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29.
ANNUAL REPORTS

FOR 1898,

TO THE FOLLOWING DISTRICT COUNCILS:

DONCASTER BOROUGH.

DONCASTER RURAL.

BALBY AND HEXTHORPE URBAN.

GOOLE RURAL.

GOOLE URBAN.

RICCALL RURAL.

SELBY RURAL.

SELBY URBAN.

TADCASTER RURAL.

J. MITCHELL WILSON, M.D., D.P.H., Cambs.

MEDICAL OFFICER OF HEALTH.



BOROUGH OF



DONCASTER.

BOROUGH OF



DONCASTER.

DONCASTER URBAN SANITARY AUTHORITY.

ANNUAL REPORT

OF THE


Medical Officer of Health,

For the Year ending 31st December, 1898.

DONCASTER :

WILSON AND MONKS, COMMERCIAL AND GENERAL PRINTERS, SCOT LANE.

1899.



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Doncaster Urban Sanitary Authority.

Annual Report

OF THE

MEDICAL OFFICER OF HEALTH

For the Year ending 31st December, 1898.

POPULATION CENSUS, 1891	...	...	...	25,954
ESTIMATED POPULATION DURING 1898	...			30,000
PART ESTIMATED AS BUILT UPON IN ACRES				1,640

TO THE DONCASTER SANITARY COMMITTEE.

GENTLEMEN,

I have now to present my annual report for 1898.

I have estimated the population of the Borough up to the middle of last year as 30,000.

The births registered were 890, males 432, females, 458 ; Births. increase in the number of births over 1897 was 70.

The birth rate in 1898 was 29·7, the average rate for the previous 10 years was 31·5 per 1,000. In the whole of England and Wales, the birth rate last year was 29·4 per 1,000. The last quarterly report of the Registrar General says, "The birth rate is lower than in any other year on record, and when compared with the average in the ten years 1888-97, 1898 shows a decrease of 1·1 per 1,000.

In the Wards of the Borough, the birth rate was as follows :—

Central Ward	...	...	...	22·0 per 1,000
East	„	...	...	19·5 „
North	„	...	...	43·0 „
St. George's Ward	...	...	...	29·4 „
South Ward	...	...	...	34·0 „
West	„	...	...	28·3 „

The greatest difference from the general rate is in the North Ward, which contains the Workhouse and the births which take place there are included in that Ward, although many of the mothers do not reside there. The low birth rate in the East Ward rather points to the population there being over estimated.

Deaths.

574 deaths were registered in Doncaster last year: males 317, females 257. Of the 72 deaths which took place at the Infirmary and the Workhouse, 42 were of persons belonging to other districts, these are deducted; 3 persons belonging to this town died at the West Riding Asylum, these are added, so that the corrected number is 535. The death rate for the year was 17·8 per 1,000. The ten years' average rate was rather higher, viz.: 18·1. The death rate for the whole County was 17·6 last year.

In the different Wards there are great differences.

In the Central Ward	the death rate was	22·4
„ East	„ „	13·0
„ North	„ „	22·6
„ St. George's	„ „	16·5
„ South	„ „	15·0
„ West	„ „	16·5

Before any of these calculations are made, all the deaths of Doncaster people which occur at the Infirmary and the Workhouse are divided among the whole population of the

town according to the numbers estimated in each Ward. The fact that the birth rate was exceptionally low in the Central Ward shows that the high death rate there is not due to any under-estimate of the population. In the North Ward, part of the excess of the death rate above the general average will be noticed immediately.

69 deaths were caused by the following diseases in the list of Zymotics:—

Deaths from
Zymotic
Diseases.

26	were caused by diarrhœa, 24 were of infants.
21	„ measles, 20 under 5 years of age.
11	„ whooping cough, all under 5 years of age.
6	„ enteric fever, two were strangers.
1	„ scarlet fever.
2	„ diphtheria.
1	„ membranous croup.
1	„ English cholera.

The death rate was 2·3 per 1,000, which agrees with the 10 years' average rate. In the North Ward that rate was nearly twice the average, viz.: 4·5; in the other Wards the deaths were below the average, unless in the Central where the excess was trifling.

1898 was one of the recurring years when measles become very prevalent, the number of deaths were double the average of the previous 6 years. In 1895 there were the same number of deaths, and in 1892 there were 25, while in 1896 there were 22, and in 1893 there were only 3. Deaths from diarrhœa were also last year above the average. There are great variations in the numbers year by year, but they are mainly influenced by the warmth of the summer and autumn months; *e.g.*, in 1895 there were 38, in 1896 only 3, in 1897 35 deaths, and in 1898 there were 27. But the deaths from diarrhœa are only one group of diseases of the bowels very fatal to young

children. Another name given by many doctors is gastro enteritis or irritation of the bowels, from that complaint there were 27 deaths in children last year.

The full influence of a hot summer is noted when the deaths among infants are measured by the births registered during the year.

Deaths among
Young
Children.

In 1898 the proportion was 205 deaths among infants to every 1,000 registered births; the 10 years' average was 167.

In the Central Ward the proportion				297
„	East	„	„	87
„	North	„	„	235
„	St. George's	„	„	227
„	South	„	„	170
„	West	„	„	188

The extreme difference between the Central and North Wards with the East, is, I believe, one largely of the more-crowded populations living in the two former Wards. I have tabulated all the deaths which occurred last year in the Common Yards of the town; the great majority of these are to be found in the North and the Central Wards. The result shows that out of 71 deaths registered in houses in these yards, 49 or 68 per cent. were among children under 5 years of age, while the proportion over the whole town was 46 per cent.

Deaths from
Disease of the
Lungs.

From disease of the lungs such as bronchitis, pneumonia, &c., there were 70 deaths, of whom more than one-half were children under 5. The death rate was 2·3 per 1,000, as compared with an average rate of 3·2. I must however add that during March and April of 1898, a sharp outbreak of influenza occurred in Doncaster and caused 20 deaths, chiefly among old people. 16 of these cases were associated with some disease of the lungs; but even with these added, deaths from chest diseases were still below the average last year. Phthisis is a separate disease of the lungs, due to the same

cause as other diseases which are known under the general name of tubercular. Deaths from phthisis or consumption were last year equal to 1·3 per 1,000. Of the 40 deaths, 25 were males; the greater number were workers *out of doors*, 36 per cent. of these died under 45 years of age. Among the 15 females who were mainly workers *indoors* 73 per cent. died before the 45th year. The lesson is that badly ventilated living and work rooms contribute to the liability of the individual who occupies these to contract consumption.

But tubercular diseases attack and carry off many young children, and when there is added to the above those so named in Table III, the death rate is increased to 2·3 per 1,000. That number I would remind you is greater than that caused by all forms of infectious disease, in the control of which so much has been and is successfully being done. But tubercular diseases can also be communicated from one person to another, and also from animals to man by the use of meat and milk. The best veterinary authorities acknowledge that a large number of cows suffer from tubercle in some degree, although proof has been given that it is only when the disease is far advanced that the milk contains the disease germs. The inspection made of the sheds where cows are lodged is to insure healthy conditions of plenty of room, air, light, and cleanliness for the animals. The method of shutting out as much air as possible and keeping the cows warm, is the very method to develop any tendency to tubercle, and the increased amount of milk obtained is at the expense of a less healthy and shorter life for the animal. This matter is now exciting so much attention, that I would again urge all users of milk to protect themselves and their families by having their supply of milk boiled before it is used. The trifling objection to the slight change of the flavour is far outweighed by the security against all forms of infectious disease which milk can convey. Cowkeepers must also expect that more air space, more light and ventilation will be required in the sheds.

32 deaths were registered last year on the certificate of the Coroner, 20 of these were returned as due to some form of ordinary disease, 10 resulted from accidents, and 2 were cases of suicide.

Cases of
Infectious
Disease
Notified.

During 1898, 115 cases of infectious disease were notified, there were 230 in 1897, and 430 in 1896. During 11 separate weeks last year, no case of infectious disease was reported.

Among last year's returns—

32	were cases of scarlet fever.
37	„ enteric fever.
33	„ erysipelas.
10	„ diphtheria.
1	„ membranous croup.
1	„ smallpox.

The 32 cases of scarlet were very considerably under the number reported in both the previous years. One death was due to this disease. 57 per cent. of the cases were treated in Carr House Hospital, and all recovered. The majority of the cases occurred during the first three months of the year. 10 cases were reported from 4 houses, but all the others were single cases and distributed fairly evenly over the different Wards of the town.

37 cases of enteric fever were reported of whom 6 died; the death rate of 16 per cent. of those attacked shows that many of the cases were of a severe type. 20 or 54 per cent. of the cases were removed to Carr House Hospital, of these 3 died. The inquiry made of each case showed that 5 came to Doncaster ailing, and within a few days of their arrival developed the symptoms of enteric fever. 2 of the deaths were among these 5 visitors or strangers to the town.

Up to the end of July there had only been 9 cases of that illness, and 5 of these had occurred at 2 houses.

On the 15th of September, the first of what proved to be an unusual outbreak was reported ; 27 cases were afterwards notified up to the end of the year. 9 of these occurred in 3 houses in Victoria Street, but the infection had been present for some time there before any case could be removed to the hospital.

In addition to these facts which prove that enteric fever has a greater power to infect others in the same house than is generally believed, it was found that cases recurred near to houses where cases had previously been reported from. When a common closet is in use by more than one family, or even an ashpit is common to 2 closets, the risk of infection is increased. At the 26 houses where cases occurred last year, a privy and ashpit was provided for 15 of these, for 7 there was an outside water-closet, for 2 a w.c. inside the house, and for 3 a common trough water-closet.

Of the 10 cases of diphtheria and 1 of membranous croup, 3 died, all children; the cases were nearly all isolated ones, and in only one house did a second case occur. With that exception and also a recurrence of the disease in a house some months after a previous one, I failed to trace the origin of the infection in last year's cases.

The only case notified as small-pox, broke out when cases of that disease were rather prevalent in a neighbouring town. The case was removed to the hospital, the other inmates of the house re-vaccinated, and no more cases followed.

At Carr House Hospital, 62 patients were treated last year.			Cases treated at Carr House Hospital.
37	suffered from	scarlet fever.	
23	„	enteric fever.	
1	„	diphtheria.	
1	„	small-pox.	

41 were new cases admitted from Doncaster, and 14 were from Balby and Hexthorpe or rural parishes.

The Sanitary Committee met at the hospital and considered suggestions made for a better separation of the cases, a new nurses' room, and improving the sanitary arrangements. The work which the Committee ordered has been carried out, and now cases of scarlet fever, enteric fever, and diphtheria can be treated in wards completely shut off from others suffering from another disease. It was felt however that no provision was available for cases of small-pox, and it was considered prudent to provide a hospital on a separate site, and not to wait until any cases of that disease should occur. Great care was taken in selecting a site, and the one eventually chosen is in my opinion in every way satisfactory. It is in the Balby district on high ground, with no house nearer than half a mile. Accommodation is provided for 12 patients in 2 wards with a substantial caretaker's house, so placed as readily to serve as well for 2 similar wards if needed, on the opposite side. Half a mile of road has been made, and water mains laid.

When the proposed alterations at Carr House and the new hospital for small-pox were being considered, the Balby-with-Hexthorpe Urban Council were asked to unite in these proposals. Terms were arranged, and now Carr House and the new hospital provide for the isolation of all cases of infectious disease for Doncaster and the Balby-with-Hexthorpe district. The latter have also all infected clothing disinfected by steam at the disinfecting apparatus at Carr House.

A large number of cases of measles and of whooping cough occurred in the spring last year, the school attendance was greatly lessened, for several schools certificates of exemption for infected children were given, but it was considered necessary to close for 3 weeks the Marshgate School.

Water Supply. During the autumn the water in the reservoirs was very low, and the additional supply of soft Sheffield water was greatly appreciated. As cases of enteric fever were more than usually prevalent, it was decided to have a bacteriological

examination of the water as supplied in the town. It was very satisfactory to hear from Professor Delepine, of Manchester, who examined the water, that "No pathogenic (or disease producing) organism was detected, and that the water must be pronounced good from a bacteriological standpoint."

During inspections made to houses in account of cases of ^{Sanitary} illness, deaths from diarrhœa, or during ordinary sanitary ^{Inspections,} inquiries, there are many of the defective iron traps found, they show how little they can claim to keep back the air of the drains as they are repeatedly broken, or partially lifted off; happily, a considerable number were replaced with gully traps last year.

During the summer the condition of the drains, closets, and paving of the common yards were examined, and many defects reported to the Sanitary Committee. The high percentage of deaths among young children living in these yards is good evidence that there is need for more improvements.

I found that some of the premises where ice cream is prepared, were in anything but a clean and satisfactory state. In reporting the facts to the Sanitary Committee, the persons concerned were noticed to make and keep their premises, vessels, &c., in a thoroughly clean condition; that brought about a considerable improvement.

During 1898 the following cattle, &c., were slaughtered at ^{Work at the} the public slaughter house:— ^{Slaughter} ^{House.}

Beasts	...	...	...	3,554
Calves	...	...	...	538
Sheep	...	...	...	7,863
Lambs	...	...	...	1,147
Pigs	...	...	...	5,433

In addition, many carcasses are brought there from the rural districts, some for inspection before being offered for sale. It was found necessary last year to destroy 4 carcasses as being

unfit for human food. After making inquiries as to practice in other large towns, the Sanitary Committee decided "that the Committee having considered returns from various towns as to the formation of Butchers' Juries, recommended that the deputation received at the last meeting be informed that the Committee cannot see their way to altering the present method of meat inspection, which, inasmuch as it allows the owner of the carcase to have every opportunity of inspection of the condemned meat by a veterinary surgeon or butchers, appears to afford them every protection."

"The Committee would be glad to support the Butchers' Association in any attempt that might be made by legislation for securing compensation for the loss arising from the condemnation of carcases in certain cases of tuberculosis."

Doncaster is fortunate in having only 3 premises licensed as private slaughterhouses ; in these very little work is carried on.

The Committee instructed the Sanitary Inspector as to visits made to the common lodging houses, and those persons licensed were reminded again by circulars as to their duty to report any case of infectious disease among the inmates.

Scavenging of
Ashpits.

In July, the Scavenging Sub-Committee found that the work of removing the ashpit refuse was not well carried out. A new foreman has been appointed, and the work is now done more thoroughly and systematically. The Inspector's returns shew an increase over the number of ashpits scavenged during the year ; that increase is due to the extra work done during the last half of 1898.

I remain,

Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON,

Medical Officer of Health.

DONCASTER, 20th February, 1899.

INSPECTOR'S TABLE.

NUISANCES ABATED, ETC., DURING 1898.

Inspections made	...	...	...	...	...	348
Written and Verbal Notices given...	...	...	...	...	...	173
Ash-pits covered and ventilated	...	...	...	...	...	35
House and yard drains repaired or trapped with gullies...	...	...	...	...	...	206
Ash-pits, etc., scavenged	...	...	...	...	...	10604
Other nuisances under The Public Health Act...	...	...	...	...	...	89
Canal boats inspected	...	...	...	...	...	73
Notices for breach of the Canal Boats Regulations	...	...	...	...	...	6
Common lodging-houses on the register...	...	...	...	...	...	9
Bakehouses on the register	...	...	...	...	...	16
Dairies and milkshops on the register	...	...	...	...	...	35
Privies made into water closets	...	...	...	...	...	41
Additional w.c's. provided...	...	...	...	...	...	7

SAMPLES OF FOOD SUBMITTED FOR ANALYSIS,

ETC.

1. New Milk (1 superior, 2 genuine, 4 fair)	...	...	...	7
2. Lard (3 genuine, 3 suspicious)	...	...	...	6

13

Cases summoned before the magistrates :

2 persons fined with costs for offences against
the Canal Boat Regulations.

JOHN THOMPSON,

INSPECTOR.

BEDDING, ETC., DISINFECTED BY STEAM AT THE
PUBLIC DISINFECTING APPARATUS, 1898.

Beds	78
Mattresses	46
Pillows and Bolsters	217
Pairs Blankets	78
Pairs Sheets	40
Counterpanes	65
Articles of Clothing	24
Sundry Articles	47
<hr style="width: 10%; margin: 10px auto;"/>	
Total	595
Houses or Rooms Disinfected	68

TABLE I.

Summary of Birth and Death Rates in the Borough, and in each Ward, during 1898, compared with the Returns for the whole of England and Wales.

	Population in 1898.	Rate per 1,000 of the Population.						Deaths in Children under one year per 1,000 Births.
		Births.	Deaths.	From Zymotic Diseases.	Diarrhoea	From Phthisis.	From other Respira- tory Diseases.	
BOROUGH ...	30,000	29.7	17.8	2.3	0.8	1.3	2.3	205
CENTRAL ...	5,344	22.0	22.4	2.4	1.1	1.8	2.9	297
EAST ...	4,100	19.5	13.0	1.2	0.9	0.9	0.7	87
SOUTH ...	5,466	34.0	15.0	2.2	1.3	1.1	2.2	170
NORTH ...	4,911	43.0	22.6	4.5	1.2	1.2	2.8	235
ST. GEORGE'S ...	4,174	29.4	16.5	1.4	0.4	1.0	1.6	227
WEST ...	6,005	28.3	16.5	2.1	0.6	1.5	2.8	188
ENGLAND & WALES	...	29.4	17.6	2.2	...	...	...	161

TABLE II.

DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES,
DURING 1898 AND THE FIVE PREVIOUS YEARS.

	1898	1897	1896	1895	1894	1893
Small-Pox... ..	0	0	0	0	0	3
Measles	21	5	0	22	10	3
Scarlet Fever ...	1	5	11	10	7	9
Enteric and Continued Fevers	6	1	5	3	6	9
Diarrhoea & Dysentery	26	35	3	38	9	43
Whooping Cough	11	3	14	2	16	8
Diphtheria ...	2	6	11	2	1	4
Membranous Croup	1	2	2	3	3	2
Cholera	1	1	0	0	0	2
Total for each year	69	58	46	80	52	83

TABLE III.

SUMMARY OF THE BIRTH AND DEATH RATES IN DONCASTER
DURING THE TEN YEARS—1888 TO 1897.

Year.	Rates per Thousand of the Population.					Deaths among Children under one year per 1,000 Births regis- tered.
	Births.	Deaths.	From Zymotic Diseases.	From Phthisis.	From other Respira- tory Diseases.	
1888	32·4	18·0	2·3	1·0	3·5	167
1889	31·4	17·0	2·3	1·4	2·4	179
1890	29·5	19·9	2·3	1·3	3·5	183
1891	32·0	19·0	2·2	1·0	4·5	168
1892	32·0	17·6	2·7	1·2	3·1	150
1893	33·3	21·0	3·0	1·3	3·3	188
1894	32·0	17·4	1·8	1·2	2·9	154
1895	33·7	20·0	2·3	1·4	3·1	181
1896	30·6	16·7	1·6	0·9	2·9	139
1897	27·5	15·3	1·9	1·7	2·7	165

TABLE IV.

DEATHS FROM SEVERAL GROUPS OF DISEASES IN
THE BOROUGH, IN 1898.

	Total.	Deaths per 1,000 of the Popu- lation.	Proportion of Deaths in every 1000 from all causes.
From			
1.—Zymotic Diseases ...	69	2·3	130
2.—Pulmonary Diseases (other than Phthisis)	70	2·3	131
3.—Tubercular Diseases	70	2·3	131
4.—Wasting Diseases of Infants	57	1·7	106
5.—Convulsive Diseases of Infants	34	1·1	63

1.—Includes Measles, Scarlet Fever, Whooping Cough, Enteric or Typhoid Fever, Diphtheria, and Diarrhœa.

