 1912.

NATURE OF COMPLAINT.	No. of Cases.	HOW DISPOSED OF.
<i>Brought forward ...</i>	38	Amount of Penalties <i>brought forward...</i> £1 5s. 0d.
Contravention of Bye-law 15 (Yards dirty)	3	Work done without the summonses being applied for.
Contravention of Bye-law 16 (W.C. structure and apparatus)	5	Ditto.
Contravention of Bye-law 18 (Waterclosets dirty)	1	Work done without the summons being applied for.
Contravention of Bye-law 19 (Privies dirty)	1	Ditto.
Contravention of Bye-law 24 (Room floors dirty)	1	Summons issued, but withdrawn on the tenant vacating the house. (See also "Bye-law 32.")
Contravention of Bye-law 27 Passages and staircase dirty)	2	Work done without the summonses being applied for.
Contravention of Bye-law 28 (Keeping of fowls)	1	Occupier summoned, and fined 5/- and costs.
Contravention of Bye-law 31 (Limewashing of yards, passages, staircases, &c.)	5	Summonses issued, and afterwards withdrawn on the work being done and costs paid by defendants.
Contravention of Bye-law 32 (Dirty room walls and ceilings)	1	Summons issued, but withdrawn on the tenant vacating the house. (See also "Bye-law 24.")
Contravention of Bye-law 33 (Yard pavement defective)	1	Work done without the summons being applied for.
Contravention of Bye-law 34 (Want of water supply for domestic purposes)	6	Water supplied without the summonses being applied for.
<i>Total ...</i>	65	TOTAL Amount of Penalties, £1 10s. 0d.

HOUSING.

Tenement Bye-laws.—The number of tenemented houses in the City is 3,551, containing 10,072 holdings, as follows:—

1 Room.	2 Rooms.	3 Rooms.	4 Rooms.	5 Rooms.	Total.
3,488	5,411	1,056	113	4	10,072

The systematic inspection of tenement dwellings continues, and undoubtedly conduces to the more cleanly habits of the dwellers in that class of property. By the repeated visits of the Inspectors, the tenants' duties and responsibilities are brought home to them, and this results in the inculcation of better ideas as to the elements of sanitation. There still, however, remains much room for improvement in this respect.

The Bye-law requiring the limewashing of tenement yards, passages, &c., in the months of April and September, has, as usual, entailed a considerable amount of labour on the part of the Health Department officers. In the year under report, 7,050 visits were made in connection with the enforcement of this Bye-law alone. As previously, circular letters of reminder have been issued to all landlords of tenemented property, which, together with personal interviews, &c., has resulted, in most cases, in the work required being carried out, legal proceedings having been rendered necessary in only five instances.

**Insanitary Dwellings dealt with under the
Newcastle-upon-Tyne Improvement Act, 1882.**

The following dwellings, reported to Committee by the Medical Officer of Health, were dealt with as shown:—

					Houses.	Holdings.
<i>Closed</i> —Cottages, Allison's Brickfield, Walker	...	...	...	...	1	2
27, Dene Terrace, Scotswood	...	...	...	...	1	1
Fair Pit, Walker	...	...	...	...	2	2
White Cottage, Walker	...	...	...	...	1	1
887, 891, 893, 895, 897, 899, 901, Scotswood Road (basement rooms)	...	...	...	...	7	7
27, Silver Street	...	...	...	...	1	4
<i>Carried forward</i>	...	...	...	...	13	17

				Houses.	Holdings
<i>Satisfactory alterations made—</i>				13	17
<i>Brought forward ...</i>				6	6
7, 11, 12, 13, 16, 18, Chapel Court, Scotswood ...				4	4
9, 11, 13, 15, Chapel Terrace, Scotswood ...				4	4
15, 19, 23, 25, Dene Terrace, Scotswood ...				2	3
Prudhoe Court, No. 2 ...				2	2
Staith House Walker ...				3	3
22, 23, 24, Boathouse Cottages ...				...	...
<i>Still under consideration—</i>				4	15
110, 114, Percy Street ...				...	...
<i>Closed—</i>				38	54
CELLAR DWELLINGS.					
227, 595, 599, 613, 617, 806, 810, Scotswood Road...				7	7
106, 107, Blandford Street ...				2	2
2, 4, 6, 16, 18, 20, 26, 28, 30, 58, 27, 29, 31, 33, 35,				...	...
37, 41, 45, 47, George Street ...				19	25
5, Bell Street ...				1	1
4, 6, Mary Street ...				2	2
26, 28, 30, 32, 45, Edward Street ...				5	5
11a, Worley Street ...				1	1
<i>Satisfactory alterations made—</i>					
94, Blandford Street ...				1	1
14, 23, George Street ...				2	2
13, 14, Cottenham Street ...				2	2
7, Laurel Street ...				1	2
279, 283, 313, 317, Scotswood Road...				4	8
<i>Proposals made and accepted by Sanitary Committee, but</i>					
<i>work not yet carried out—</i>					
187, 287, 291, 299, 601, 605, 607, 611, 619, 623,				10	13
Scotswood Road ...				1	1
20, John Street ...				4	5
3, 7, 10, 17, Worley Street ...				...	...
<i>Still under consideration—</i>				2	4
251, 255, Scotswood Road ...				...	...
				64	81
TOTAL ...				102	135