2.—Includes Bronchitis, Pneumonia, Pleurisy, and Asthma.

3.—Phthisis, Scrofula, Tabes Mesenterica.

4.—Includes Marasmus, Atrophy, Debility, and Premature Birth.

5.—Includes Hydrocephalus, Menengitis, Convulsions, and Teething.

Table of POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Doncaster Urban District; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Last Census.	Estimated Population.	Registered Births.	Aged under 5 or over 5.	New cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Number of such cases removed from their Homes in the several Localities for Treatment in Isolation Hospitals.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
					Small-Pox.	Scarlatina.	Diphtheria.	Membranous Group.	Fevers.					Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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CENTRAL WARD	The Division of the Town into 6 Wards sanctioned in 1894.	5344	118	Under 5 ... 5 upwards	...	6	1	7</

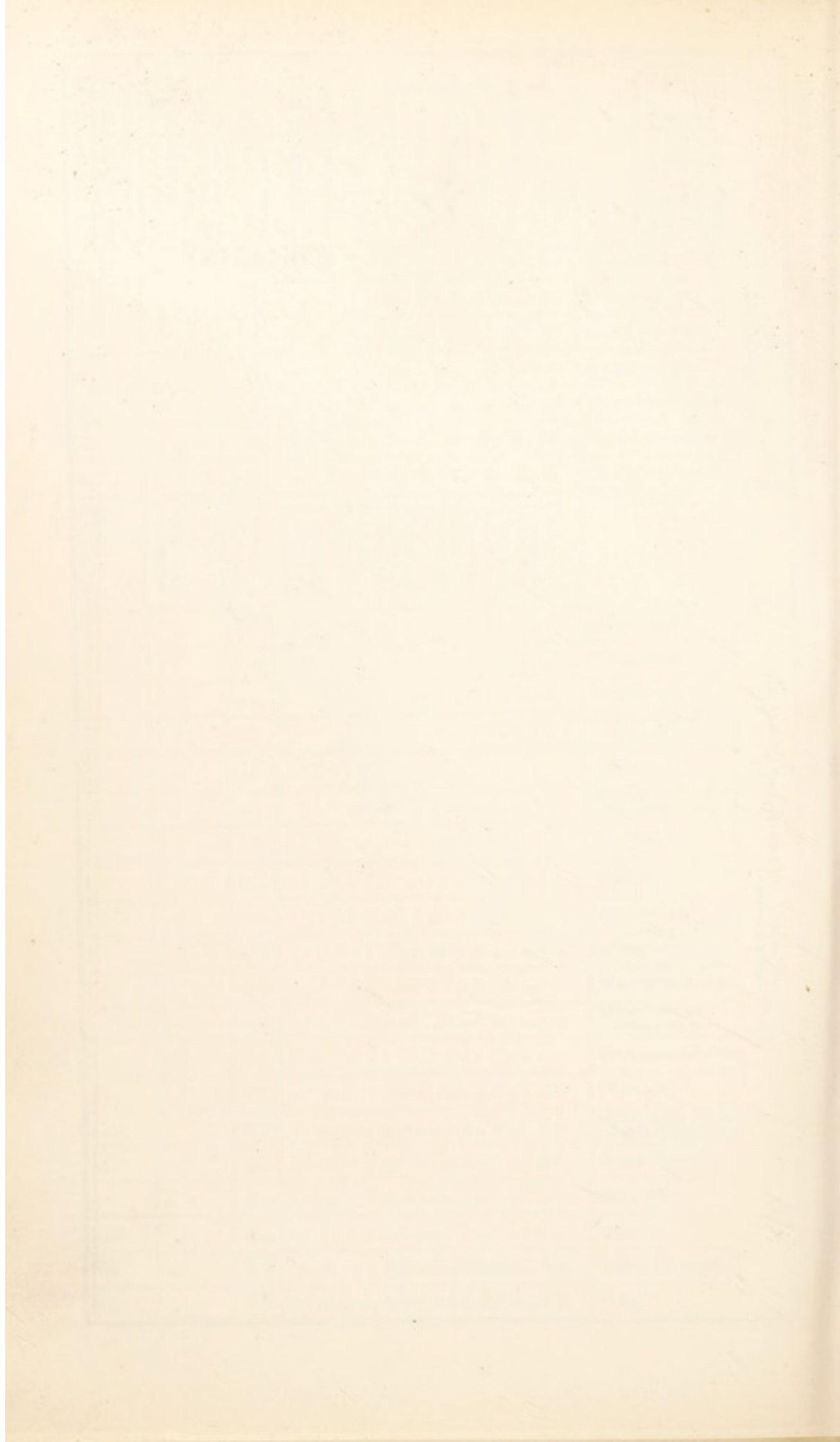
"Notification of Infectious Diseases" is compulsory in this District since 17th March, 1893.

The names of the Isolation Hospitals used by the sick of the District are Carr House Hospital and Small-Pox Hospital.

Table of Deaths during the Year 1898, in the Doncaster Urban District; classified according to Diseases, Ages, & Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Mortality from all causes at subjoined ages.						Mortality from subjoined causes, distinguishing deaths of children under 5 years of age.																			
	At all ages.	Under 1 year.	1, and under 5.	5, and under 15.	15, and under 25.	25, and under 65.	65, and upwards.	Mortality from subjoined causes, distinguishing deaths of children under 5 years of age.																		
								Small-Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fever.			Cholera.	Erysipelas.	Measles.	Whooping Cough	Diarrhœa and Dysentery.	Rheumatic Fever	Phthisis.	Bronchitis, Pneumonia & Pleurisy	Heart Disease.	Influenza.	Injuries.	Other Diseases.	Total.
CENTRAL WARD	114	35	15	4	6	27	27	Under 5 5, upwards.....	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	32	50
EAST WARD	49	7	5	1	3	21	12	Under 5 5, upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31	64
NORTH WARD	106	50	15	4	5	20	12	Under 5 5, upwards.....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	32	65
SOUTH WARD	75	32	10	2	3	14	14	Under 5 5, upwards.....	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21	42
ST. GEORGE'S WARD	63	28	3	...	4	18	10	Under 5 5, upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19	33
WEST WARD	91	32	16	1	4	13	25	Under 5 5, upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	48
CARR HOUSE HOSPL.	4	...	1	...	2	1	...	Under 5 5, upwards.....	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3
THE WORKHOUSE ...	54	1	2	...	3	25	23	Under 5 5, upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
THE INFIRMARY	18	...	...	7	...	10	1	Under 5 5, upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10	18
TOTALS.....	574	185	67	19	30	149	124	Under 5 5, upwards.....	...	1	1	1	...	...	6	...	1	1	20	11	24	...	11	39	1	252
Deaths occurring outside the district among persons belonging thereto	3	...	...	...	...	1	2	Under 5 5 Upwards.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
Deaths occurring within the district among persons not belonging thereto.....	42	2	1	4	6	17	12	Under 5 5, upwards.....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	10	1	6	3





DONCASTER

RURAL DISTRICT COUNCIL.

RURAL DISTRICT COUNCIL

TO THE

Doncaster Rural District Council.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1898.

Population of the District in 1891	24,094
Population estimated in 1898.....	30,647
Area in Acres	93,524

Population in Registration Sub-districts, 1898 :—

Barnburgh.....	17,143	28,329
Bawtry	6,552	22,381
Campsall	5,590	27,216
Tickhill	1,362	15,598

GENTLEMEN,

I have now to present to you my annual report for Population . 1898. There have been no alterations in the sub-districts during the year other than the specially rapid increase of the population in several of the townships. I have estimated the population to the middle of the year as 30,647, an increase of 1,189 during the year. The large number of plans passed might appear to justify a much larger increase, but the explanation is that the basis for the population is taken by the number of houses actually occupied at the end of June last.

During 1898, 1,161 births were registered, the propor- Births
tion of the sexes being nearly equal, boys 580, girls 581. The birth-rate for the year was 37·8 per 1,000 ; this is an increase over that of last year, when it was 36·3, and a considerable increase over the average rate for the previous 10 years, which was slightly above 33 per 1,000.

In the Barnbrough sub-districts the birth-rate was 44·0 per 1000

„	Bawtry	„	„	28·7	„
„	Campsall	„	„	27·0	„
„	Tickhill	„	„	34·0	„

These birth rates closely agree with the returns during 1897, and therefore confirms the estimate of the population made for 1898.

The	birth-rate	in	Bolton	parish	was	61
„	„	„	Conisborough	„	„	48·3
„	„	„	Thurnscoe	„	„	56·2
„	„	„	Wheatley	„	„	37·6
„	„	„	Bentley	„	„	32·0
„	„	„	Denaby	„	„	30
„	„	„	Norton	„	„	30
„	„	„	Bawtry	was lower than the	death-rate.	

Deaths

475 deaths were registered last year. Males 237, females 238. There is a considerable reduction when compared with the total of 546 during 1897. A correction is made for deaths in the districts among persons not belonging thereto; these are deducted. The deaths of persons at the Doncaster Workhouse and the Infirmary, or at Lunatic Asylums, of persons who had gone to these institutions from the Doncaster rural districts are added; the corrected number then amounts to 487, and the death-rate to 16 per 1 000. The average rate for the previous 10 years was just above 17.

In the Barnbrough	sub-districts	the death-rate	was	18·4
„	Bawtry	„	„	12·8
„	Campsall	„	„	11·8
„	Tickhill	„	„	15·4

In the parishes having the largest population the following were the death-rates:—

In Bawtry it was	...	...	24	per 1000
„ Bolton	„	...	23·8	„
(Including Goldthorpe Lane Ends).				

„ Conisbro'	„	...	...	19·7	„
„ Thurnscoe	„	...	...	18·7	„
„ Denaby	„	...	..	15·0	„
„ Askern	„	...	...	13	„
„ Wheatley	„	...	...	10·0	„
„ Bentley-with-Arksey			...	9·4	„

The causes for some of these differences from the general average will be noted.

From the zymotic list of diseases there were the following deaths :—

Zymotic
Diseases.

From Diarrhœa chiefly among infants there were 39 deaths

„ Whooping Cough	„	„	14	„
„ Measles	„	„	8	„
„ Enteric Fever	„	„	9	„
„ Scarlet Fever	„	„	3	„
„ Membranous Croup	„	„	1	„

The death-rate was 2·4, which is greater than last year.

In Barnbrough sub-districts this rate was 2·8

„ Bawtry	„	„	1·1
„ Campsall	„	„	1·4

The increase over the whole districts is caused by the large number of deaths among children from diarrhœa and from whooping cough. The excess was in the following parishes :—

In Conisbro' deaths from zymotic diseases caused a death-

			rate of	4·6
„ Bolton	„	„	„	3·1
„ Thurnscoe	„	„	„	2·7
„ Denaby	„	„	„	2·6

From phthisis or consumption there were 33 deaths ; Phthisis or
from bronchitis and similar forms of disease of the lungs there Consumption
were 79. The total number 112 is 20 less than in 1897. The Diseases of
death rate from these during 1898 was 3·6. The Lungs.

In the Tickhill sub-districts	this rate was	4.4
„ Barnbrough	„ „	4.3
„ Bawtry	„ „	2.9
„ Campsall	„ „	2.3

Diseases of the lungs were very prevalent in the parish of Wadworth, the death rate was 9 per 1000.

In Bawtry	the death-rate was	5.2
„ Conisbro'	„ „	5.0
„ Bolton	„ „	4.3
„ Denaby	„ „	3.7

Deaths at
Different
Ages

When we examine the ages at which death occurred, the extreme high birth-rates in several parishes, are equalled by the excessive mortality among infants. Among every 1000 births registered 168 infants under one year died in the whole district. The proportion in—

The Barnbrough sub-districts	was	203
„ Bawtry	„ „	100
„ Campsall	„ „	80
„ Tickhill	„ „	80
In Bolton parish	it was	243
„ Conisbro'	„ „	218
„ Denaby	„ „	175
„ Bentley	„ „	150
„ Wheatley	„ „	116

It is quite evident that a large birth-rate when accompanied by an excessive death-rate among young children is no evidence of a permanently increasing population. This is also borne out by another fact, 75 per cent. of all the deaths in Conisbro' last year were of children under 5 years of age.

In Bolton	there were	68 per cent.
„ Denaby	„ „	61 „
„ Wheatley	„ „	57 „
„ Thurnscoe	„ „	53 „

The high death-rate in Bawtry was due to many deaths among very old people; exactly one-half of the total number were over 65 years of age.

A death was registered in March last, at Frickley, of a woman at the extreme age of 100 years.

Twenty-one deaths were registered on the Coroner's Certificate; 14 resulted from various injuries, and 7 were due to natural causes.

Fourteen deaths were not certified; 8 of these were of young children under a year.

During 1898, 241 cases of infectious diseases were notified:—

154 were cases of Scarlet Fever.

61 „ „ Enteric „

3 „ „ Puerperal „

19 „ „ Erysipelas.

3 „ „ Diphtheria.

1 was reported as Membranous Croup.

The total number is 63 less than in 1897.

There were about the same number of cases of scarlet fever as in the previous year, and the disease was prevalent in several parishes throughout every month of the year. Two-thirds of the cases were reported from the districts of Thurnscoe, Goldthorpe, and Conisbro'. The population of these districts is being rapidly added to by many families before sufficient house accommodation is ready for them. Serious cases of overcrowding are constantly met with, and among people so housed cases of so infectious a disease as scarlet fever soon spread. The proof of that statement is shown by the fact that 62 cases of fever were reported from only 23 houses, or nearly 3 per house, and as no doctor had probably been called to see the first patients, the notification of 2 and 3 cases from the same house came together. We succeeded in removing nearly 50 per cent. of the cases to the Hospital, but the good results of such removals are considerably lessened when it only takes place when 2, 3 and 4 of the family are ill.

Cases of
Infectious
Diseases
Notified.

Scarlet
Fever

Enteric
or
Typhoid
Fever.

Sixty-one cases of enteric or typhoid were reported last year, as compared with 91 cases in 1897. Until August there were very few cases of this disease in the whole district. A case was reported in Conisbro' village, which was contracted before the patient returned home, a second case occurred at the same house 3 weeks after, 3 additional cases were also reported there in August, and although serious nuisances from leaking ashpits and foul cesspools existed and helped, I believe, to spread the infection, yet these were not the main cause of the outbreak. There was no suspicion of the milk, and the patients were chiefly adults. In September there were 6 cases, and in October there were 7. The one article in use by all the patients, with a doubtful exception, was the water from the town's well. The origin of that water is uncertain, and there is no doubt that infected matters were deposited in ashpits and cesspools on a higher level, and in the direction from which the water would naturally flow. There is another main supply of water in use in Conisbro', but cases did not occur among that group. Only 2 of the 18 cases were treated in the Hospital.

The only other serious outbreak of enteric fever has been in Thurnscoe parish; the first case was reported at a house where less than a month before a death had been registered from "Inflammation of the bowels with hæmorrhage;" 8 cases were afterwards reported in houses near to the first. A new water supply was provided for one group, but a well water is still used by those tenants who have been more recently attacked, and one of these latter brought the clothing from an infected house to be washed. In December 10 cases were reported from another group of houses in the same parish; there is no trace of direct infection, but rather of illness, lasting 3 or 4 weeks, suspected to be influenza. Crowded houses, midden privies, and dirty back yards have all helped to spread this local outbreak. The water is the general supply.

Four of the cases notified in one district brought the disease with them, and 2 of these died.

The death-rate among all the cases was 14 per cent. among those attacked.

Only 3 cases of diphtheria were reported—all were isolated cases.

Outbreaks of measles occurred in Bawtry, Fenwick, Moss, Sprotboro', Old Denaby, and Norton; the cases in these parishes increased so quickly that it was thought necessary to close the day schools in each for a few weeks. In New Conisbro' and Denaby there were many cases of measles and whooping cough; an endeavour was made to keep the infected families away from the school without closing.

Measles

While cases of diarrhoea were very prevalent and fatal many of the houses were inspected. It was too often found that the dirty crowded state of the house was such as would induce such illness among infants.

Diarrhoea

During 1898 101 patients were treated in the Fever Hospital at Balby.

Fever
Hospital

82 were cases of scarlet fever, 73 of these were new cases admitted during the year.

19 were of enteric fever, all new cases.

Cases of scarlet fever have been under treatment during every month of the year, and very urgent cases of enteric fever were admitted in January, May, October, and December. All the 101 cases treated at the hospital last year recovered; this is the best proof of the great care and attention that the patients received. The present temporary hospital has been of great service since it was removed to Balby in April of 1896, and very many householders have been glad to avail themselves of the isolation and treatment there provided. Patients were sent there last year from 11 different parishes, lying as widely apart as Sandall or Bawtry, and Goldthorpe and Thurnscoe. At such times as the hospital at Balby was full 10 cases of scarlet fever were treated at the Doncaster Fever Hospital.

The Hospital Sub-committee decided that in future no charge should be made for patients treated at the hospital from houses of ratepayers, within the rural districts, unless in very exceptional cases which that Committee would decide upon. Patients admitted from outside the rural districts are to be charged a guinea a week.

Early in the year an endeavour was made to form a Joint Committee of the different authorities to provide hospital accommodation for all infectious diseases throughout the Doncaster Union.

A Committee was formed by members from the Doncaster Rural District Council and members of the Mexboro' and Tickhill Urban Councils. Several meetings have been held, and after many sites had been visited and inquiries made a site has been selected, and the Doncaster Rural and Mexboro' Urban Councils have agreed to purchase $7\frac{1}{4}$ acres of land in Conisborough parish as a site for ordinary infectious cases. It is considered very suitable in situation and its surroundings, and will have suitable water supply and means of drainage available. The Tickhill Council at their last meeting declined to take part in the combined scheme.

WATER SUPPLY.

During 1898 the works for supplying Thurnscoe with water were completed, and 347 houses have already been supplied. The Council replaced a main previously laid by the Colliery Company by a new one, 900 yards in length. An addition to the scheme was required for houses built recently some distance from those first arranged for. A scheme was submitted by an engineer for the supply of Conisboro'. The estimated cost was £5,142. The Parish Council of Conisboro' then applied to the Corporation of Doncaster for a supply of water; terms were discussed, but immediately after, the inhabitants of Conisboro' decided to apply to be formed into an Urban Council, and the water supply question is left for the expected new Council to deal with. During last summer and autumn the water supply at Conisboro' was very insufficient,

and in part under suspicion as having been one main cause of the outbreak of fever. In Barnbrough also the water in the reservoir was very low, but on a careful inspection a leak was found, and when that was remedied the supply greatly increased.

On the occurrence of cases of enteric fever at Loversall and Sprotborough complaints were made of the unsatisfactory water used. The spring which supplies the former village is liable to pollution, both from constant surface impurities and in times of flood by sewage. It was suggested some 3 years ago that this water should be piped direct from the spring to the village.

In Sprotborough the supply is insufficient, and the existing well waters are not safe. During the last 2 years several cases of enteric fever have occurred there ; 3 have been treated in the hospital.

At Adwick-on-Dearne the water supply has been known to be very defective for some time. A few months ago, when cases of scarlet fever were prevalent, the main supply was from a pipe in a private yard and very small in quantity.

An inspection was also made of the water obtainable throughout the village of Rossington ; many well-founded complaints were made of the long distance all water had to be carried for drinking.

Water from private wells was found, on being analysed, in 9 cases to be very impure and unsafe to drink.

A request was sent to the Dearne Valley Water Company that some steps should be taken to remove the iron present in the water and to reduce its hardness, as many complaints were made by persons living at Bolton-on-Dearne. Several of the previous sources of supply there were dried up as the new sewers were laid.

SEWERS AND DRAINS.

The Sewage Scheme for Thurnscoe has been completed, and the Sanitary Committee are noting the results for purifying the sewage by the bacterial filters; nearly all the houses have had suitable connections made to the new sewers.

The scheme for Bolton and Goldthorpe has been in progress for nearly a year, but it is not yet completed.

Mr. Barras prepared plans for dealing with the sewage of the parishes of Adwick-on-Deerne and Adwick-le-Street; both have been adjourned.

A committee has been appointed to consider the works that will most efficiently deal with the sewage of the parishes of Askern, Bentley-with-Arksey, and Bawtry.

In Bentley Road a new sewer has been laid to replace a defective one, and a sub-committee are considering how to deal best with the sewage for a time.

A portion of the new sewer near Denaby Railway Station was blocked up by cinders and other road refuse, but has been thoroughly cleansed.

The open ditch near Askern Station has been systematically brushed out.

An important work has been carried out in Wheatley, 374 yards of a main sewer for surface water has been laid with an outlet into the river, but protected by a suitable catch pit.

Short lengths of sewers have been provided in the parishes of Armthorpe, Barmboro', Harlington, and Conisbro'.

The details in the table prepared by Mr. Barras shows the improvements carried out during the year in the drainage of houses.

A mere list of the work considered by the Sanitary Committee under the bye-laws is good evidence of the constant growth of the district, and of increasing work required to supervise it.

5 new streets have been passed in Wheatley, and 3 in Bolton-on-Dearne.

Plans for 275 houses and for 21 alterations and additions have been considered and passed during the year.

In Wheatley several of the back roads and passages were in a very unsanitary condition; it was decided to apply for powers under the Private Streets Works Act, 1892, to have these drained and asphalted. An inquiry was held in December last.

Plans were prepared in the Surveyor's Office for these, and the streets in New Conisbro' and Denaby.

In the parishes of Conisbro', Bolton-on-Dearne, Thurnscoe, and Wheatley the house refuse is removed by contractors at stated short intervals. The disposal of that refuse at Conisbro' has become a difficulty.

The recently adopted bye-laws for slaughter-houses and common lodging-houses have required further inspections to be made of these premises, and advice given as to carrying out these bye-laws.

2 houses were condemned as unfit for human habitation. An order was obtained from the magistrates declaring a house reported in 1897 unfit to be occupied.

The following table prepared by Mr. Barras gives the details of the year's work.

I remain, Gentlemen,

J. MITCHELL WILSON,

Medical Officer of Health.

DONCASTER, 14TH JANUARY, 1899.

STATEMENT SHOWING SANITARY WORK COMPLETED
AND NUISANCES ABATED DURING THE YEAR
1898.

Number of Inspections made	4140
Number of Notices served by order of the Rural District Council relating to Defects of Drainage, Ventilation of Sewers and W.C.'s, Cleaning of Ashpits, &c. ...	62
Houses connected with New Sewers	575
Number of Cesspools abandoned by connecting House Drains to Sewers	11
Number of New Cesspools	28
Drains and Watercourses cleaned and repaired 9 miles	
Number of Sinks disconnected over trapped gullies	256
Number of W.C. Soil pipes ventilated ...	20
New Trapped Gullies for Surface Water ...	10
Houses stoved, disinfected, and cleansed ...	169
Houses closed, and overcrowding in Houses abated	30
New Wells sunk	22
Pumps and Hydrants repaired	19
Number of Houses newly connected with the Doncaster Water Mains in Wheatley ...	68
Number of Houses in Warmsworth provided with Doncaster water chiefly from seven stand pipes	216
Wells not satisfactory	7
Connections to the new supply at Barnborough and Harlington	8
W.C.'s provided for New Houses	25
Privies and Ashpits ,, ,, New Houses	256
Additional ,, ,, Old Houses	3
Pigs and Manure Nuisances abated	8

Plans considered...	...	...	...	...	69
These included : Dwelling-houses	...	...	...	...	275
„ Other Buildings and Altera-					
tions...	...	..	...	...	21
Old Manholes repaired and altered	...	...	...	...	5
New Ventilating Shafts for Sewers	..	...	...	...	3
Number of Inspections of Houses where cases					
of Infectious Disease reported	...	...	...	...	169
Cow-sheds on the Register	...	...	...	...	76
Slaughter-houses inspected	...	...	...	...	19
Number of houses in Conisbro' 1,982, Wheatley					
688, Bolton-on-Dearne 582, Thurnscoe					
319; the ashpit for each house in these					
parishes is cleansed every three months					
under the supervision of the Authority	...				

C. C. BARRAS,

Surveyor and Inspector.

TABLE B.

Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health during the year 1898, in the Rural Sanitary District of Doncaster; classified according to Diseases, Ages, and Localities

Names of Localities adopted for the purpose of these Statistics; public institutions being shown as separate localities.	Population at all Ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Cases Removed &c., to Isolation Hospitals.		
	Census in 1891.	Estimated in 1898.			Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.				Cholera.	Erysipelas.	Diphtheria.	Enteric Fever.	Scarlet Fever.
Barnburgh Sub-District..	4139	17143	776	Under 5 ... 5 upwards..	...	53	...	1	...	4	...	...	...	...	...	...	21
Bawtry "	6531	6552	188	Under 5 ... 5 upwards..	...	72	1	...	...	49	...	...	...	...	...	15	45
Campsall "	5185	5599	151	Under 5 ... 5 upwards..	...	15	...	...	...	5	...	...	...	...	...	4	13
Tickhill "	8239	1362	46	Under 5 ... 5 upwards..	...	4	2	...	...	2	...	...	1	...	...	...	...
Totals	24094	30647	1161	Under 5 ... 5 upwards..	...	63	3	1	...	4	...	...	3	...	...	19	25
					...	91		...	...	57	...	...		19	...		58

"Notification of Infectious Disease" is compulsory in the District since 1st March, 1890.
Hospital for Infectious Cases provided at Balby. 10 cases were treated at Carr House Hospital, Doncaster.

TABLE I.

BIRTH AND DEATH RATES FOR THE RURAL SANITARY
AND DISTRICT REGISTRATION SUB-DISTRICTS DURING 1898.

	Rates per 1,000 of the Population.				Deaths under one year to every 1000 Births.
	Births.	Deaths.	Deaths from Zymotic Diseases.	Deaths from Respira- tory Diseases.	
The Rural Sani- tary District..	37·8	16·0	2·4	3·6	168
Barmbrough	44·0	18·4	2·8	4·3	203
Bawtry	28·7	12·8	1·1	2·9	100
Campsall	27·0	11·8	1·4	2·3	90
Tickhill	34·0	15·4	0·0	4·4	80

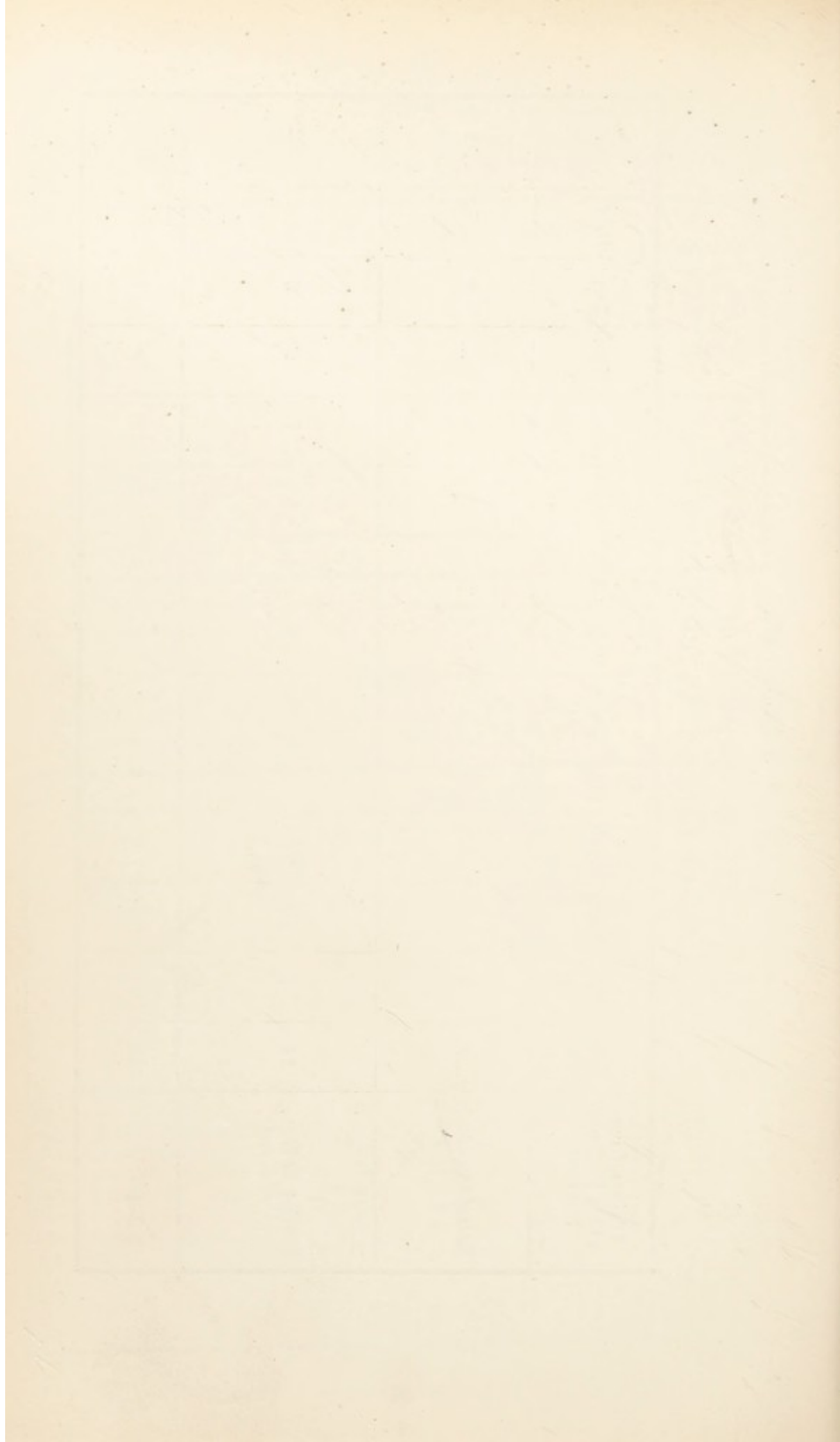
TABLE II.

BIRTH AND DEATH RATES IN THE LARGEST PARISHES
DURING THE YEAR 1898.

Parishes.	Popula- tion, 1898.	Rates per 1000.				Deaths under one year to every 1000 Births.	Percent- age of Deaths among persons 65 years of age and up wards.
		Births.	Deaths.	Deaths from Zymotic Dis- eases.	Deaths from Respira- tory Dis- eases.		
Barnby Dun	516	31·0	13·0	..	..	..	43
Bawtry	947	15·8	24·0	2·0	5·2	..	50
Bentley-with-Arksey.	2437	32·0	9·4	1·0	1·6	150	33
Bolton-on-Deane ..	2546	61·0	23·8	3·1	4·3	243	46
Conisboro'	8260	48·3	19·7	4·6	5·0	218	5
Denaby	1900	30·0	15·0	2·6	3·7	175	..
Norton	500	30·0	20·0	..	..	133	.
Thurnscoe	1440	56·2	18·7	2·7	2·7	123	..
Wheatley	2818	37·6	10·0	2·1	1·4	116	25

TABLE III.
BALBY ISOLATION HOSPITAL.
NO. OF CASES TREATED DURING 1898.

Disease from which Patients Suffered.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Died.	Re- covered.
Enteric Fever ...	.....	4	.....	.....	1	.....	.....	.....	.....	6	.. ..	8	.....	19
Scarlet Fever ..	14	7	15	9	5	8	5	4	3	7	2	3	.....	82
Total	14	11	15	9	6	8	5	4	3	13	2	11	.....	101



BALBY-WITH-HEXTHORPE

URBAN DISTRICT COUNCIL.

Balby-with-Hexthorpe Urban District Council.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR 1898.

Population in 1891 ...	...	...	4,270
Ditto estimated to the middle			
of 1898 ...	...	...	5,800
Area in acres ..	...	...	1,613

TO THE BALBY-WITH-HEXTHORPE
URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have now to present to you my
Annual Report for 1898.

I have estimated the population to the middle of last Population.
year as 5,800, a very large number of plans for new houses
were passed, but as these houses are not occupied we cannot
yet allow for a corresponding large increase of the population.

220 births were registered—males 119, females 101. Births.
The birth-rate for the year was 38 per 1,000. In 1897 the
birth-rate was 40. If a larger estimate had been made of

the population this rate would have been even lower than the average of previous years.

Deaths. 73 deaths were registered in the district last year. One death of a person belonging to Hexthorpe, who died at the Workhouse, is added. The total 74 is 11 less than in 1897. The death-rate last year was only 13 per 1,000, that is 4 per 1000 under the average rate since 1891.

M = 42
F = 31

Zymotic Diseases. From the zymotic group of diseases there were 12 deaths.

7 were caused by diarrhœa.

3 were caused by measles.

1 was caused by diphtheritic croup.

1 was caused by whooping cough.

The death-rate from these was 2 per 1000. No deaths resulted from fever.

Diseases of The Lungs. From phthisis or consumption there were 8 deaths, an unusually large number, and more unusual still to find that 4 of these were children under 5 years of age. 15 deaths were caused by other diseases of the lungs, such as bronchitis, pneumonia, &c. The total number 23 is equal to a death-rate of 4 per 1000, that is more than the average rate from 1891.

Deaths among Children. The deaths among infants last year were in the proportion of 150 per 1000 births; that is less than last year. It is necessary to examine the ages more in detail for the death-rate among infants is commonly taken as one of the tests of the sanitary condition of a district. Last year, however, one-third of these infants whose deaths were reported had lived less than one month, a period too short to be much influenced by their sanitary surroundings. 55 per cent of all the deaths were among young children under 5 years of age. I noted in my report for 1897 that it is among this group that there is hope for lessening the death-rate from all causes. I have previously noted that there were 4 deaths among children under 5 this year from consumption. It is now fairly common

knowledge that a general name for this disease is ^{Tuberculosis} ~~Tubercle~~, and that it attacks other organs of the body as well as the lungs; when these other fatal effects of tubercle are examined in last year's returns there are found 10 deaths, none exceeding 10 years of age. At the present time there is hardly any question persons interested in the prevention of disease are more carefully considering than how to reduce the deaths from all forms of tubercular disease. Much has been done to lessen it among adults, but with less success among children. It is thought that as the same disease is known to affect animals used for human food, and especially milk cows, there is a strong probability that children are infected through the use of raw or unboiled milk.

7 children under 5, 6 of them were under a year, died from bronchitis or similar disease of the lungs. These figures deserve the earnest attention of the mothers who reside in the district so as to try and lessen the risks to which young children are especially liable.

3 deaths were returned on the Coroner's certificate, and 1 death was neither certified by any doctor or the Coroner.

During 1898, 19 cases of infectious diseases were notified as compared with 62 cases in 1897. Cases of Infectious Disease.

8 were cases of scarlet fever.

5 were cases of erysipelas.

3 were cases of enteric fever.

3 were cases of diphtheria and diphtheritic croup.

The 8 cases of scarlet fever occurred at 6 houses, and 4 were treated in Carr House and Balby fever hospitals.

There were three cases of enteric or typhoid fever; one was ill when she arrived at her home. No history could be obtained of the cause of a case in October. A neighbour, who nursed that case, was also attacked a fortnight afterwards. There were no local causes to explain the illness. All the 3 cases were treated at Carr House Hospital.

The 3 cases of diphtheria were associated with croup. Two of them occurred in one house, the sanitary surroundings there were very unsatisfactory. The third case was an adult, who was attacked while nursing a case of scarlet fever.

The 5 certificates of erysipelas only referred to 3 individuals, as three notifications were of the same case.

During August cases of measles were very prevalent in Balby. 3 deaths of young children occurred in houses where older children had previously been ill of that disease.

Hospital
Accommoda-
tion for Cases
of Infectious
Disease.

A very satisfactory arrangement has been made with the Corporation of Doncaster for the isolation and treatment of cases of infectious disease from the Balby and Hexthorpe Districts. The hospital at Carr house has been altered and added to, so as to permit cases of fever and diphtheria to be treated quite apart, and a new hospital has been provided in a well isolated situation in the Balby district, solely for the isolation of cases of small pox.

The permanent charges of these hospitals are to be borne by the two authorities, on the basis of population, the charges for maintenance are to be according to the actual number of patients treated there from each district after the actual cost per day of the hospital has been ascertained at the close of the financial year.

The inhabitants in Balby and Hexthorpe district now have all infected clothing and bedding disinfected by steam at the apparatus provided at Carr House hospital.

SANITARY WORK.

The absence of any serious outbreak of disease last year gave more time to devote to work for the sanitary improvement of the district, which is the essential means of preventing disease.

Water
Supply.

A large number of well-waters were analysed and the surroundings of the wells inspected. Of the 20 well-waters

examined, 2 were found to be satisfactory, and these serve as guides as to the possible standard of purity to be found in the district. In 7 the water were less pure, but did not show signs of direct contamination; such waters must be kept under notice in the future. 11 well-waters were seriously polluted and unsafe to drink.

This work has drawn special attention to the water supply, and instead of attempts to sink wells in yards or gardens, a large number of houses, old and new, have during the year obtained a supply from the mains of the Doncaster Corporation. 107 houses have been connected in Balby, and 40 in Hexthorpe.

Last year, plans for 153 houses were passed, and many of these are completed or are being built. This is good evidence of a large increase in the district in the near future, and one sees constant additions to the existing factories and workshops.

Plans
Passed.

The alterations made last year at the sewage farm have proved successful, as the sewage can now be turned upon a larger area, and a better result in purifying the sewage is obtained.

Sewerage
Disposal.

There are still a good many house drains imperfectly cut off from the sewers by defective iron traps. Complaints are often made of these. 20 were last year removed, and satisfactory gully traps substituted.

In 1897 a large number of houses were reported upon as being unhealthy dwellings. Last year many sanitary improvements of these were carried out rendering them habitable. I reported last year on another block of houses which had many serious nuisances about them. After some delay improvements have also been completed for them. Some of the older houses have not been well looked after, and extensive alterations are a necessity. The yards have no paving, the

Houses in an
Unsanitary
Condition.

closets are too few in number, and badly arranged. It is necessary that these should be altered and improved. The Council have decided that in future there must be one closet provided for each family, for old as well as new houses.

The Council have not yet succeeded in obtaining suitable land and at a suitable price for a cemetery.

Nuisances.

The keeping of pigs is rather extensively carried on, not only by householders for their own use, but as a trade. The accumulation of a large number of pigs and manure heaps near to houses, or the gardens of these houses, is almost certain to be complained of. The offensive smell travels a long way. Suitable premises in the open country, and away from houses, is the only satisfactory means of pig keeping on a large scale.