Houses Demolished or otherwise Converted.—15 tenemented houses (45 holdings) and 2 self-contained houses have been converted into business premises or otherwise ceased to be used as dwellings. These are in addition to the number closed as unfit for habitation.

Houses Built during the Year 1912.—The following return of houses built during the year under report is supplied through the courtesy of the City Engineer:—

Newcastle-upon-Tyne.				Houses Self-contained.	Houses of Two Flats each.
Benwell ...	...	...	...	3	1
Fenham ...	...	...	...	11	—
Elswick Township ...	...	...	...	4	—
Westgate Township ...	...	...	...	—	—
Byker Township ...	...	...	...	4	3
Jesmond Township ...	...	...	...	23	6
Heaton Township ...	...	...	...	21	11
St. Andrew's Parish ...	...	...	...	—	—
St. John's Parish ...	...	...	...	—	—
St. Nicholas' Parish ...	...	...	...	—	—
All Saints' Parish ...	...	...	...	—	—
Walker ...	...	...	...	31	3
				97	24
				(for 48 families.)	

New accommodation has thus been provided for 145 families, or at the rate of 5 persons to a family, 725 persons, as compared with accommodation estimated for 1,565 persons provided during 1911.

Customs and Inland Revenue Act, 1890, Sec. 26 (2).—Applications, respecting 25 houses, for certificates entitling the owners to exemption from inhabited house duty were made to the Medical Officer of Health during the year. In only 8 instances were the sanitary conditions such as to justify the granting of a certificate.

Sanitary Alterations.—12 plans for minor sanitary works have been examined and approved or otherwise by the Medical Officer of Health, and forwarded to the City Engineer for his consideration, as compared with 17 during the previous year.

NEW HOUSE DRAINS.

Drains of New Buildings.—This work has been efficiently carried out during the year, details being shewn in the following table:—

No. of Premises at which Drains have been laid.	No of Main Drains Tested.		No. of Branch Drains Tested.		Supplementary Tests.	Super-visions of Work in Progress.	Visits to learn if Work in Progress.
	With Water.	With Smoke.	With Water	With Smoke			
304	264	40	979	76	1,071	5,175	2,514

COMMON LODGING HOUSES.

These houses have been well conducted during the year. 65 applications have been received for the registration of common lodging houses, 64 being granted and 1 refused, whilst 2 houses have been closed, and 2 adjoining houses converted into one. The number of common lodging houses in the City at the end of the year was 61. The total number of lodgers for which these houses were registered was, at the close of the year, 2,006, as against 2,033 at the end of 1911. The average number of lodgers per night was 1,524, the highest and lowest numbers on any one night being 1,739 and 1,437 respectively.

For further particulars see Tables below.

The Assistant Inspectors of Common Lodging Houses also obtain samples of water and milk for bacteriological examination, and collected 191 of the former and 286 of the latter during the year. These officers also take smoke observations, and assist the District Inspectors when required.

REGISTERED COMMON LODGING HOUSES.

SUMMARY OF WORK DONE AND VISITS MADE DURING THE YEAR 1912.

Number of Houses on the register at the end of the year	61
Applications for registration (64 granted—1 refused) ...	65
*Houses registered	64
Houses removed from Register (2 being closed, and 2 adjoining houses converted into 1)	3
Inspections made in the day-time	10,148
" " night-time	662
Notices served { <i>re</i> washing of bed clothes 244 } { „ limewashing of houses 122 }	366
Contraventions of Bye-laws, &c. :—	
Cleaning and ventilation of houses	10
Removal of liquid filth from rooms	1
Bed clothes not properly “aired” during prescribed hours	18
Beds and bedding dirty or defective	18
Cleansing of yards and passages	9
Structural defects in houses	12
Defective water-closets and drains	16
Choked drains, water-closets, &c.	13
Defective roofs and choked or defective spouting	8
Defective or choked sinks, waste pipes, &c.	5
W.C. without a water supply	1
Dirty water-closets	9
Lavatories defective	2
Lavatory dirty	1
Defective urinal	1
Insufficient ventilation to rooms (broken window cords, &c.)	3
Deaths reported (non-infectious disease)	1
Cases of infectious disease reported	2

* Application for the registration of common lodging houses is now required to be renewed each year (Sec. 63, Newcastle-upon-Tyne Corporation Act, 1911).

LODGERS OCCUPYING COMMON LODGING HOUSES IN THE CITY
DURING THE YEAR 1912.

			Year 1912.	Corresponding Nos. for Year 1911.
Average number of Lodgers per night	...	...	1,524	1,426
Highest number on any one night	...	...	1,739	1,568
Lowest " " "	...	...	1,437	1,268
Number of Lodgers for whom accommodation was provided in the Common Lodging Houses of the City at the end of the year	...	...	2,006	2,033

FACTORIES AND WORKSHOPS.

Factory and Workshop Acts.—There are on the Register 1,302 workshops, besides a large number of factories, domestic workshops, workplaces, laundries, bakehouses, &c.

Particulars as to the number and nature of the various trades carried on, the number of inspections made, defects found, out-workers, &c., are given in the Tables below.

During the year, 83 lists of outworkers have been received, 30 employers having sent in lists twice, and 23 employers once.

Included in the lists so received, were 25 names and addresses of out-workers employed in districts outside the City. These were duly forwarded to the respective districts, as required by law.

64 notices as to insanitary conditions in factories and workshops have been received from H.M. Inspectors of Factories. 16 of these related to factories, and 48 to workshops. The matters referred to were investigated and dealt with by service of notice, &c., the results being reported to the Inspectors of Factories as required by the Act.

ADMINISTRATION OF THE FACTORY AND WORKSHOP ACT, 1901,
IN CONNECTION WITH FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK,
DURING THE YEAR 1912.

HOME OFFICE TABLES.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR
INSPECTORS OF NUISANCES.

PREMISES. (1)	NUMBER OF		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
Factories (Including Factory Laundries.)	174	497	Nil.
Workshops (Including Workshop Laundries.)	7,441		
Workplaces (Other than Outworkers' premises included in Part 3 of this Report.)	1,058		
Total	8,673	497	

2.—DEFECTS FOUND.

PARTICULARS. (1)	NUMBER OF DEFECTS.			Number of Prosecu- tions. (5)
	Found. (2)	Remedied. (3)	Referred to H.M. Inspector. (4)	
<i>Nuisances under the Public Health Acts:—*</i>				} Nil.
Want of cleanliness	221	220	1	
Want of ventilation	15	14	—	
Overcrowding	17	17	—	
Want of drainage of floors	2	2	—	
Other nuisances	199	198	—	
† Sanitary (insufficient	38	35	—	
accommodation (unsuitable or defective	71	70	2	
(not separate for sexes	18	17	—	
<i>Offences under the Factory and Work- shop Act:—</i>				
Illegal occupation of underground bakehouse (s. 101)	1	1	—	} Nil.
Breach of special sanitary require- ments for bakehouses (ss. 97 to 100)	72	71	—	
Other offences (Excluding offences relating to out- work which are included in Part 3 of this Report.)	—	—	2	
Total	654	645	5	

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

Sec. 22 of the Public Health Acts Amendment Act, 1890, is in force. The standard fixed by the Sanitary Accommodation Order (No. 89) of 4th February, 1903, is followed as a model.

FACTORY AND WORKSHOP ACTS.—Continued.
3.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.										OUTWORK IN UNWHOLESOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.		
	Lists received from Employers.						Notices served on Occupiers as to keeping or sending Lists.	Prosecutions.		Instances.	Prosecutions.	Instances.	Orders made (Section 110.)	Prosecutions (Sections 109, 110.)		
	Twice in the Year.		Once in the Year.					Failing to keep, or permit inspection of Lists.	Failing to send Lists.							
	Lists.†	Outworkers.†		Lists.	Outworkers.											
		Con-tractors (3)	Work-men. (4)		Con-tractors (6)	Work-men. (7)										
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
Wearing (1) Making, &c. ...	58	12	194	22	8	68	70	Nil.	Nil.	37	...	Nil.	2	Nil.	Nil.	
Apparel (2) Cleaning and Washing	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
Household Linen ...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	
Furniture and Upholstery	...	...	17	1	...	1	...	...	...	...	...	...	...	...	...	
Brass and Brass Articles	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
Umbrellas, &c. ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
Paper Bags and Boxes...	2	...	10	...	...	...	...	...	...	...	...	...	...	...	...	
Making Cart Gear	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
" Locks, &c. ...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	
" Brushes ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	
Total	60	12	229	23	8	72	70	...	...	37	37	...	2	...	...	