**Milk Sellers
and
Cow Sheds.**

The Council have given notice to the 34 cow keepers and milk sellers registered, as to the regulations adopted requiring all such places to be kept in a clean and wholesome state. I have already noted the many deaths among young people from tubercular diseases, and the likelihood of such diseases being caused by milk from cows affected with tubercle, it is the interest of the cow keeper so to house and provide for his cattle as to lessen the risks of this very prevalent disease.

**Scavenging
of House
Refuse.**

The refuse from all privies and ashpits is removed regularly every 3 months, the contractor's work has been done with fewer complaints last year; structural alterations have been carried out for 18 defective closets.

**Street Im-
provements.**

The Surveyor has given me the following notes of the large amount of work the Council has proposed as private street improvements at a Local Government Inquiry held in June last, proposals were submitted to an Inspector, referring to 9 streets in Balby and 8 in Hexthorpe:—

“The Council have had plans sanctioned for certain private street works at Balby and Hexthorpe. The expenditure

will be £3,750. The Hexthorpe portion of the work is now in hand, and practically the whole of the surface drains for the streets have been laid. 1,252 yards of 12in., 9in., and 6in. sanitary tubes, with cement joints and manholes, are completed. In future, if any stoppage occurs, it will be reached from the new manholes."

This very important sanitary work has had a very direct effect in reducing the death rate in many towns, and especially the number of deaths from consumption, and the Council will, I hope, be able to prove that the health of the district has been safeguarded by this very work. Mr. Gledhall has prepared a table which gives the details of the sanitary improvements carried out last year.

I remain, Gentlemen,

J. MITCHELL WILSON,

Medical Officer of Health

BALBY, 18TH JANUARY, 1899.

**List of Work Completed and Nuisances Abated
in 1898.**

Inspections made	..	...	...	...	...	113
Nuisances found	...	...	...	...	...	64
Defective Sewers Relaid	...	...	...	...	10 yards	
Defective house drains relaid	...	...	...	...	18	
Gullies fixed instead of iron traps	...	...	...	...	25	
Surface water drains re-laid	...	...	...	...	2	
Defective spouts and rain-water conductors repaired	...				3	
Number of houses supplied with water from the Don-						
caster water mains in 1898...	...	...	...	...	147	
Wells closed, water not being wholesome...	...	...	...	...	8	
Samples of well water taken	...	...	...	...	20	
Plans passed for new houses	...	...	...	...	153	
„ „ „ streets	...	...	...	...	4	
„ „ „ other buildings	...	...	...	...	10	
Overcrowding in houses abated	...	...	...	...	4	
Filthy houses cleansed	...	...	...	...	7	
Privies and ashpits covered in and repaired	...	...	...	...	18	
Cowsheds and dairies registered	...	...	...	...	34	
Bakehouses do.	...	...	...	...	2	
Nuisance from back passage yard abated	...	...	...	...	2	
„ „ pigs do.	...	...	...	...	5	
Other nuisances dealt with	...	...	...	...	6	
Houses disinfected after cases of infectious diseases	...				11	

GEORGE GLEDHILL,

Inspector and Surveyor.

A) Table of DEATHS during the Year 1898 in the BALBY AND HEXTHORPE URBAN DISTRICT
classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the pur- pose of these Statis- tics; public institu- tions being shown as separate localities	Mortality from all causes, at subjoined ages.							Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																						
	At all ages.	Under one year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	(continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All Other Diseases.	Influenza.	Total.	
Balby - with-Hexthorne Sub-District	73	33	8	2	1	17	12	Under 5	..	..	1	..	..	..	..	..	..	..	3	1	7	..	5	7	7	..	..	17	..	41
							5 upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	8	4	1	14	2	32	
The Fever Hospital ..	.....	.....	.....	.....	.....	.....	Under 5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
							5 upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.....
Totals.....	73	33	8	2	1	17	12	Under 5	..	..	1	..	..	..	..	..	..	..	3	1	7	..	5	7	7	..	..	17	..	41
							5 upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	8	4	1	14	2	32	

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

[illegible]

TABLE B.

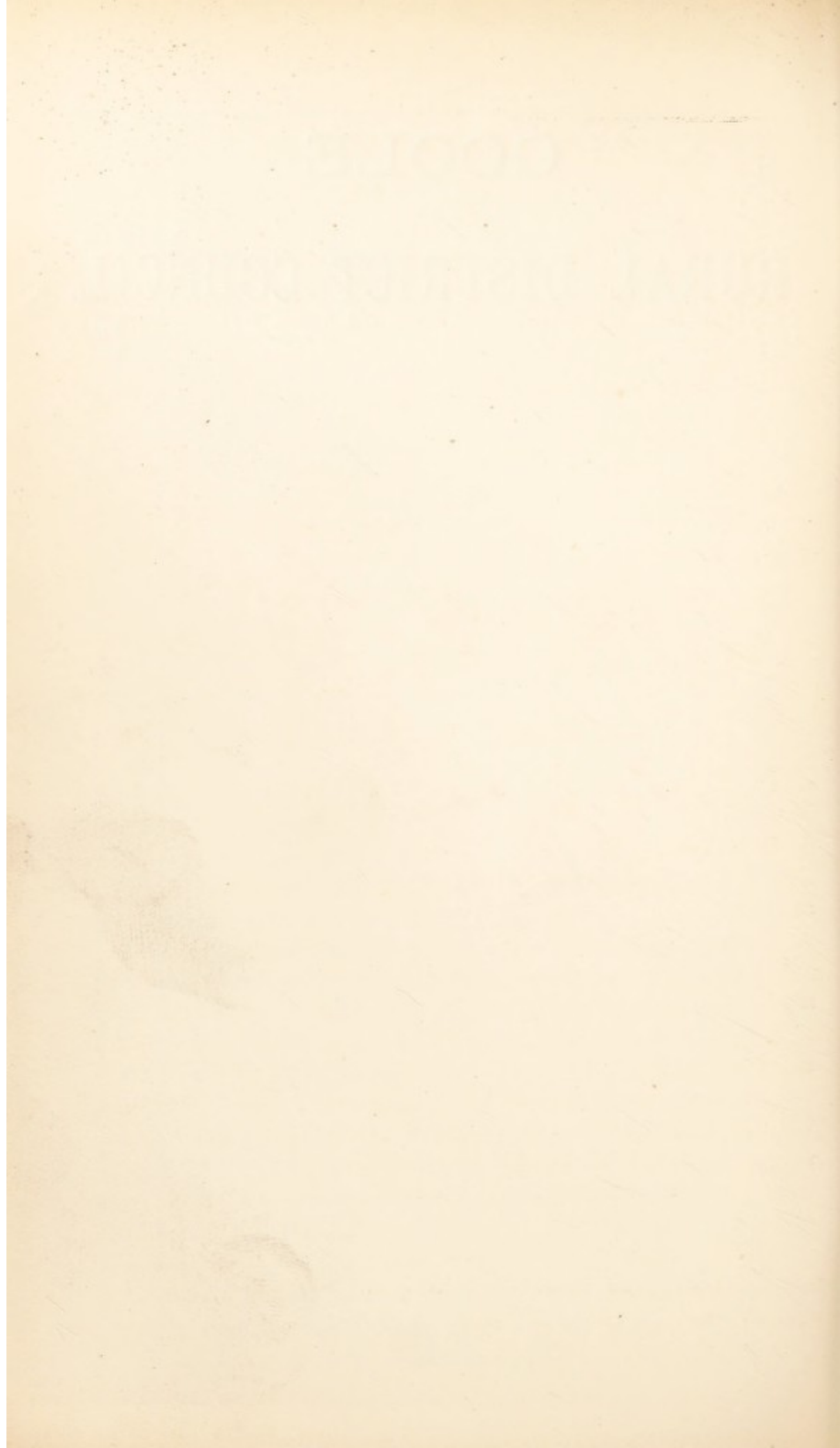
Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health during the year 1898, in the Balby and Hexthorpe Urban District; classified according to Diseases, Ages, and Localities

Names of Localities adopted for the purpose of these Statistics ; public institutions being shown as separate localities.	Population at all Ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.										Number of such Cases removed from their Homes in the several localities for treatment in the Isolation Hospital.																																																																																																																																																																																																													
	Census in 1891.	Estimated in 1898.			Fevers.						Small Pox.	Scarlatina.	Diphtheria	Membranous Group.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.																																																																																																																																																																																																				
Balby and Hexthorpe.....	4270	5800	208 220	Under 5 ... Under 5 upwards. Under 5 ... Under 5 upwards. Under 5 ... Under 5 upwards.	4 ... 4	1 ... 1 3

The "Notification of Infectious Disease" is compulsory in the District since 14th September, 1896.
The name of the Isolation Hospitals used by the sick of the District are Carr House in the Borough of Doncaster, and the Hospital for Smallpox in Balby.

GOOLE

RURAL DISTRICT COUNCIL.



Goole Rural District Council.

POPULATION, CENSUS 1891	...	...	...	8,977
ESTIMATED POPULATION IN 1898	...	...	...	8,138
AREA IN ACRES	...	...	...	3,8328

THE SUB-REGISTRATION DISTRICTS ARE:—

	POPULATION.	AREA IN ACRES.
GOOLE RURAL	1,400	9,105.
SNAITH	4,102	13,687.
SWINEFLEET	2,636	15,446.

TO THE GOOLE RURAL DISTRICT COUNCIL.

GENTLEMEN,

It is now my duty to present to you my annual report for 1898.

I think it is certain that a good many householders have left their houses at Rawcliffe Bridge, and the population has decreased during last year. I have therefore estimated the population of the whole Rural district as 8,138, a lessening of 180 in the Rawcliffe sub-districts. Population.

In 1898 there were 225 births registered, males 95, females 130; the birth rate was 27·6 per 1000. The actual number and the birth rate are below the figures for 1897. Births.

In the Swinefleet Sub-district the birth rate was 30.

„	Goole Rural	„	„	30.
„	Snaith	„	„	25·3.

In Swinefleet parish it was 36, in Hook 45, Reedness 31, and in Rawcliffe 29.

M. = 65
F. = 60

Deaths.

There were 125 deaths registered in the districts, but there was a heavy fatality at the Workhouse among old people belonging to the Rural districts, these have to be added, and the total of 136 is equal to a death rate of 16·7, that exceeds the rate of the previous year, but is equal to the average of several years.

In the Goole Rural Sub-districts the death rate was 18·5.

„ Snaith	„	16·3.
„ Swinefleet	„	15·0.

In those parishes which have the largest population the average death rate is above the average with few exceptions.

In Cowick parish it was 21·5, in Rawcliffe 20·7, in Hook 19, in Swinefleet, and in Airmyn 18 per 1000 of each population.

Some explanation of these will be noted.

From Zymotic diseases there were 19 deaths.

Deaths from
Zymotic
diseases.

Scarlet fever	caused	3.
Diphtheria and membranous croup	„	3.
Whooping	„	3.
Diarrhoea	„	6.
Measles	„	2.
Puerperal fever	„	2.

The death rate was 2·3 per 1000. In Rawcliffe parish that rate was 4, and in Airmyn 5 per 1000.

Diseases of the
Lungs.

From diseases of the lungs there were 21 deaths, 7 of these were caused by consumption, and 14 from bronchitis and pneumonia. The death rate was high for the country districts, 4 per 1000: in the Swinefleet sub-districts it was only 2·6, but in the Goole Rural and Rawcliffe sub-districts it was 4 and over.

In Rawcliffe parish this rate was also high 6·5, and in Airmyn 5 per 1000.

8 deaths were registered at Rawcliffe Bridge, all were of children under 5 years of age, and 5 of these died from bronchitis.

Deaths among
Children

During last year, especially in the summer and autumn many young children died; when the deaths of infants under a year are compared with the births registered during the same year the death rate last year was 18 per cent, while 13 to 14 per cent is the usual average. In the Goole Rural Sub-districts it was nearly 22; in the Snaith Sub-districts it was 20, and in Swinefleet Sub-districts it was 16 per cent. The parishes I have previously

noted as having a death rate above the general average included many deaths among young children.

5 deaths were registered on the Coroner's certificate, 3 were caused by some form of accident, and 2 by natural causes. Only one death was not certified.

33 cases of infectious diseases were notified last year :—

16 were cases of scarlet fever.

7 „ enteric or typhoid fever.

3 „ diphtheria.

1 „ membranous croup.

4 „ erysipelas.

2 „ puerperal fever.

Cases of Infectious diseases notified.

There were fewer cases reported than in 1897.

Of scarlet fever there were 16 cases as compared with 30 in the previous year, but again all the cases came from the Swinefleet Sub-districts. The 16 cases occurred in 4 parishes, 5 in 2 houses in Adlingfleet; 7 cases in 4 houses in Reedness; 1 in Ousefleet, and 2 in separate houses in Whitgift. The cases were of a severe type, as one-fifth of those attacked died, while a more general death rate is 4 deaths in a hundred attacks. It is very probable that all the cases of fever were not reported, no medical attendant being called in. The infection of scarlet fever hung about the Marshland parishes throughout the year. We failed to induce the parents to consent to any case being removed to the hospital, and if the children are kept from school even for many weeks, but return there with their wearing apparel imperfectly disinfected there is likely to be some susceptible school-fellow infected. The 2, 3, and 4 cases at the same house only shows that home isolation is but a poor protection to the other children in the infected house.

Scarlet Fever.

The 7 cases of enteric or typhoid fever occurred in the parishes of Hook (5), Adlingfleet, and Rawcliffe, one case died. One of the cases was ill on coming into this district, while another was scarcely a case of enteric fever in the ordinary meaning of that term.

Enteric or Typhoid Fever.

The 5 cases at Hook presented an unusual history. The first occurred in February with no history of infection. Certainly a well water was occasionally used, but none of the younger persons in the house had been ill as is frequently the case. In September the

second was reported at a house a long way from the first. A suspicion of having caught the infection at work in Goole was negatived when the time of such work was given ; 4 weeks after the removal to the hospital a second case occurred in the same house, and two months after a third case, the second case having returned home weeks before. A week before that third case began a neighbour's child was also attacked. These notes of the last 4 very strongly point to the infectious power of this fever. A report was made of the sanitary condition of the premises, especially as to the unsatisfactory means for the removal of refuse stored close to the house, and from that source the continuation of the infection was probably due.

Diphtheria.

There were 3 cases of diphtheria notified, and 1 of membranous croup, the latter is closely related to the former, and both are frequently very malignant—3 of the 4 cases died.

In one house 2 children were attacked, the house they lived at had been reported a few months before as a damp unhealthy dwelling. It has since been replaced by a new house. The other cases were not associated with any infection, and gave the history of a cold, followed by sore throat.

Measles.

Cases of measles are not notified, that disease was very prevalent in Airmyn and Hook, requiring the school in each parish to be closed for 4 weeks. Cases were also heard of at Swinefleet, and at Rawcliffe, but the infected families were not so many, and all the children from these houses were kept from school, and certificates given for them.

2 cases of enteric fever were removed from Hook to the fever hospital at Goole.

Hospital accommodation.

The Goole Urban Council have provided a temporary hospital for cases of small-pox in the Rural district, it would be a very desirable precaution if terms could be arranged, whereby patients from the Rural districts suffering from small-pox could be treated at that hospital.

Water supply

The long continued dry weather of last summer and autumn showed how unsatisfactory a source of supply of rain is when it has to be collected from the roofs of cottages, and stored in small cisterns, or only in tubs. Notices were, however, served as to 115 houses in Swinefleet where no cisterns were provided. In 8 cases

cisterns have since been made, and at present no other water is available for drinking, cooking, &c. The same want was felt more or less severely in all the Marshland parishes. A sample of well water was analysed, it was considered to be good, but the results were not satisfactory. In Hook also there is a similar scarcity, the only provision is rain water, the well waters are not usable.

While inspecting at Rawcliffe Bridge district complaints were made of the long distance water had to be carried by tenants of some of the new houses. At another group of houses a large collection of decaying refuse was seen quite near the pump, another pump was broken, and a pool of dirty water stood near to a third. These are some of the causes by which well waters become impure, and the tenants are negligent in permitting them to continue.

A Local Government Inquiry was held at Swinefleet in September, to consider the new drainage scheme for that village. The report since received declines to sanction the proposal, chiefly on account of the open ditch which was to be utilized as a sewer close to the outlet.

Sewers and
Drains.

An extension of 80 yards has been made to the sewers in Snaith, and additional ventilators supplied. A short length of new sewer has also been laid at Hook, but levels are being taken to ascertain if a new outlet would not provide a more satisfactory means of adequately sewerage that village throughout. For private house drains various improvements have been made, either by connections made to new sewers, by relaying drains which had been found to be defective, and by substituting gully traps where there were none, or where there were offensive cesspools.

The Surveyor reports that—

The main sewers in West Cowick, Gowdall have been cleansed, and those in East Cowick, Reedness, and Hook have been flushed, while those at Snaith and Rawcliffe, he thinks should be more systematically flushed.

In Snaith and Swinefleet parishes all the house refuse is removed by contractors, the work in the latter place was not satisfactorily done last year.

Refuse removal.

In addition to the privies, ash-pits, and soil boxes, the contractor is required to cleanse all the street gullies and catchpits,

some of these are used by householders for getting rid of their house drainage. The returns I have received show that the complaints made are justified that the pits and movable boxes are not cleansed so often as is necessary.

From Mr. Tudor's report upon the condition of the cow-sheds it is readily seen that some milk sellers take far more care in keeping the sheds clean, and to allow a reasonable amount of air space ventilation for their cows than others do.

I think there is far too little attention given to the lighting of these cow-sheds, many of them are practically dark which is an unhealthy condition for the animals, and a hindrance to keeping the places and the milk clean.

In both Hook and Swinefleet the water supply for dairy work are not satisfactory.

Canal Boats.

Last year Mr. Plews inspected 63 canal boats, and found the greater part of them in good order, and he adds, "I did not find a single case of overcrowding, and only one case where the boat had its full number of occupants allowed by the certificate."

The following table gives fuller details of last year's work.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON,

MEDICAL OFFICER OF HEALTH.

GOOLE, 1ST FEBRUARY, 1899.

INSPECTIONS MADE, WORK CARRIED OUT, AND NUISANCES ABATED
DURING 1898.

Number of Inspections made	...	...	...	...	...	...	...	722
Number of Nuisances found	...	...	...	...	...	...	...	272
Number abated after notice	...	...	...	...	...	...	...	224
New Main Sewers laid	...	...	...	...	...	...	...	160 yards
Houses connected with new and improved Sewers	...	...	...	...	...	...	...	12
House drains newly constructed	...	...	...	...	...	...	...	16
New Gullies provided for Main Sewers and Houses	...	...	...	...	...	...	...	24
Sinks disconnected	...	...	...	...	...	...	...	2
Cesspools removed and Pot Gullies substituted	...	...	...	...	...	...	...	28
Old Privies and Ash-pits re-constructed	...	...	...	...	...	...	...	20
Privies (new)	...	...	...	...	...	...	...	15
Houses cleansed, lime-washed, and disinfected after infectious disease	...	...	...	...	...	...	...	23
New Houses and other Buildings, Plans passed for	...	...	...	...	...	...	...	9
Lodging-Houses Inspected	...	...	...	...	...	...	...	7
Slaughter-Houses cleansed and lime-washed	...	...	...	...	...	...	...	11
Wells cleansed	...	...	...	...	...	...	...	5
Cow-sheds and Dairies registered	...	...	...	...	...	...	...	54
Other Nuisances abated, referring to the removal of Manure, &c.	...	...	...	...	...	...	...	158
Village Water Courses cleansed	...	...	...	...	...	...	...	13,190 yards
Ash-pits cleansed under contract	...	...	...	...	...	...	...	1,578
Boxes	...	...	...	...	...	...	...	1,015

E. C. B. TUDOR,

SURVEYOR AND INSPECTOR.

TABLE I.

STATISTICS FOR THE RURAL SANITARY DISTRICT COMPARED WITH
SUB-REGISTRATION DISTRICTS DURING 1898.

RURAL DISTRICT AND SUB-DISTRICTS.	Rate per 1000 of the Population.				Deaths under 1 to every 1000 Births registered.
	Births.	Deaths.	From Zymotic Diseases.	From Respira- tory Diseases.	
Rural Sanitary District ...	27·6	16·7	2·3	3·9	187
Goole Sub-District	30·0	18·5	3·5	4·3	214
Swinefleet Sub-District	30·0	15·0	1·8	2·6	165
Snaith Sub-District	25·3	16·3	2·2	4·0	200

TABLE II.

BIRTH AND DEATH RATES DURING 1898 IN THE LARGEST PARISHES.

PARISHES.						Rate per 1000 of the population.	
						Births.	Deaths.
Cowick	...	...	...	...	...	27·0	21·5
Rawcliffe	...	...	...	...	...	29·0	20·7
Snaith	...	...	...	...	...	28·0	20·0
Swinefleet	...	...	...	...	...	36·0	18·0
Airmyn	...	...	...	...	...	16·0	18·0
Hook	...	...	...	...	...	45·0	19·0
Reedness	...	...	...	...	...	31·0	18·0

TABLE A.
TABLE OF DEATHS, during the year 1898, in the Rural Sanitary District of Goole, classified according to Diseases, Ages, and Localities.

NAMES of LOCALITIES adopted for the purposes of these statistics ; public institutions being shown as separate localities.	Mortality from all causes at subjoined ages.							Mortality from subjoined causes, distinguishing deaths of Children under Five Years of Age.																			
	At all Ages.	Under 1 Year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small-Pox.	Scarlatina.	Diphtheria.	Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Measles.	Diarrhoea	Whooping Cough	Erysipelas.	Rheumatic Fever	Ague.	Phthisis.	Bronchitis and Pneumonia	Pleurisy.	Heart Disease	Injuries.	All other Diseases	Total.
Goole Rural Sub-Registration District.....	26	9	3	3	9	5	5	Under 5 5 upwds	5	...	1	...	...	1	...	3	...	...	...	...	2	1	4	2	...	5	9
Snaith do.	62	20	10	2	2	14	14	Under 5 5 upwds	5	...	1	1	...	...	2	2	2	2	...	...	1	10	3	2	...	11	30
Swinefleet do.	37	13	5	...	1	5	13	Under 5 5 upwds	5	...	3	...	...	...	...	1	1	...	...	...	1	4	2	6	1	7	18
Totals.....	125	42	15	5	3	28	32	Under 5 5 upwds	5	3	1	1	...	1	2	6	3	...	...	...	2	15	9	10	...	23	57
The subjoined numbers have also to be taken into account in judging of the above records of mortality.																											
Deaths occurring without the District among persons belonging thereto.	...	...	...	...	...	...	...	Under 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	11	...	...	...	5	6	5	upwds	...	...	...	...	...	...	...	1	...	...	...	...	1	2	1	...	...	6	11

TABLE B.

TABLE OF POPULATION, BIRTHS, and of NEW CASES OF SICKNESS coming to the knowledge of the Medical Officer of Health during the year 1898, in the Rural Sanitary District of Goole; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES.	Population at all ages	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each locality, coming to the knowledge of the Medical Officer of Health.							Number of Cases removed from their homes in the several localities for treatment in Isolated Hospital.			
	Small-Pox.			Scarlatina.	Diphtheria.	Membranous Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas.	Small-Pox.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	
Goole Rural Sub-Regis- tration District.....	1400	42	Under 5 5 upwds	...	...	...	...	1 4	...	1	...	...	...	2
Snaith do.	4102	104	Under 5 5 upwds	...	...	3	1	1	1	2	...	...	1	...
Swinefleet do.	2636	79	Under 5 5 upwds	...	10 6	...	...	1	...	2	...	...	...	...
Totals.....	8138	225	Under 5 5 upwds	...	10 6	3	1	1 6	2	4	...	...	1	2

"Notification of Infectious Disease is compulsory in the District since 9th December, 1889."
The name of the Isolated Hospital used by the sick in the District is the Fever Hospital, Goole.

GOOLE
URBAN DISTRICT COUNCIL.

Goole Urban District Council.

ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH, FOR 1898.

POPULATION IN 1891	...	...	...	...	...	...	...	15,416
ESTIMATED POPULATION IN 1898	...	...	...	...	...	...	...	17,000
AREA IN ACRES	...	...	...	...	...	...	...	1,331

TO THE GOOLE URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have now to present to you my annual report for 1898.

From inquiries I have made I find that there are no facts which would justify me in estimating any increase in the population. There is year by year an overplus of births amounting to between 200 and 300 above the number of deaths registered, but the number of unoccupied houses does not indicate any new comers. It is better therefore to err on the right side, and I have estimated the population in 1898 as 17,000.

The births registered last year was 581, 7 more than in 1897. 252 were males, and 329 females; the birth rate was 34 per 1000. The average rate from 1893—97 was 35·5.

300 deaths were registered in Goole last year, males 159, females 141: 18 of these were of persons belonging to other districts, and are deducted. On the other hand 2 deaths of Goole persons at the West Riding Asylums are added, and the corrected number 284 is equal to a death rate of 17·2.

Before the next census is taken I hope arrangements will be made to ascertain the population in each of the 5 Wards into which the town is divided. Goole is too larger a town to be

satisfied with knowing only the birth and death rates over the whole district. I have before pointed out that it would be a great help to trace back the localities where the highest death rates prevail, but we must first obtain the population of each of the wards. As an example; of the 6 deaths registered last year from diphtheria and membranous croup, 3 were at houses in the North ward, but that information says nothing as to whether the population there is such as to make the proportion of deaths above or below the average death rate from these particular diseases for the whole town.

From all forms of zymotic diseases 36 deaths were registered—

Zymotic
diseases.

16	were caused (chiefly among infants) by diarrhoea.	
4	”	measles.
2	”	whooping cough.
3	”	scarlet fever.
4	”	enteric fever.
4	”	membranous croup.
2	”	diphtheria.
1	”	puerperal fever.

The death rate was the same as in the previous year, viz., 2 per 1000, while the five years' average rate was 2·7.

Phthisis and
other
Diseases of the
Lungs.

From phthisis or consumption, there were 18 deaths, equal to 1 per 1000. From bronchitis, pneumonia, and other diseases of the lungs there were 63 deaths, equal to a death rate of 3·7, which is considerably above the average. I find that nearly one half (30) of these deaths were among infants under 1 year, and 42 were of children under 5 years of age. That is a very large proportion of fatal cases among children, and raises the question if parents are impressed enough with the dangerous nature of the illness generally called a cold when it attacks young children. But colds can in part be kept off if our houses are kept better ventilated, and the air of our rooms oftener changed.

A larger number of young children died last year than for several years, and the proportion under 1 year was 167 per 1000 registered births.

A closer examination of the weekly returns shows that 30 per cent of these infants died from inherited weakness rather than illness contracted during life, as that proportion had only lived a

month, rather more than half of these latter did not survive over a week.

Of the 18 deaths registered by the Coroner 10 were returned as due to disease, 4 cases were of drowning, 3 of other accidents, and 1 suicide.

Cases of Infectious diseases notified.

In 1898 135 cases of infectious diseases were notified :—

51	were cases of scarlet fever.
22	„ enteric fever.
13	„ small-pox.
9	„ diphtheria.
5	„ membranous croup.
34	„ erysipelas.
6	„ puerperal fever.

Cases of scarlet fever were as a rule isolated ones in many separate, households, they were reported during every month of the year. at no time did the disease prevail in anything like an epidemic, there were repeated cases where the infection was traced to parents visiting neighbours' houses when some one was ill with fever. 41 per cent of the cases notified were removed to the hospital. Among those left at their homes the first case was in 7 instances followed by a second.

The 22 cases of enteric fever were very unevenly distributed throughout the year, as only 4 occurred before the 1st October—2 of these were contracted away from Goole. In the beginning of October 2 cases of enteric fever were reported, one of these was said to be also ill of scarlet fever owing to a rough condition of the skin of the hands, the other had suffered from pneumonia. Before the end of October 6 additional cases of enteric fever were reported from 4 houses in the same street, 3 cases occurred in one. The inquiry made at each showed that one patient in the telegraph rural service only returned to Goole at the end of the week, and therefore more likely contracted his illness away from than at Goole. Another was a sailor on a tug steamer, the water supply used on board had been taken from the river Ouse on the 15th September, at Naburn Lock, immediately below the outlet from the York sewage works. This patient's illness was notified on the 10th October, following upon a fortnight's ailing condition. Another sailor, on the same boat, was notified ill of enteric fever on

Enteric or Typhoid Fever

14th October. He lived in another part of the town. I was informed that a third member of the crew was also attacked with fever at Hull about the same time. The 4 additional cases which followed in houses in the same street in October appeared to be the result of infection, the milk supply was the same, but was used by a large number of people who had no illness. The drains and the water mains were examined, and found in a satisfactory condition, the box closets were specially cleansed and disinfected. Another case occurred in the house next to that occupied by the second sailor I have named above, and that was probably due to infection from visiting. In quite another part of the town a man who had been in poor health for several weeks was notified ill of enteric fever at the end of October; although the house was small and contained a large family, the patient would not consent to be removed to the hospital. In less than a fortnight two fresh cases of fever broke out in the same house, these under pressure were removed. These facts are given to prove that it is a mistake often followed by serious consequences to consider cases of enteric or typhoid fever as not infectious. 45 per cent of the cases reported were treated in the hospital.

Small-pox

During April and May a sharp outbreak of small-pox occurred. The first patient worked on the docks, and it was considered possible that he might have contracted the disease while handling bales of rags. But that was more than doubtful as no case of that disease occurred in the West Riding in May, where the cargoes of rags are usually consigned. The man had not been away from Goole, and no clear trace of the infection could be obtained. But there was no difficulty in tracing a close connexion between him and the cases that followed.

The patient fell ill on the 23rd April, and did not return to work; on the 26th spots appeared on his face, but he felt then well enough to go out, and visited a certain public-house more than once. On the 30th a doctor saw him, and sent the patient to the hospital. The attack was not severe, there were 4 good primary vaccination marks; he had never been re-vaccinated. On the 14th April the man's sister was ill and had spots; she had been re-vaccinated on the 31st March. On the 15th a neighbour was also notified who had visited the infected house repeatedly. On the

17th and 18th, 4 persons with whom the first patient had repeatedly associated at the public-house were all found to have the rash of small-pox developed; another visitor at the very time our fifth patient was removed on the 17th April developed the rash on the 7th May. Another visiting neighbour had the disease on the 20th, her son the 3rd May, and a third case on the 7th, the latter a child 18 months old was first vaccinated on the 20th. There was another doubtful case reported, also a case of chicken-pox in a well vaccinated child.

The fever hospital was understood not to be available for the treatment of cases of small-pox, after the first was sent there steps were immediately taken to find some temporary means of dealing with possible future cases. Goole was very fortunate in obtaining the loan of the ship which had been provided against cases of cholera, it had never been used for that purpose. It was speedily got ready, moored in the river, and the first patient was sent there on the 17th April. 8 patients were treated on board, and all recovered. All the patients had been vaccinated more or less.

2 shewed one mark.

4 „ two marks.

1 „ three marks.

1 „ five marks.

3 patients had been vaccinated 14 days before the illness broke out, and a child was vaccinated for the first time before, in all these cases the attack of small-pox was very slight, the stay in the hospital equalled 19 days each as compared with 36 days, the average stay of the other cases. Re-vaccination was urged upon every individual in the infected houses, and nearly always agreed to, great care was taken to have the disinfection of the houses and their contents carried out very thoroughly. The Council at once arranged to have a more commodious hospital provided for cases of small-pox; land (11 acres) was purchased at a safe distance from any population, and yet within easy reach of Goole. A temporary wood and galvanized iron hospital has been since erected, capable of treating 12 patients. It is not yet in every way complete. In October a case notified as small-pox was removed to the new hospital, the course of the illness rather threw a doubt on the view of the case first taken.

Diphtheria
and
Membranous
Croup

There were 9 cases of diphtheria notified, 4 among children, and 5 adults. 2 of the children died. 3 of the 9 were very slight attacks, the patients were in fact not separated from others. 2 cases followed upon others in the house being ill of scarlet fever.

There were 5 cases notified as membranous croup, 3 of whom died. This disease is very much like to if not actually diphtheria. Both have prevailed in the district—North from the station gates, and to the East side. One-half of the 14 cases occurred in that district which very largely consists of recently built houses. The disease often begins as a cold, and I have drawn the attention of the Council to the damp and unhealthy conditions very common in that district arising from streets not made, and so often covered with wet, mud, or refuse. Children living and playing around such surroundings do readily contract sore throats, which I have shown develops into membranous croup, or diphtheria.

Cases treated
at the
Hospital

The following cases of infectious diseases were last year admitted to the hospital:—

Scarlet fever 22.

Enteric fever 14 (2 were from the Rural district).

Diphtheria 2 (1 was from the Rural district).

Small-pox 14.

One case sent in as scarlet fever died the day after admission.

There were 3 deaths among patients suffering from enteric fever with pneumonia, one case was in the hospital only 5 days.

Water supply

The water supply of the town has been nearly continuously under consideration during the whole year. Every endeavour was made by consultation with the expert in geology who had advised, and the engineers, who carried out the work at Rawcliffe to find out the cause of the unsatisfactory state of the water from the bore-hole, and further if any measures could be carried out which would both remove the traces of iron present, and also reduce the excessive hardness. The information obtained did not commend any scheme to the Council, and it was decided that a fresh source of supply should be sought for. Many inquiries were made, and information obtained of the quality and quantity of water now supplied from wells to the east and west of Rawcliffe. That information all indicated that a water of good quality, and probably in abundance, was to be had from the new red sand stone rock, where it is overlaid by layers of gravel as is found at Pollington.

After the special committee, and also members of the Council had viewed the sites suggested as the most suitable at which a trial bore-hole might be sunk, a contract was entered into, and a experimental bore-hole has been made. It is 180 feet in depth and lined with iron tubing for 80 feet; samples of the water pumped up have been analysed by several analysts, and the water is reported to be satisfactorily pure, and of a moderately degree of hardness not exceeding 10 degrees. Based upon these and other facts, a bill is to be presented to Parliament during this session, for the purpose of obtaining a new water supply for the town from the site fixed upon.

The Council have decided to erect a suite of baths in Pasture Road, to consist of two swimming, and a number of private slipper baths. An application is to be made to the Local Government Board for power to borrow the money.

Baths

After reporting upon the worst of the damp unpaved streets the General Purposes Committee recommended the Council to serve notices under the 150 section of the Public Health Act, to have those streets put into a proper state of repair.

Paving of
Streets

I have visited the public slaughter-house on repeated occasions last year, in spite of the large and increasing amount of work which is done there the premises are kept clean, and the whole sanitary condition is well looked after. The following is a list of the animals slaughtered there in 1898.

Public
Slaughter-
house

Cattle	Sheep	Pigs	Calves
874	1157	1484	32

An application to be allowed to dress skins for tripe on the slaughter-house premises was refused.

Acting upon the instructions of the Council the Sanitary Inspector began last year to take samples of milk as sold in Goole, and forward them to the Public Analyst. He reports that so far only 2 samples have been analyzed, one was genuine, the other of fair quality.

Milk
Analysed

We find that several of the old wood erections which had been licensed by the police as suitable premises for cow keeping have been pulled down, and new premises more substantial with more air space, better ventilation, and better sanitary arrangements are being provided.

Cow Sheds

Canal Boats.

Several of the old canal boats are also being gradually disused, so that the number of boats now registered as dwelling places is less than in previous years for that reason. The number of persons actually found on board the canal boats is only one-half that for which these boats are registered to carry. Among those inspected there were found 214 men, 85 women, and 69 children. They were registered to carry 720.

Plans passed

The Surveyor informs me that during 1898, plans for 20 new houses, and 16 for alterations to existing buildings were passed.

The Hook drain or sewer opposite the avenues was ordered to be cleaned out. 10 additional ventilators have been provided for the sewers, and constant flushing of street sewers by the flushing van, and of side streets and common yard gullies by the hose pipe is carried out at an increasing cost.

Scavenging of
House Refuse

The work of scavenging the ash-pits, privies, and soil-boxes has been not to the satisfaction of the Sanitary Inspector. The disposal of that refuse is becoming every year more difficult, hence there is less desire to tender for doing the work, even at an increased rate. In the near future the committee may have to consider whether such refuse shall not be destroyed cheaper by fire than the present method. To get rid of over 8,000 loads of refuse yearly, so as not to cause a nuisance, either now or in the future, is no small difficulty. Mr. Ellis' table gives the full details of the year's sanitary work.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON,

MEDICAL OFFICER OF HEALTH.

GOOLE, 8TH FEBRUARY, 1899.

TABLE I.

LIST OF NUISANCES ABATED, AND STRUCTURAL ALTERATIONS
MADE DURING THE YEAR, 1898.

No. of Inspections made	...	...	...	...	...	2120
„ Verbal notices given	...	...	...	...	...	52
„ Written notices served...	...	...	...	...	...	132
„ Notices complied with	...	...	...	...	...	237
„ Nuisances partly abated or in progress	...	...	...	...	...	4

The Nuisances abated include:—

No. of House drains repaired and defects remedied	...	...	...	...	...	130
„ Sinks and Cisterns disconnected from drains	...	...	...	...	...	7
„ Trapped Gullies fixed instead of Cesspools	...	...	...	...	...	7
„ Houses disinfected and cleansed	...	...	...	...	...	82
„ Houses overcrowded	...	...	...	...	...	1
„ Other Nuisances abated	...	...	...	...	...	57
„ Manure Heaps removed	...	...	...	...	...	16
„ Closets and Ash-pits repaired	...	...	...	...	...	77
„ Closets and Ash-pits emptied monthly	...	...	...	...	...	892
„ Box Closets and Dry Ash-pits emptied weekly	...	...	...	...	...	2589
„ Dry Ash-boxes emptied every week	...	...	...	...	...	242
„ Loads of Night-soil removed	...	...	...	...	...	8246
„ Canal Boats examined	...	...	...	...	...	150

To hold Aft. 461; Forward 259 persons.