NOTES.—† The figures in columns (2), (3), and (4) are the total number of lists (received from employers who sent them both in February and August as required by the Act) and of the entries of names of outworkers in those lists. They are, therefore, double of the number of such employers and (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the same outworker's name is often repeated.

Columns (3), (4), (6), and (7)—Employers seldom state whether their Outworkers are "Contractors" or "Workmen," hence the numbers given above may not be properly divided.

§ In 51 cases the lists of outworkers were not received in the month of February or August as required by the Act, but in every such case they were subsequently received on the employers being reminded of their default. 19 instances of failing to keep or permit inspection of lists of outworkers also occurred, the employers likewise complying after reminder.

* With one exception the Notices were served upon the Outworker, and in each case, were immediately complied with.

† These cases were children of outworkers. In each case the patient was removed to Hospital, and the premises thoroughly disinfected.

In cases where an employer gives out work of more than one of the classes specified in Column (1), the "list" is included in Column (2), or (5), as the case may be, against the principal class only, but the outworkers are assigned in Columns (3) and (4) or (6) and (7), into their respective classes.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number. (2)
Factories	643
Workshops	1,302
Domestic Workshops	181
Workplaces	256
Laundries	41
Bakehouses	267
Total Number of Factories and Workshops on Register ...	2,690

5.—OTHER MATTERS.

CLASS. (1)	Number. (2)
Matters notified to H.M. Inspector of Factories:—	
Failure to affix Abstract of the Factory and Workshop Act (sec. 133)	25
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5). {	
Notified by H.M. Inspectors ...	64
Reports (of action taken) sent to H.M. Inspectors ...	64
Other:—	
Underground Bakehouses (s. 101):—	
Certificates granted during the year	—
In use at the end of the year	13

6.—TRADES,

Particulars as to the number and nature of the various trades carried on in the workshops of the City.

TRADES.	Work-shops.	Domestic Work-shops.	Work-places.
Aerated Water Manufacturers	1	—	—
Agricultural Implements (making and re-pairing)	1	—	—
Artificial Stone making	7	—	—
Asphalt preparing, &c.... ..	3	—	1
Athletic Outfitters	6	—	—
Anchor making	1	—	—
Bacon washing	6	—	—
Bakehouses	65	202	—
<i>Carried forward</i> ...	90	202	1

6.—TRADES—continued.

TRADES.	Work-shops.	Domestic Work-shops.	Work-places.
<i>Brought forward</i> ...	90	202	1
Bags, Baskets, Trunks, &c. (making and repairing) ...	12	2	2
Bouquet and Wreath making ...	11	—	—
Bedsteads, Bedding and Mattress making ...	6	—	—
Bicycles (making and repairing) ...	28	—	—
Blacksmiths ...	67	—	—
Boat building ...	3	—	—
Bottling wine, spirits, and beer, and bottle washing ...	5	—	13
Boots, Shoes, and Slippers (making and repairing) ...	136	26	—
Builders and Contractors ...	19	—	4
Brush making ...	2	—	—
Carriages, Coaches, Carts, and Barrows (making and repairing) ...	14	—	—
Carpets, Canvas, and Waterproof Covers (making) ...	7	1	—
Cattle Food and Medicine preparing... ..	2	—	—
Chemical Works, &c. ...	5	—	—
Confectioners ...	12	1	—
Coal Depôts ...	—	—	23
Coopers ...	10	—	—
Cork Cutters ...	2	—	—
Currants and other fruits (packing and cleaning) ...	7	—	1
Cutlers, and Corset and Stay Makers ...	2	—	—
Cigarette making ...	2	—	—
Dentists ...	1	—	—
Drysalts ...	8	—	1
Empty Crates (storage of) ...	—	—	1
Egg packing, &c. ...	2	—	—
Engravers ...	7	—	—
Electric Tram Depôts ...	2	—	—
„ Fittings (making) ...	6	—	—
Engineers ...	6	—	2
„ (Electrical) ...	9	—	1
„ (Motors) ...	6	—	6
„ (Model Makers) ...	1	—	—
Fire Wood and Fire Lighters (preparing) ...	5	—	—
Fish Curers ...	3	—	1
Furriers ...	10	—	—
Fur pulling ...	1	—	—
File cutting ...	1	—	—
Furniture (cabinets, automatic seats, &c., and french polishing) ...	48	—	3
Guns (repairing)... ..	3	—	—
Gut scraping ...	1	—	—
Galvanizing ...	1	—	—
Grain, Ice, and Oil Warehouses ...	—	—	26
Hat and Cap making ...	4	2	—
Hosiery Garments (making) ...	5	2	—
Harness (making and repairing) ...	13	—	—
Hay, Straw, and Moss Litter (storage of) ...	—	—	10
<i>Carried forward</i> ...	585	236	95