„ Boats on Goole Register—Highest No. 805	...	...	...	...	...	739
„ „ Registered in 1898	...	...	...	...	...	8
„ Regulations cancelled	...	...	...	...	...	2
„ Canal Boats Notices served 9, verbal 12	...	...	...	...	...	22
„ „ Letters as to	...	...	...	...	...	48
„ „ Not Registered	...	...	...	...	...	3
„ „ Change of Owners not notified	...	...	...	...	...	5
„ „ Requiring better ventilation, cleansing, &c.	...	...	...	...	...	2
„ „ Transfer of Ownership and Certificate	...	...	...	...	...	28
„ „ „ Captain's and Boat's Names	...	...	...	...	...	5
„ „ Duplicate Certificate provided	...	...	...	...	...	14
„ Cow-sheds, Dairies, and Milk-shops registered	...	...	...	...	...	48
„ „ Common Lodging-houses inspected...	...	...	...	...	...	6
„ „ Bodies placed in Mortuary	...	...	...	...	...	6

W. H. ELLIS, INSPECTOR.

TABLE II.
BIRTH AND DEATH RATES IN GOOLE IN 1898, AND FOR THE PREVIOUS FIVE YEARS, COMPARED
WITH THOSE OF THE WHOLE COUNTRY.

Year.	Rate per 1000 of the Population.						Deaths in Infants per 1000 Births.	
	Births.		Deaths.		Deaths from Zymotic Diseases.			
	Goole.	England and Wales.	Goole.	England and Wales.	Goole.	England and Wales.	Goole.	England and Wales.
1898	34·0	29·4	16·7	17·6	2·0	2·2	167	161
1897	33·1	29·7	15·0	17·4	1·9	2·1	167	156
1896	36·2	29·7	15·8	17·1	2·3	2·1	151	148
1895	36·0	30·3	18·8	18·7	2·8	2·14	161	161
1894	35·8	29·6	18·9	16·6	3·5	1·7	150	137
1893	36·6	30·8	17·4	19·2	3·0	2·4	187	159

TABLE III.

DEATHS FROM THE PRINCIPAL ZYMOTIC DISEASES IN 1898, AND DURING THE FIVE PREVIOUS YEARS.

	1898	1897	1896	1895	1894	1893
Small-Pox	0	0	0	0	0	3
Scarlet Fever.....	3	0	0	8	3	1
Membranous Croup..	4	2	0	1	2	2
Diphtheria	2	1	5	10	6	2
Fever, Enteric	4	5	1	2	1	3
Puerperal.....	1	0	1	1	1	1
Measles.....	4	0	15	0	21	0
Whooping Cough....	2	0	5	11	20	2
Diarrhoea	16	26	13	16	4	33
Total.....	36	34	40	49	58	47
Rate per 1000..	2.0	2.0	2.2	2.8	3.5	9.9

TABLE IV.
DEATHS IN 1898 FROM SEVERAL GROUPS OF DISEASES CHIEFLY AMONG CHILDREN UNDER
FIVE YEARS OF AGE.

	Total.	Deaths per 1000 of Population.	Proportion of Deaths in every 1000 from all causes.
1.—Seven principal Zymotic Diseases.....	36	2.0	126
2.—Pulmonary Diseases.....	63	3.7	223
3.—Tubercular Diseases.....	26	1.5	91
4.—Wasting Diseases of Infants	20	1.2	70
5.—Convulsive Diseases of Infants	9	0.5	31

- 1.—Includes Measles, Scarlet Fever, Whooping Cough, Enteric and Continued Fever, Diphtheria,
Membranous Croup, and Diarrhoea.
2. " Bronchitis, Pneumonia, Pleurisy, and Asthma.
3. " Phthisis, Scrofula, Tabes-Mesenterica.
4. " Marasmus, Atrophy, Debility, and Premature Birth.
5. " Hydrocephalus, Infantile Meningitis, Colvulsions, and Teething.

TABLE V.

SUMMARY OF CASES ADMITTED IN THE FEVER HOSPITAL, GOOLE, DURING 1898.

DISEASES.	Jan.	Feb.	Mar.	Apl.	May	Jne.	July	Aug	Sep.	Oct.	Nov.	Dec.	Recov- eries.	Died.
Scarlet Fever...	2	5	2		1	2	3	2	1		1	3	21	1
Enteric Fever...						1			1	8	3	1	10	4
Diphtheria	1	1											2	
Small-pox			1	7	5					1			14	
Totals.....	3	6	3	7	6	3	3	2	2	9	4	4	47	5

TABLE B.

TABLE OF POPULATION, BIRTHS, and of NEW CASES OF SICKNESS coming to the knowledge of the Medical Officer of Health during the year 1898, in the Urban Sanitary District of Goole; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES, adopted for the purpose of Statistics; Public Insti- tutions being shown as separate localities.	Population at all ages		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each locality, coming to the knowledge of the Medical Officer of Health.						Number of Cases removed from their homes in the several localities for treatment in Isolated Hospital.					
	Census 1891	Estimated middle of 1898.			Small-Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas.	Small-Pox.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	Other Diseases.
Goole Town.....	15308	16892	581	Under 5 5 upwds	1 13	20 30	5 4	3 2	2 19	... 1	... 33	1 11	8 13	... 1	... 11	1 2
The Cottage Hospital.....				Under 5 5 upwds	... ...	... 1	... ...	... ...	... ...	... ...	... ...	... ...	1...	......	......	......
The Workhouse.....	108	101		Under 5 5 upwds	... ...	... ...	... ...	... ...	... 1	... ...	... 1	......	......	......	......	......
Totals.....	15416	17000	581	Under 5 5 upwds	1 13	20 31	5 4	3 2	2 20	... 1	... 34	1 11	9 13	... 1	... 11	1 2

"Notification of Infectious Disease is compulsory in the District since 9th December, 1889."
The name of the Isolated Hospital used by the sick in the District is the Fever Hospital, Goole.



RICCALL
RURAL DISTRICT COUNCIL.

SELBY :
W. B. BELLERBY & SON, PRINTERS, BOOKSELLERS, &c.

1899.

REPORT

RURAL DISTRICT COUNCIL

OF THE DISTRICT OF ...

RICCALL RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1898.

POPULATION IN 1898	...	...	...	3,184
AREA IN ACRES	...	...	...	16,735

TO THE RICCALL RURAL DISTRICT
COUNCIL.

GENTLEMEN,

I have now to present to you my Annual Report for 1898.

I have estimated the population of the District at 3,184, a slight increase, which I think has taken place chiefly in the parish of Barlby.

85 births were registered last year, males 50, females 35 ; the BIRTHS.
birth-rate was 26·6 per 1,000 ; this rate has for the last 2 years been below the average.

In Barlby parish the birth-rate was 40 per 1,000.

„ Cliffe	„	„	23	„
„ Riccall	„	„	20	„

These rates in the largest parishes can only be taken as for 1898, and not as the general average, for among populations of less than 1,000, a very few extra births make a notable difference.

Deaths. 62 deaths were registered in the districts, males 30, females 32, 2 of these were strangers, but a death occurred at the Selby Workhouse of a person belonging to these districts, the corrected number is therefore 61, and the death-rate for the year was 19·3 per 1,000. That is the highest rate for several years, and the following figures explain that it prevailed in several parishes:—

In Barlby the death-rate was 28 per 1,000.

„ Riccall	„	„	19	„
„ Cliffe	„	„	18·7	„
„ Skipwith	„	„	21	„

Deaths from
Diseases of
the Lungs.

There were only 2 deaths from any form of zymotic disease, they were caused by diarrhœa in Cliffe parish. There were 10 deaths caused by diseases of the lungs, 5 from phthisis or consumption, and 5 from bronchitis, pneumonia, &c.; the death-rate from these was 3·1 per 1,000. The high death-rates I have just noticed are due to an unusual number of deaths from diseases of the lungs.

In Barlby parish it was 6 per 1,000.

„ Cliffe	„	„	4·7	„
„ North Duffield also			6·0	„

The whole country are awakening to the fact that all diseases caused by tubercle, of which phthisis is only one form, are preventable. Even in country districts that disease carries off many of its victims at the most useful period of their lives, the ages of those who died last year were 23, 37, 23, 39, and one over 60. We find houses, too, overcrowded, even in our villages; these and other sanitary matters influence this disease, and it is well to be reminded of the need of the sanitary improvements recommended.

Deaths among
Children.

Last year was especially fatal to very young children, infants under a year died in the proportion of 18·8 per cent. of the births registered during the year. In Riccall parish the proportion was 40 per cent., but several of these died from inherited weakness before disease had time to affect them.

On the other hand, many deaths occurred among persons over 65 years of age, the average per cent. last year was 41, whereas in Skipwith all the deaths were of aged persons over 65 years.

6 deaths were registered on the Coroner's Certificate, 3 were returned as due to natural causes, 2 accidents, and 1 suicide.

There were only four cases of infectious disease notified last year; 3 were cases of enteric or typhoid fever, and 1 a case of erysipelas.

The first case of enteric fever was ailing when he returned home; in spite of the very unfavourable sanitary conditions about his home no other case followed. The other 2 cases occurred at one house at the same time. The history of the illness and the conditions about the house indicated an illness beginning apart from any previous infection. I reported the cases in November, and stated that among the 4 families who used the well water, all of the inmates in 3 had been subject to diarrhoea during August and September. The 4 houses are on opposite sides of the highway, and have separate drains and closets. The water is discoloured, the pump is out of repair, and there is no efficient drain to carry away the waste water from the pump. Within 20 feet of the well is a pig-stye and manure heap, and soak hole from the stye; abutting upon that is the privy with no proper ashpit or receptacle. The evidence of the nature of the illness the children suffered from is confirmed by the sad fact that the mother has also been attacked and died during the present month. Enteric Fever.

In August, many children were ill in Skipwith from whooping cough. I found that the attendance at the school was greatly lessened through the illness, and it was decided to give a certificate for closing the school for 4 weeks. Whooping Cough.

The question of a hospital for cases of infectious disease has not been considered with any neighbouring Council recently.

There is a certainty in the very near future of a large number of houses being built in the township of Barlby. Land close to Selby has been purchased. A form of bye-laws have repeatedly been under consideration suitable for new streets and buildings. At the meeting in November, the Council adopted the set which New Houses at Barlby.

had been considered finally by the Committee; they are based upon a similar set now in force in the district of a neighbouring Rural Council. It is to be hoped that the Local Government Board will give their sanction to their adoption very soon.

During the past year the condition of every parish has been inspected and the results reported at the monthly meetings of the Council.

Water Supplies

The water supply is with few exceptions obtained from shallow wells, and an analysis usually confirms the unfavourable opinion formed from seeing the surroundings of the well. I last year reported that very many wells are open, with little, if any, protection from impurities getting into the water from the ground around them. Of 5 well waters analysed, 4 were quite impure, containing large amounts of both organic and saline impurities. We have proof that the use of such impure water causes indifferent health as well as actual fever. 4 of these wells were last year cleansed, work which I have previously shown is not likely to be followed by any satisfactory improvement. The polluting matter enters from outside the well, and the remedy is to prevent all such pollutions from reaching the water. If the ground near to the well receives sewage slops thrown upon the ground or into a leaking or blocked drain, or if manure is spread on the ground or is stored any way near, under all these conditions the well will receive some share of these impurities, and the ground becomes so clogged with them that it ceases to act as a filter or a protection to the water in the well. Every parish has many examples of these unsafe wells. 4 new wells were made last year. The public open well on the Green at Skipwith was by order of the Council re-made. The bricks were taken out, 3 well tubes 3 feet in diameter and length forced into the well, these came a few inches above the ground level; a pump has been fixed, also a channel to carry away the waste water.

Sewers and Drains.

The sewers in Riccall parish were further improved by laying 225 yards of 8 inch sanitary pipes. We find that builders in the country do not hesitate to lay drains underneath domestic buildings, or to build over the house drain; when the new bye-laws are in force, building over a drain or sewer will be prevented,

unless in very exceptional cases. In nearly every parish the house drains are every year being improved, sanitary pipes and gullies are being provided, and connections made in a larger number to efficient sewers. The catch-pits, made in the line of the sewers, with the street gullies and the outfall ditches, are regularly cleaned out. The pond at Osgodby was last year thoroughly cleaned out, and 500 loads of refuse removed. A report was made asking that a notice should be served to prevent sewage being allowed to discharge into it in future. The open pond at Cliffe was not yet been dealt with; it often caused a nuisance, and it is very near the school.

It was necessary to serve notices requiring 5 houses, which Nuisances. were in a dilapidated and unsanitary condition, either to be repaired and provided with water, drains, and closets, or else to be closed. These were reported from 3 parishes. The closets provided are in too many cases unsatisfactory; too near to the houses or the well, or with no outlet into an ashpit, or means of deodorizing the refuse,—occasionally a broken down wood erection has to serve. It is a reasonable hope that the standard of sanitary requirements and conditions which promote health and comfort in rural districts should be raised nearer to the standard required even in small towns.

There are 18 cow-sheds on the register; there is no milk trade Cow-sheds. carried on on a large scale, but the health of the cows, and the wholesomeness of the milk supplied, are of the same interest and importance in the country as in towns.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON,

Medical Officer of Health.

January 23rd, 1899.

TABLE I.

TABLE SHEWING PARTICULARS OF NUISANCES ABATED AND SANITARY
 WORK DONE IN RICCALL RURAL DISTRICT DURING
 YEAR 1898.

Number of inspections made	...	...	...	...	187
Number of nuisances found	...	...	...	...	67
Number of notices served	...	...	...	...	25
Number of water notices served	...	...	...	...	14
New drains laid by private owners	...	...	...	...	362 yds.
New drains laid by Sanitary Authority	...	...	...	...	237 „
New tube wells	...	...	...	...	1
Old well tubed	...	...	...	...	1
New brick wells, part bored	...	...	...	...	2
Old wells filled up	...	...	...	...	4
Old wells cleansed	...	...	...	...	4
New pumps	...	...	...	...	2
New privies and ashpits built	...	...	...	...	6
Old privies removed from dwellinghouse	...	...	...	...	1
New cesspools	...	...	...	...	5
Cesspools cleansed by District Council	...	...	...	...	50
Old cesspools filled up	...	...	...	...	1
New gullies	...	...	...	...	11
Parish pond cleansed	...	...	...	...	1
Pigstyes removed	...	...	...	...	2
Houses condemned	...	...	...	...	5
Canal Boats inspected	...	...	...	...	6
Cow-sheds inspected	...	...	...	...	18

TABLE II.
STATISTICS FOR THE RURAL SANITARY DISTRICT OF RICCALL, 1898, AND AVERAGE
RATES DURING THE TEN YEARS, 1881—1890.

DISTRICT. 1898.	RATE PER 1,000 OF THE POPULATION.				Deaths under 1 to every 100 Births Registered.	Percentage of Deaths in Persons aged 65 years and over.
	Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.		
Riccall District.. ..	26.6	19.3	0.0	3.1	18.8	41
10 Years' Average	30.4	15.1	1.2	2.9		

TABLE III.
BIRTH AND DEATH RATES IN THE LARGEST PARISHES DURING 1898.

PARISHES.	POPULATION	RATES PER 1,000 OF THE AVERAGE POPULATION.				Deaths under 1 year per 1,000 Births.
		Births.	Deaths.	Zymotic Diseases.	Respiratory Diseases.	
Barby	500	40.0	28.0	0.0	6.0	10
Cliffe	640	23.0	18.7	3.0	4.7	18*
Riccall	736	20.3	19.0	0.0	0.0	40

TABLE A.

TABLE OF DEATHS during the year 1898 in the Rural Sanitary District of Riccall, classified according to Diseases and Localities.

NAMES OF LOCALITIES.	Mortality from all causes.							Under 5 5 upwards	Mortality from subjoined causes, distinguishing Deaths of Children under Five years of age.																				
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		FEVERS.																				
									Small-pox.	Scarlatina.	Diphtheria.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Erysipelas.	Measles.	Whooping Cough	Diarthra and Dysentery.	Rheumatic Fever	Influenza.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Diseases.	Injuries.	All other Diseases	Total.	
Riccall Sub-District ..	62	17	1	1	2	17	24	Under 5 5 upwards	..	..	..	..	..	..	..	1	..	..	3	5	..	1	..	..	4	3	24	16	18
Totals	62	17	1	1	2	17	24	Under 5 5 upwards	..	..	..	..	..	..	..	1	..	..	3	5	..	1	..	..	4	3	24	16	18
Deaths occurring outside the District among persons belonging thereto	1	..	..	..	..	1	1	Under 5 5 upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Deaths occurring within the District among persons not belonging thereto	2	..	..	..	..	1	1	Under 5 5 upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Riccall Rural District; classified according to Diseases and Localities.

NAME OF LOCALITIES.	Population at all ages, Census, 1898.	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.									
				Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup	FEVER.					
								Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.
Riccall District	3184	85	Under 5 5 upwards.	.....	.....	.....	.....	.....	3	.....	.....	.....	.....
Totals	3184	85	Under 5 5 upwards.	.....	.....	.....	.....	.....	3	.....	.....	.....	1

Notification of Infectious Diseases is compulsory in the District since 1st December, 1889.
There is no Isolation Hospital in or used by the Sick of the District.

❧ SELBY ❧

RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR

❧ 1898. ❧

SELBY :

W. H. SPENCER, PRINTER, 5, FINKLE STREET.



SELBY

RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1898.

POPULATION IN 1898 5,950

AREA IN ACRES 34,726

SUB-REGISTRATION DISTRICTS :—					POPULATION.	AREA IN ACRES
CARLTON	...	...	...	...	2,251	13,293
SELBY RURAL	...	...	...	...	3,699	21,433

TO THE SELBY RURAL DISTRICT
COUNCIL.

GENTLEMEN,

I have now to present to you my Annual Report for 1898.

I do not think there has been any appreciable recent increase or decrease of the population, which I estimate at 5,950.

There were 158 births registered last year—males, 80 ; females, 78 ; the birth-rate was 26·5, which is almost the same as in recent years.

In the Carlton Sub-Districts it was 28 per 1,000.

„ Selby Rural do. „ 25·7 „

In Cawood parish the birth-rate was 36 ; in Carlton and Wistow it was 26 ; in Hambleton it was 16 ; and in Brayton only 12.

Deaths.

Eighty deaths were registered in the Rural Parishes—males, 42 ; females, 38 ; 2 of these were strangers found drowned in the river Aire ; these are deducted, but 5 persons died in Selby Workhouse belonging to Rural Parishes ; these have to be added, the corrected number 83 is a equal to a death-rate of 14 per 1,000. That rate is very little above that of 1897, and is I think satisfactory. In the Selby Rural Sub-Districts the death-rate was 15·4. In the Carlton Rural Sub-District the death rate was 12·3. In Cawood parish it was 19 ; in Wistow 16 ; and in Hambleton only 8. The high or low birth rate in these parishes controls to some extent the death rate.

Zymotic Diseases.

There were 7 deaths from the zymotic group of diseases :—

4 caused by whooping cough.

3 caused by diarrhœa.

The death rate was only 1·3 per 1,000 of the population ; the deaths from whooping cough occurred at Cawood.

Deaths at different ages.

The deaths among children were above the usual average, the proportion of infants under 1 year was 15·2 per 100 births ; it was 18·2 in the Selby Rural Sub-Districts ; and 10·9 in the Carlton Districts ; these proportions were even higher in the parishes of Brayton, Cawood, and Wistow.

Thirty-six per cent. of all the deaths in the Rural Parishes were of persons who had reached or passed the age of 65 years ; in several parishes at least one-half the deaths were of such old persons.

Diseases of the Lungs.

Fourteen deaths were caused by diseases of the lungs, 3 were caused by phthisis or consumption, and 11 by bronchitis ; nearly half of these latter were of children under 5 years of age. The death rate of all forms of disease of the lungs was 2·3 per 1,000 ; there is very little difference in any district from the general average. In Cawood the death rate was double the average, through children probably attacked with some disease of the

lungs after recovery from whooping cough. Three deaths were registered from influenza; one of these was associated with disease of the lungs.