6.—TRADES—continued.

TRADES.	Work-shops.	Domestic Work-shops.	Work-places.
<i>Brought forward</i> ...	585	236	95
Hide and Skin Dealers ...	—	—	4
Instruments, Mathematical and Musical (making and repairing) ...	2	—	—
Ink manufacturing ...	1	—	—
Ice Cream making ...	7	78	—
Ironmongery (storage of) ...	—	—	1
Jewellery, Watches, Clocks, &c. (making and repairing) ...	51	4	—
Joiners, Handrillers, and Ladder Makers ...	64	—	—
Japanning ...	1	—	—
Lamps (making and repairing) ...	2	—	—
Lard rendering ...	1	—	—
Laundries ...	25	16	—
Leather dressing ...	2	—	—
Locksmiths ...	4	—	—
Machines, Second hand (repairing) ...	2	—	—
Marble Masons and Monumental Sculptors ...	8	—	—
Milliners ...	72	3	—
Marine Stores and Metal Dealers ...	21	—	1
Oil bottling ...	1	—	—
Opticians ...	1	—	—
Organs and Pianos (making and repairing) ...	2	—	8
" Pipes ...	1	—	—
Onion stringing ...	2	—	—
Ornament making (fine art) ...	2	—	—
Paint and Varnish (making and bottling) ...	3	—	—
Painter's Workshops ...	42	—	—
Paper Warehouses ...	—	—	2
Parcel Carriers ...	—	—	3
Photographers ...	24	—	—
Pickle and Sauce making ...	8	—	—
Picture Framers ...	13	—	—
Pipes, Tobacco (making and repairing) ...	1	1	—
Plaster and Lath rendering ...	5	—	—
Plumbers and Gasfitters (including making and repairing of sanitary pipes and fittings, &c.) ...	83	—	2
Provisions, Ship's Stores, Tinned Meats, &c. (storage of) ...	—	—	11
Restaurants, kitchens ...	—	—	85
Rubber Stamps and Tyres (making and repairing) ...	3	—	—
Refuse Tips ...	—	—	2
Scales and Weighing Machines (making and repairing) ...	6	—	—
Sewing Machines (repairing) ...	1	—	—
Sign Boards and Sun Blinds (making and repairing) ...	2	—	—
Stained Glass (making) ...	5	—	—
Sugar packing ...	1	—	—
Slates (storage of) ...	—	—	1
Stables (Livery, &c.) ...	—	—	35
Tailors ...	207	23	—
<i>Carried forward</i> ...	1261	361	250

6.—TRADES—continued.

TRADES.	Work-shops.	Domestic Work-shops.	Work-places.
<i>Brought forward</i> ...	1,261	361	250
Taxidermists	2	—	—
Tea Blending	5	—	—
Ticket Writers	11	—	—
Timber Yards	11	—	—
Tin, Iron Plate, and Wire Workers ...	16	—	1
Tripe Dressers	6	1	—
Typewriting Machines (repairing) ...	3	—	—
Tools and Saws (making and repairing) ...	2	—	—
Telegraphic Apparatus (storage of) ...	—	—	1
Toys (storage of)	—	—	2
Underclothing (making of)	21	30	—
Undertakers	23	—	—
Upholsterers	16	4	2
Umbrellas (making and repairing) ...	1	—	—
Venetian Blinds (making and repairing) ...	3	1	—
Wood Carvers	11	2	—
Totals	1,392	399	256

COUNCIL SCHOOLS.