Nine deaths were registered on the Coroner's certificate; 4 were returned as due to natural causes, 3 from accidents, and 2 by drowning. Five cases were not certified by any doctor or the Coroner.

Last year 12 cases of infectious diseases were notified—6 were cases of scarlet fever, and 6 were cases of enteric or typhoid fever. All these 12 cases of illness recovered. Four of the cases of scarlet fever were infected from previous cases of that disease in another district, the source of the infection of the other 2 could not be traced.

Cases of Infectious Disease.

The 6 cases of enteric fever all occurred at separate houses, 2 in Cawood parish, 2 in Drax, the others in Burn and in Temple Hirst.

The illness of 2 was not contracted in these districts; another was far probably a case of simple continued fever than of enteric. A careful inquiry was made about all the cases, and as to 3 there were not found any definite source of infection. In each of these the water supply used was far from the standard of pure wholesome water, and after excluding all other probable causes the use of such water remains as the most likely explanation of the special illness. Precautions were enforced in each case, and there was no spread of the disease in the same house.

Cases of whooping cough, measles, and influenza were prevalent among the school children at Camblesforth.

At Hambleton a sudden outbreak of measles affected a large number of the children at the National School. In both of these cases it was considered necessary to close the schools for a few weeks so as to prevent other children from being infected. In Cawood many young children were ill of whooping cough, and for scholars kept from school from infected houses a Certificate under Section 101* of the Education Code was given. While these inquiries were being made the unsatisfactory condition of

the closets at the Hambleton Schools was reported, and a more satisfactory arrangement was provided. Defects about the drains at Camblesforth and near Gateforth Schools were also reported and notices served.

In conjunction with the Selby Urban Council a Joint Hospital District has now been formed to provide means for the isolation and treatment of cases of infectious diseases for the Rural and Urban Districts. Members of a Hospital Committee have been appointed from each Council, and the first meeting was held in August last.

Water supplies. An inspection has been made of the water supply in every village of the district, and the results reported at the monthly meetings of the Council.

Some progress was made last year, 6 new wells were provided, 3 of these were bored and the sides lined with glazed well-tubes, and 3 were brick made wells, but the water was got from a deeper strata by boring from the bottom of the made well. Six other wells were cleaned out with no very hopeful results. Others now in use are known to supply a very doubtful wholesome water, the analyses of 8 well waters showed the water in each to be very impure. Some wells now yielding a fairly wholesome supply are gradually becoming not wholesome from neglect or from the soakage into them of surface or sub-soil impurities. Many pumps are found out of repair, and have to be primed before fresh water is drawn; plenty of clean water is not always at hand even for that purpose, and some less pure has to be used. Pump cases are broken, and any dry refuse is liable to be carried to the water next drawn. But a common want is a open channel to carry away the waste water instead of it being allowed to soak into the ground near to the pump and so reach the well in a dirty condition. This is too often seen to occur by the marks clearly left on the sides of an opened well, especially when it is only covered with flag stones or old railway sleepers. The work of well sinking is in my opinion far more important than laying a drain, yet the latter is usually regulated as to its proper size, material and inclination, but no official guide, bye-law or regulation has ever been framed for the guidance of well sinkers.

A very important work affecting the parishes of Burn and Camblesforth was carried out last year by the thorough cleansing and deepening of the open sewer which extends a little over 4 miles in length. The smaller sewers and house drains connected with these have been much benefited and nuisances complained of removed.

Sewers and
Drains.

At Hambleton the culvert, 440 yards long, in the village was thoroughly cleansed, and every endeavour has been made to prevent the loss of the water, which is so important for use in Hambleton and below, but which has been seriously interfered with of late just above Hambleton parish.

A new sewer has also been laid in the South end of Carlton Main Street, where previously there was no outlet for the drainage of several houses.

Better drains have been provided by private owners a little over 800 yards in length in the parishes of Carlton, Cawood, Gateforth, Hambleton, Wistow, and Thorpe; that work is in addition to the relaying of house drains, which has been reported as being defective. Thirty earthenware gully traps have been put down, and gradually old fashioned stone or iron traps which have many defects are being got rid of. On the line of the sewers several cesspools or catchpits are usually provided; these are regularly cleaned out, keeping the sewers free of solid refuse and also the outlet ditch.

Better closet accommodation is also being provided little by little; in 9 parishes last year new or greatly improved privies and ashpits were built, and in a few parishes a movable box closet is found more suitable. There are, however, many of these closets which are far from satisfactory, and the owners are slow to make the much-needed alteration. Such cases are where there is no ashpit, and foul matter leaks beyond the closet wall and refuse heaps are made in any situation. The new Bye-laws will regulate these matters so far as new buildings are concerned.

Closets and
Ashpits.

At the meeting of the Council in November last the set of Bye-laws which have been carefully considered by a Committee and compared with those already in operation in neighbouring Rural Districts were adopted, and have been sent to the Local Government Board for their approval.

Unhealthy
Houses.

Last year it was necessary to serve notices requiring 4 houses to be either repaired and provided with satisfactory drains, closets, water supply, or to be closed as unfit to occupy. Two have since been repaired, and 2 are closed. This rather extreme measure is sometimes necessary when long neglect has allowed property to get very much out of repair, or when repeated notices from the Council for improvements are disregarded.

Canal Boats.

Mr. Christie reports that 13 Canal Boats have been inspected ; no case of infectious disease was found, and the sanitary conditions on board were satisfactory.

Cow Sheds.

There are 16 dairies and cowsheds on the register, and all those who sell milk are required to carry out the regulations which have been framed to protect the health of the public by requiring cleanliness in every part of the trade of milk producing and selling.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

MEDICAL OFFICER OF HEALTH.

SELBY, 30th January, 1899.

TABLE I.

TABLE SHOWING PARTICULARS OF NUISANCES ABATED AND SANITARY
 WORK DONE IN THE SELBY RURAL DISTRICT DURING
 YEAR 1898.

Number of Inspections made	...	...	...	...	226
Number of nuisances found	...	...	...	...	64
Number of notices served	...	...	...	...	38
Number of water notices served	...	...	...	...	17
New sewers laid by Sanitary Authority	...	...	...	...	330 yds.
New drains laid by private owners	...	...	...	...	856 „
Old drains lifted and re-laid by Sanitary	...	...	...	...	76 „
Old drains lifted and re-laid by private owners	...	...	...	...	317 „
Old drains and water courses cleansed...	...	...	...	...	3860 „
Old drains and water courses deepened	...	...	...	...	7317 „
New privies and ashpits built	...	...	...	...	12
Privies converted into box closets	...	...	...	...	4
Privies and ashpits repaired or covered	...	...	...	...	6
Old privies removed from houses	...	...	...	...	4
New bored wells	...	...	...	...	1
New tubed wells	...	...	...	...	2
New brick wells	...	...	...	...	3
Old wells deepened or cleansed...	...	...	...	...	6
New pumps	...	...	...	...	8
New cesspools	...	...	...	...	2
Old cesspools filled up	...	...	...	...	3
New gullies	...	...	...	...	30
Canal boats inspected	...	...	...	...	13
Dairies and cow-sheds inspected	...	...	...	...	16
Old wells filled up	...	...	...	...	1
Sinks disconnected	...	...	...	...	1

Many Cesspools and Gullies in the respective Parishes in this district have been frequently cleansed during the year. The open Dykes have also been attended to, some of them having been deepened.

T. CHRISTIE, Inspector.

TABLE II.
STATISTICS FOR THE RURAL SANITARY DISTRICT OF SELBY AND THE
SUB-REGISTRATION DISTRICTS, 1898.

RURAL SANITARY DISTRICT AND SUB-DISTRICT.	RATE PER 1000 OF THE POPULATION.				Deaths under 1 to every 1000 Births Registered.	Percentage of Deaths among Persons aged 65 and over.
	Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.		
Rural Sanitary District ...	26·5	14·0	1·3	2·2	152	36
Carlton Sub-District ...	28·0	12·0	0·0	2·2	109	43
Selby Sub-District...	25·7	15·4	2·1	2·1	182	32

TABLE III.
BIRTH AND DEATH RATES IN THE LARGEST PARISHES DURING 1898.

PARISHES.	POPULATION.	RATE PER 1000 OF THE AVERAGE POPULATION.	
		BIRTHS.	DEATHS.
Brayton	370	12.0	13.5
Carlton	759	26.0	12.0
Cawood	1000	36.0	19.0
Hambleton	489	16.3	8.0
Wistow... ..	674	26.7	16.3

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Rural Sanitary District of Selby; classified according to Diseases and Localities.

NAMES OF LOCALITIES.	Population at all ages, Census, 1891.	Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.											
				Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	FEVER.						Cholera.	Erysipelas.
								Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.			
Carlton Sub-District 	2261	64	Under 5 5 upwards	..... .....	2	.....	.....	.....	2	.....	.....	.....	.....	.....
Selby Sub-District 	3689	87 94	Under 5 5 upwards	..... .....	3 1	.....	.....	.....	4	.....	.....	.....	.....	.....
Totals 	5950	148 158	Under 5 5 upwards	..... .....	5 1	.....	.....	.....	6	.....	.....	.....	.....	.....

Notification of Infectious Disease is compulsory in the District since 1st December, 1889.

There is no Isolation Hospital in or used by the Sick of the District.



SELBY
URBAN DISTRICT COUNCIL.

SELBY :
W. B. BELLERBY & SON, PRINTERS, BOOKSELLERS, &c.

1899.

SELBY

URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH FOR 1898.

POPULATION, CENSUS 1891 ...	...	...	...	6,030
ESTIMATED POPULATION IN 1898	...	...	...	6,500
AREA IN ACRES ...	...	...	...	3,757

TO THE SELBY URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have now to present to you my Annual Report for 1898.

It is somewhat difficult to get at a reasonably accurate estimate of the population. Last year there were all the signs of a new era of prosperity for the town, and of a large addition of new workers to the population. For the purpose of this report the estimate of the population for any year is made up to the end of June, as the middle of the year; the population then is considered to be a fair average, it is more than there was in the early months, but less than there was in the later months of the year. There is no doubt that during the present year, when the many new houses, for which plans have been passed and which are now in course of erection, are occupied, the population will be found to be greatly increased. It has also been suggested

Population.

that many of the workmen who have arrived are now living in lodgings, and have not yet brought their families for want of house room. I have seen an estimate of the present population much larger than I can adopt, and the following actual figures of the number of births and deaths registered are a very good guide.

I have estimated the population during 1898 as 6,500. During the latter half of last year a considerable number of workmen came to Selby, so that the present population is no doubt nearer 6,800.

Births. Last year the number of births registered in Selby was 192, 2 more than those registered in 1897; these were 92 males and 100 females. The birth-rate was 29·3 per 1,000; the average rate for the previous 5 years was 31·5, and for the previous 10 years 31. In England and Wales the birth-rate last year was 29·4.

Deaths. 125 deaths were registered, males 70, females 55. 5 deaths were of persons not belonging to the town; 2 people from Selby died at the West Riding Lunatic Asylum; these latter are added, the corrected number 122 is equal to a death rate of 18·3 per 1000, which is also the average death rate for the 5 previous years.

There were 8 deaths from zymotic diseases :—

7 were from diarrhoea among infants,

1 was from whooping cough,

the death rate was 1·2 less than one-half the average.

**Diseases of
the Lungs.**

From phthisis or consumption there were 9 deaths, and from other diseases of the lungs 12; together these equalled a death rate of 3·1. In addition there were 5 deaths registered from influenza, a disease which is closely associated with diseases of the lungs.

Phthisis will before long be generally acknowledged as a disease which can be communicated from one person to another, and also one that man may contract from his animal food. Although every death is counted in our total, yet there is a higher value to be attached to deaths among persons in the prime of life. I have noted that all the deaths in the zymotic group, which are the more generally understood as being infectious, were among infants, but of the 9 deaths from phthisis, 7 were of

persons between 5 and 36 years of age. But phthisis, a disease of the lungs, is only one form of disease which is known to be caused by the germ of tubercle; it attacks other organs of the body and they are returned under other heads. There are tubercular diseases of the bowels and of the brain, and 3 deaths from these among young people of school age last year have to be added to the list, and thus there is the greater need to consider how this disease, under all its varieties can be lessened.

Among infants under a year, the deaths equalled 135 per 1,000 of the births registered, the average rate is 159.

During 1898 many persons died in old age; after excluding deaths at the Workhouse of persons belonging to other parishes, there were 28 per cent. of all the deaths during the year among persons who had live to the age of 65 and over.

7 deaths were returned on the Coroner's certificate, 2 were returned as due to natural causes, and 5 resulted from some accident; 3 of the latter were infants suffocated or overlaid in bed.

Very few cases of infectious disease were reported last year, there were of

Scarlet Fever	...	...	4
Enteric „	...	...	1
Erysipelas	...	...	2

Cases of
Infectious
Disease.

The cases of scarlet fever all occurred as isolated ones in February, April, May and November, and in none of the houses did the disease spread.

The case of enteric fever was another in the same house where several cases occurred in 1897.

While cases of diarrhœa were prevalent, an inspection was made of the houses where the fatal cases were reported from. Notices had to be given requiring premises to be cleansed, and special attention was given to the closets and ashpits near to these houses.

Measles were very prevalent among the children at the Catholic Schools, and they were closed for 4 weeks.

The first step was taken last year towards providing a hospital for the isolation and treatment of cases of infectious disease. An

order of the West Riding County Council constituted a joint district for this purpose to serve for the population of the urban and rural districts. The first meeting of the representatives appointed by the Urban and Rural Councils was held in August last. The next work will be the selection of a suitable site or sites upon which to erect an Hospital

On the recommendation of a Coroner's Jury as to the need for a Public Mortuary, plans have been prepared for one, but no further action has yet been taken to erect this very necessary building.

Sanitary work. When we turn to the several works which have been considered during 1898, they will be found both in amount and importance to have exceeded the records of many past years.

Plans were last year passed for 125 new houses, and during the present month for 67 more. Further, it can only be for future workers in Selby that the large number of houses in Barlby parish are about to be built. The width of the river will separate them from the Urban Council district, but their work and chief interest will be Selby. All these evidences of more workers, and hence more prosperity in Selby, follow upon the large business undertakings which have already begun or are rapidly being completed in the town. A much larger number of the class of skilled workmen will be among the new comers, men who are well known to appreciate all the comforts which good sanitary conditions about them confer ; and what does Selby offer ? The houses built under the existing bye-laws are required to be provided with a large amount of free air-space both in front and back ; the actual work about the houses is supervised so as to secure dry, well-ventilated healthy dwellings. There is a good and plentiful supply of water from a deep well. 128 new houses were connected with the water mains last year, the quantity used averages 25 to 26 gallons per head per day, of which some part is used for the systematic flushing of the sewers and yard drains.

The town is sewered throughout, and in order to obtain a better fall and to provide an adequate sewer for future new streets and houses, another outlet has been obtained into the river to the east of the town. Mr. Gray tells me that the sewers submitted by private owners and passed by the Council for the new streets

in East Common, Doncaster-road, Ebor-street, are 2,043 yards in length, and that the new outfall sewer to the river, provided by the Urban Council, is 948 yds. Already 135 houses have been connected with these new sewers.

Selby is essentially a water-closet town, and among the new houses 128 have been provided with these, including a proper cistern for flushing. This latter is a great improvement upon the old method where no cistern but only flushing from the supply pipe is provided. The removal of ashpit and house refuse is carried out by the Council's workmen ; year by year an increasing amount of that refuse is removed weekly from movable boxes instead of being stored in ashpits. Up to the present there has not been much trouble in getting rid of the refuse by tipping into old clay pits, but as houses extend nearer to these pits, the tips will not be available, and other means of destroying it will have to be considered.

Scavenging of
House Refuse.

The Council have decided that a complete set of baths, both swimming and slipper baths, shall be provided, and plans have been prepared ; tenders are now being considered. There can be no doubt that this is mainly a health question, and has a good effect in teaching one form of cleanliness, which sanitary work is ever trying to bring about in all our surroundings.

Baths.

The completion of the new Park has given to the people of Selby the first it may be of what are called the lungs or breathing space of towns.

Public Park.

But sanitary work is never completed, and in Selby it can still be improved. I have noted the fact that the disease most commonly known as phthisis, is one which is communicable from the sick to the healthy, and the more crowded people either live or work together, the greater is that risk. Such considerations justify the requirement that every dwellinghouse shall have secured to it a reasonable amount of free air-space, that that space shall be paved, kept clean and dry, and that windows made to open shall permit of a free draught of air through every part of the house. But animals, especially cows and others slaughtered for human food, are also attacked with tubercular disease. Children, who are the chief users of milk, are in danger of contracting the disease from the milk of cows when they are badly affected with

Cow-sheds and
Milk Supply.

tubercle. I would like to repeat the advice I have previously given, viz., that boiling all milk destroys any possible infection it may have. The cow-sheds are registered and inspected to see that the animals live on reasonably clean premises, with sufficient air-space and ventilation in the sheds. In addition to the 28 on the register, 5 new applications were last year made. 5 Notices had to be served requiring more care in carrying out the regulations.

Slaughter
Houses.

There are 8 registered slaughter-houses in Selby, and from repeated visits to them all, I can only say that the greater number came far short of what a reasonably satisfactory slaughter-house should be. Many are found in small narrow yards, with dwelling-houses all round, and in a few the entrance is through a shop or narrow passage. It is very difficult to carry on the work of preparing human food and the removal of offal, refuse, &c., under such conditions without causing a nuisance. The whole conditions are changed when a public slaughter-house is provided, and the experience I have had of these in Doncaster and in Goole, justifies me in urging that the time has come when a similar public convenience should be provided in Selby.

Bye-laws
amended.

The bye-laws regulating new streets and buildings were last year revised, and an amended set sent to the Local Government Board.

9 new streets were passed last year, 3 of which have been completed, and the others are being made. New sewers and water mains are also a part of the work in all these streets.

Full details of the sanitary work of the year in the inspection of houses and premises, of cow-sheds, bakehouses and other workshops, and also canal boats, are given in the table prepared by Mr. Gray; in every part of that work improvements have been carried out, more through persuasion than formal proceedings.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON,

Selby, February, 1899.

Medical Officer of Health.

TABLE 1.

ANNUAL REPORT OF NUISANCES ABATED AND OTHER SANITARY WORK
FOR THE YEAR ENDING 31ST DECEMBER, 1898.