Sanitary Inspection of Council Schools.—190 inspections of these schools have been made during the year. At 13 schools, insanitary conditions were found. (For particulars see page 117.) The matters in question were reported to the School Authorities.

THE RAG FLOCK ACT, 1911.

In pursuance of this Act, which came into operation in July last, 12 samples of rag flock have been purchased and submitted for analysis to the Public Analyst. Six of them did not conform to the standard of cleanliness laid down by the Local Government Board in their Regulations under the Act, but contained soluble chlorine as chlorides in amounts varying from 43 to 554 parts per 100,000 of flock. In each of these cases, the vendor was cautioned, by order of the Sanitary Committee.

The attention of Upholsterers and other Dealers in Rag Flock was also drawn to the provisions of the Act, by advertisement in the local newspapers.

For particulars of work done under the *Food and Drugs Acts*, see pages 100-110.

I am, Sir,

Your obedient Servant,

W. HUDSPETH,

Health Department,

Town Hall,

9th May, 1913.

Inspector of Nuisances,

Common Lodging Houses, &c.

**SUMMARY OF SPECIAL REPORTS MADE BY
THE MEDICAL OFFICER OF HEALTH
DURING 1912.**

The following, among other matters, have been brought before the Sanitary Committee by the Medical Officer of Health during the year :—

Infectious Disease.

Scarlet Fever and Schools	...	...	...	...	Jan., Feb.
Enteric Fever—Outbreak in Delaval Terrace	...	...	...	...	Feb.
Diphtheria—Outbreak at Walker Gate School	...	...	...	...	Nov.

City Hospital for Infectious Diseases.

Superannuation, Nurses and Servants	...	...	...	...	Feb.
Tenders for Groceries, Provisions, Meat, Milk, Fish, Bedding, Linen, Furnishings, Hardware, Earthenware, etc.	...	...	...	...	Feb., May.
Meat Contract	...	...	...	...	April.
Report on Expenditure—Comparative with other hospitals (Deputy M.O.H.)	...	...	...	...	Sept.

Localities.

Ouseburn Refuse Tip	...	...	...	...	Jan.
Houses unfit for Habitation, including Cellar Dwellings	...	...	...	...	Jan., Feb., Mar., Apr., May, July, Aug., Sept., Oct.

General.

Food and Drugs Act	...	...	...	...	Jan., Dec.
Bacteriological Examinations—Cost	...	...	...	...	May.
Confirmation of Agreement by Council	...	...	...	...	July.
Agreement and Annual Estimates	...	...	...	...	Aug.
Monthly References	...	...	...	...	—
Ptomaine Poisoning	...	...	...	...	Mar.

SUMMARY OF SPECIAL REPORTS—continued.

Tuberculous Milk	...	...	...	...	Mar., April, May, Sept., Dec.
Library books from infected houses	...	...	...	...	Mar.
Tenders for Bedding Van, Uniforms and Overcoats for Inspectors, etc.	...	...	...	...	Mar., Sept.
Conferences on Tuberculosis	...	...	...	...	April.
Health Conference and Exhibition	...	...	...	...	May.
Conference on National Insurance Act, between National Health Commissioners, Local Government Board, and Medical Officers of Health (Deputy M.O.H.)	...	...	...	...	June.
National Association for Prevention of Consumption—Annual Conference at Manchester	...	...	...	...	June.
Tuberculosis Dispensary	...	...	...	...	June.
National Insurance Act—Nomination by Commissioners of Superintendent of Midwives on Newcastle Insurance Committee, and appointment of Deputy M.O.H. as Medical Adviser to that Committee	...	...	...	...	June, Aug.
Sanitary Inspectors' Association—Annual Conference at Sheffield	...	...	...	...	July.
Retirement of Dr. Henry E. Armstrong	...	...	...	...	July.
Royal Sanitary Institute—Annual Congress at York	...	...	...	...	Aug.
Corporation Superannuation Fund—Complete schedule of value of emoluments of all grades of employés in the Health Department	...	...	...	...	Aug.
Rag Flock Act, 1911	...	...	...	...	Sept.
Public Health (Tuberculosis) Regulations, 1912	...	...	...	...	Dec.
National Association for the Prevention of Infantile Mortality and for the Welfare of Infancy	...	...	...	...	Dec.
Appointment of Dr. Harold Kerr as M.O.H.	...	...	...	...	Nov., Dec.
Appointment of Dr. S. J. Clegg as Assistant M.O.H.	...	...	...	...	Dec.