Inspections made	...	...	...	...	1925
Verbal and written notices from Inspector	...	...	...	...	491
Notices from the Council	...	...	...	...	19
New Streets passed, length	...	...	...	...	703 yds
New Main Sewers passed	...	...	...	...	2043 „
New Main Sewers made	...	...	...	...	484 „
New Main Outfall Sewer	...	...	...	...	948 „
Number of houses connected with new sewers	...	...	...	...	135
Defective drains cleansed and re-laid	...	...	...	...	22
Sinks disconnected	...	...	...	...	8
New Water Mains laid	...	...	...	...	225 „
New Houses connected with town water supply	...	...	...	...	128
W.C.'s provided with flushing cisterns	...	...	...	...	128
Defective W.C.'s cleansed and repaired	...	...	...	...	138
Notices issued for waste of water (W.C.'s)	...	...	...	...	161
New W.C.'s provided	...	...	...	...	144
Defective and dilapidated privies and ashpits rebuilt	...	...	...	...	11
Ashpits, privies, &c., cleansed	...	...	...	...	4601
Number of loads of refuse removed	...	...	...	...	1443
Ash Boxes emptied	...	...	...	...	10088
Premises cleansed and limewashed	...	...	...	...	69
Houses unfit for habitation	...	...	...	...	1
Overcrowding—Notices sent	...	...	...	...	7
Offensive accumulations removed	...	...	...	...	33
Other Nuisances abated	...	...	...	...	72
Plans passed for buildings, dwellinghouses, &c.	...	...	...	...	138
New spouts for houses	...	...	...	...	5
Rooms disinfected	...	...	...	...	6
Dairies and cow-sheds registered	...	...	...	...	28
Bake-houses registered	...	...	...	...	30
Canal boats inspected	...	...	...	...	45
Notices under Canal Boats Act	...	...	...	...	5
Common lodging-houses registered	...	...	...	...	5
Notices for keeping lodgers without being registered	...	...	...	...	2
Slaughter-houses registered	...	...	...	...	8
Slaughter-houses repaired, &c.	...	...	...	...	4
New Workshops registered	...	...	...	...	2

BRUCE MCGREGOR GRAY,

Surveyor and Inspector.

TABLE II.

BIRTH and DEATH RATES during 1898, and Five Previous Years, in the Selby Urban Sanitary District, and in England and Wales.

Year.	Rate per 1000 of the Population.						Deaths in Children under 1 year to every 1000 Births.	
	Births.		Deaths.		Deaths from Zymotic Diseases.			
	Selby.	England and Wales.	Selby.	England and Wales.	Selby.	England and Wales.	Selby.	England and Wales.
1898	31·5	29·4	18·3	17·6	2·6	2·2	159	161
1897	29·7	29·7	17·3	17·4	2·0	2·1	138	
1896	29·7	29·7	18·2	17·1	4·0	2·1	180	148
1895	33·2	30·3	18·0	18·7	4·3	2·1	189	161
1894	30·0	29·7	17·5	16·7	1·3	1·7	141	137
1893	30·8	30·8	21·2	19·2	1·4	2·0	139	159

TABLE III.

SUMMARY of the BIRTH and DEATH RATES during the 10 Years 1881-90.

	Average of the 10 years 1881-1890.
Birth Rate per 1000	31.2
Death " "	18.4
From Zymotic Diseases	1.5
" Phthisis or Consumption	1.4
" other Lung Diseases	2.9
Deaths in infants under 1 year per 1000 births	133

TABLE IV.
MORTALITY FROM SEVERAL GROUPS OF DISEASES DURING 1898.

	Total	Deaths per 1000 of Population.	Proportion of Deaths in every 1000 from all causes.
1—Seven Principal Zymotic Diseases ..	8	1.2	64
2—Pulmonary Diseases (other than Phthisis) ..	13	2.0	104
3—Tubercular Diseases ..	11	1.7	88
4—Wasting Diseases of Infants ..	12	1.8	96
5—Convulsive Diseases of Infants ..	8	1.2	64

2.—Includes Bronchitis, Pneumonia, Pleurisy, and Asthma.

3.— „ Phthisis, Scrofula, Tabes Mesenterica.

4.— „ Marasmus, Atrophy, Debility, and Premature Birth.

5.— „ Hydrocephalus, Meningitis, Convulsions, and Teething.

TABLE B.

TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Urban Sanitary District of SELBY; classified according to Diseases, Ages, and Localities.

NAME OF LOCALITIES.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.										
	Census, 1891.	1898			Small-pox.	Scarlatina.	Diphtheria.	Membranous Croup	FEVERS.						
									Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.
SELBY LOCAL BOARD DISTRICT	5922	6392	192	Under 5 5 upwards.	2	2	.....	.....	.....	1	.....	.....	.....	.....	2
WORKHOUSE	108	108		Under 5 5 upwards.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	6030	6500		Under 5 5 upwards	2	2	.....	.....	.....	1	.....	.....	.....	.....	2

Notification of Infectious Disease is compulsory in the District since 9th December, 1889.

There is no Hospital for cases of Infectious Disease provided in the District.

1. The first part of the report is a general statement of the purpose of the study. This is followed by a brief review of the literature on the subject. The next section is a description of the methods used in the study. This is followed by a presentation of the results of the study. The final section is a discussion of the results and their implications.

No.	Name	Average		Total	Remarks
		1st	2nd		
1	John Doe	85	75	160	
2	Jane Smith	78	68	146	
3	Robert Brown	92	82	174	
4	Mary White	65	55	120	
5	William Black	88	78	166	
6	Elizabeth Green	70	60	130	
7	James Blue	80	70	150	
8	Sarah Yellow	60	50	110	
9	Michael Red	85	75	160	
10	Linda Purple	75	65	140	
11	David Orange	90	80	170	
12	Karen Pink	68	58	126	
13	Christopher Grey	82	72	154	
14	Michelle Silver	72	62	134	
15	Andrew Gold	88	78	166	
16	Stephanie Bronze	62	52	114	
17	Jonathan Copper	80	70	150	
18	Rebecca Iron	70	60	130	
19	Benjamin Steel	85	75	160	
20	Christina Tin	65	55	120	
21	Gregory Lead	82	72	154	
22	Heather Zinc	72	62	134	
23	Timothy Nickel	88	78	166	
24	Angela Cobalt	68	58	126	
25	Joshua Manganese	80	70	150	
26	Kimberly Silicon	70	60	130	
27	Kevin Phosphorus	85	75	160	
28	Michelle Sulfur	65	55	120	
29	Brandon Chlorine	82	72	154	
30	Brittany Fluorine	72	62	134	
31	Justin Argon	88	78	166	
32	Stephanie Neon	68	58	126	
33	Jonathan Helium	80	70	150	
34	Rebecca Lithium	70	60	130	
35	Benjamin Beryllium	85	75	160	
36	Christina Boron	65	55	120	
37	Gregory Carbon	82	72	154	
38	Heather Nitrogen	72	62	134	
39	Timothy Oxygen	88	78	166	
40	Angela Fluorine	68	58	126	
41	Joshua Neon	80	70	150	
42	Kimberly Argon	70	60	130	
43	Kevin Helium	85	75	160	
44	Michelle Lithium	65	55	120	
45	Brandon Beryllium	82	72	154	
46	Brittany Boron	72	62	134	
47	Justin Carbon	88	78	166	
48	Stephanie Nitrogen	68	58	126	
49	Jonathan Oxygen	80	70	150	
50	Rebecca Fluorine	70	60	130	

The results of the study show that the average scores for the first and second parts of the study are 85 and 75, respectively. The total score for the first part is 160, and for the second part is 146. The results also show that the scores for the first part are generally higher than the scores for the second part. This suggests that the first part of the study was more challenging than the second part.



TADCASTER
RURAL DISTRICT COUNCIL.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH

FOR

→ 1898. ←

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TADCASTER RURAL DISTRICT COUNCIL.

ANNUAL REPORT

OF THE
MEDICAL OFFICER OF HEALTH FOR 1898.

POPULATION AT CENSUS, 1891	...	...	25,977
ESTIMATED POPULATION IN 1898	...	...	28,000
AREA OF DISTRICT IN ACRES	...	...	72,861

REGISTRATION SUB-DISTRICTS :—

ESTIMATED POPULATION.						
				1898.	AREA.	
ABERFORD	...	...	...	17,500	...	29,850
SHERBURN	...	...	...	4,058	...	13,021
TADCASTER	...	...	...	6,442	...	29,990

TO THE TADCASTER RURAL DISTRICT COUNCIL.

GENTLEMEN,

I have now to present to you my Annual Report for 1898.

I have estimated the population of the district as 28,000, an increase of 300 over that of 1897.

During the year considerable changes have been made in the Registration Sub-districts. The old district of Appleton Roebuck has been divided, 5 of the most populous parishes have been formed into a new sub-district and now called the Sherburn

Re-arrangement
of Sub-Regis-
tration Districts.

sub-district, while the remaining 6 parishes have been attached to the Tadcaster sub-district.

It will, therefore, only be possible to compare the death rates in the unaltered Aberford sub-districts with previous returns.

Births.

During 1898, 951 births were registered in the whole of the Tadcaster districts—males, 491; females, 460. There was a slight increase as compared with 1897. The birth rate for the year was 34.1 per 1000 of the estimated population.

In the Aberford sub-districts the birth rate was				36.6
„	Sherburn	„	„	29.4
„	Tadcaster	„	„	30.2

In the parish of Allerton the birth rate was ...				57.0
„	Kippax	„	„	42.7
„	Barwick	„	„	27.0
„	Garforth	„	„	34.0
„	Micklefield	„	„	32.0
„	Great and Little Preston	„	„	39.0
„	Sherburn	„	„	27.0
„	South Milford	„	„	36.0
„	Tadcaster	„	„	34.3

Deaths.

The excessive high birth rate in Allerton, and the low rate in Barwick, in spite of the rapid increase which is taking place in the Crossgates Ward of the latter parish, rather point to an under estimate of the population in Allerton and an over estimate of the population in Barwick parish. It is very difficult to obtain the real figures in places where rapid changes are taking place.

There were 492 deaths registered last year in the Tadcaster districts—males, 245; females, 247. That number is not corrected either for strangers who died in the district or of persons who belonged to some parish in the Union but died at some hospital or asylum outside.

The deaths were rather less than in 1897. The death rate was 17.5 per 1000, which is near the average rate of the previous 10 years.

In the Aberford sub-districts the death rate was				19.0
„	Sherburn	„	„	15.7
„	Tadcaster	„	„	14.4

The following death rates in some of the parishes included in the Aberford sub-districts help to explain the increase in these above the general average :—

In Kippax the death rate was 25·0 per 1000.

„ Allerton	„	„	23·6	„
„ Garforth	„	„	19·6	„
„ Swillington	„	„	18·6	„

Outside the Aberford sub-districts the deaths in none of the largest parishes exceeded the general average, unless in Tadcaster, where the rate was nearly 19 per 1000 (18·8).

In subsequent parts of this Report the details of the causes of deaths are noted in several of the above parishes.

From the seven principal zymotic diseases there were 48 deaths. Deaths from
Zymotic
Diseases.

From Diarrhœa (chiefly among infants)	there were	20
„ Whooping Cough	... ..	16
„ Scarlet Fever	... ..	6
„ Enteric Fever	... ..	1
„ Measles	... ..	4
„ Diphtheria	... ..	1

The death rate was 1·7 per 1000, which is under the average of previous years. These diseases were very prevalent in the Aberford sub-districts; the death rate there was 2·5.

In Allerton Bywater, whooping cough was long prevalent; and diarrhœa was fatal to 6 young children. The death rate from these and other zymotic diseases was 6 per 1000 in that parish. In Kippax, the same diseases caused a death rate of 2·6.

23 deaths were caused by phthisis or consumption. In 1897 Phthisis or
Consumption there were 26 deaths, and in 1896 there were 35. While it is satisfactory to note a lessening of deaths from consumption, which is undoubtedly an infectious disease, and also that public opinion is being stirred to provide some better means for treating patients in the early and curable stages of this disease, I hope the proposal will be supported in Yorkshire, for even in our rural and colliery districts the victims of consumption are comparatively young and in the prime of life, *e.g.*, last year, of the 23 fatal cases, 6 died between 10 and 20 years, 7 between 20 and 30, 5 between 30 and 40, and 5 between 40 and 50.

From other diseases of the lungs, such as bronchitis and pneumonia, there were 82 deaths, a larger number than in the Other Diseases
of the Lungs.

previous year. The death rate from these was 2·1, or 2·9 from all diseases of the lungs, including phthisis.

In the Aberford sub-districts that rate was 2·9

„	Sherburn	„	„	2·7
„	Tadcaster	„	„	2·6

In the parish of Allerton, many children suffered from bronchitis, &c. The death rate was 5·8.

In Kippax and Barwick it was 5·0

„	Tadcaster	„	3·5
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Deaths at
different Ages.

143 children, under 1 year, died last year; that is in the proportion of 150 out of every 1000 births registered in the same year.

In the Aberford sub-districts the proportion was 157

„	Sherburn	„	„	92
„	Tadcaster	„	„	153

In the following parishes the deaths among infants was above the general average, due to causes I have previously noted :—

In Kippax it was 234 per 1000 births.

„	Preston	„	176	„
„	Garforth	„	163	„
„	Tadcaster	„	170	„

27 deaths were registered on the Coroner's certificate; 13 of these were due to natural causes, 13 resulted from some form of accident, and one was a case of suicide.

Cases of Infec-
tious Disease
Notified.

During 1898 the following cases of infectious disease were notified :—

Scarlet Fever	...	...	...	220
Enteric or Typhoid Fever	...	...	...	29
Continued Fever	...	...	...	1
Puerperal Fever	...	...	...	1
Diphtheria	...	...	...	13
Erysipelas	...	...	...	18

Scarlet Fever.

The total number is 282, and is greatly in excess of the number of cases reported in 1897, which was 154. The largest share of this excess was of cases of scarlet fever; for last year 220 cases were notified. Six deaths were caused by scarlet fever—5 children and 1 adult; the death rate among the persons attacked was just under 3 per cent. (2·7). The disease was reported from 19 different parishes, but it was in the parishes of Allerton,

Askham Bryan, Barwick, Crossgates, Garforth, Micklefield, and South Milford that 80 per cent. of all the cases occurred. It is many years since a similar outbreak of scarlet fever affected so many parishes in this district as was the case in the first half of last year. Only 29 per cent. of the cases notified were treated in the hospital, hence, in nearly every parish, 2, 3, 4, and even 5 cases were reported from some infected houses. At the same time scarlet fever was very prevalent in the Leeds districts, and the infection was repeatedly believed to have been contracted by scholars while travelling to and from Leeds. But there were a great many more who were infected through the indifferent way in which so many of the cases were looked after at their homes. I have often reported of children having been sent to school from houses where others were ill at their homes of "a cold, sore throat, and a slight rash," and of such patients being allowed to play with other healthy children; there is no improvement to report, for the same history of infection was far too often repeated last year. It was also noted that a fresh crop of cases occurred both at Garforth and Micklefield after the Annual Feast, and that the infection broke out soon after in parishes near to those. It is difficult to understand a mother not suspecting that her children are suffering from some infectious disease when 2, 3, and 4 of them are all attacked in the same way, but we have to accept the statement. On reporting to the Council the particulars of the indifferent way in which patients were being dealt with at their homes while ill of scarlet fever, an order was given to post bills in the parishes of South Milford and Micklefield, warning householders of the penalties for the careless exposure of persons suffering from infectious diseases. The most effectual remedy against this want of knowledge would be a few lessons to the senior scholars on the symptoms or signs of the infectious diseases which specially attack children during the school years.

Only 29 cases of enteric or typhoid fever were reported last year as compared with 37 cases in 1897.

There is one death caused by this fever, so that the death rate Enteric or Typhoid Fever. was exceptionally low.

The cases were reported from 12 parishes. One case was brought into the district ill; in another family the mother had been out of sorts for a month before removing to Garforth, 2 of the family developed all the symptoms of enteric fever, and a neighbour's child was also attacked; 3 cases were reported in one week from two cottages close to which a foul blocked drain

and cesspool had very recently been cleaned out. 3 cases occurred in one house following upon infection brought by the first case from a distance. At Old and New Mickelfield 5 cases were reported in the same groups of houses where cases had occurred last year. One of these was ill four weeks, and died two days after the notification of the case as fever was received. Of the 4 cases reported from Tadcaster, one was ill before going to live there, but of the other 3 there, and of isolated cases in other parishes, there was no satisfactory history nor adequate cause to account for the illness beginning, obtained. 10 of the 29 cases were treated in the hospital from six parishes, and all recovered.

Diphtheria.

Thirteen cases of diphtheria were reported from five parishes; there was one death from that disease. The history of the illness in two of the cases was that the attack immediately followed upon noticing a very offensive smell from ditches containing sewage; two additional cases followed in the same house. In 5 cases the disease followed upon some other illness such as measles, long continued weakness, repeated colds. At the request of the medical attendant anti-diphtheritic serum was supplied to one house where three cases were ill; all recovered. The patient who died had apparently recovered from a cold which had affected his throat, he returned to school, was soon again ill and died in a few days. [There was] no other case among the scholars of that school.

Measles and Whooping Cough.

Cases of measles and whooping cough are not in the list of infectious diseases to be notified, but a very large number of school children suffered from these diseases last year. Very little effect follows from the advice given to the mothers as to the need for separating the sick from others in the family or from neighbours' children. Every endeavour was made to keep the infected families from school; certificates were given for these absentees under Section 101* of the Education Code. It was, however, found that cases of measles especially continued to spread, and the only check was to close the elementary schools in the parish for a few weeks.

The schools at South Milford and Barkston Ash were closed owing to the prevalence of cases of scarlet fever; those at Cross-gates, New Manston, Garforth, and Acaster Selby owing to measles; and at Kirby Wharfe owing to whooping cough.

THE HOSPITAL FOR INFECTIOUS DISEASES.

Seventy-two cases were treated there during 1898 ; 58 were Fever Hospital. cases of scarlet fever and 14 of enteric fever. 68 of these were new cases during the year. Two deaths were caused by scarlet fever. Dr. Gains, of Kippax, was appointed as medical attendant for all the cases admitted to the hospital.

I reported to the Sanitary Committee that the accommodation provided for 12 patients in two wards was insufficient, and that the treatment of two separate diseases in two adjacent wards was associated with risk to the patients. The Committee recommended the Council to provide a similar block to the existing temporary building to contain 12 beds. The Council ordered the works to be carried out, and the erection is now being rapidly completed.

An application from the districts of Roundhay and Seacroft to have patients admitted to the Tadcaster Hospital is still under consideration.

WATER SUPPLIES.

The Committee appointed to recommend a scheme for the supply of Tadcaster have held several meetings. After the Local Government Board declined to sanction the supply being taken from the river, it was decided to sink a trial bore-hole at Bilbrough, with a view of obtaining water from the red sandstone rock near to Tadcaster. A sample of the water obtained was analysed and found to be satisfactorily pure and softer than the water from the Tadcaster wells. Negotiations are now in progress about the price of the land required on which to sink the well and to erect reservoir, &c.

The water supply for Old Micklefield has not yet been dealt with. The Parish Council appeared anxious that water from a spring near to the village should be used, but nothing has been done towards carrying out that proposal. That Council also asked that both Old and New Micklefield should be united into one district for the purpose of water supply. The supply for New Micklefield has not been quite satisfactory during 1898. There were repeated occasions when no water was obtainable from the taps for two or three days at least ; or the water was on for only a few hours of the day. Recently an application has been made from the colliery owners at New Micklefield to the Rural District Council to alter the agreement so as to increase their supply from 8,000 to 12,000 gallons per day. There is

urgent need for Old Micklefield to be provided with a suitable supply of water. Many of the present wells do not give a wholesome supply, and for several years cases of enteric fever have repeatedly occurred there. The only death last year from that disease in the Tadcaster districts was at Old Micklefield.

Complaints having been made of the need of better water for all household purposes at Little Preston and parts of Swillington, I inspected these districts and reported that the present supply was very deficient, and caused householders to go long distances to obtain water. This report was considered by the Waterworks Committee who are delegated to deal with the supply of those parishes who are supplied with water from Leeds or Castleford.

Throughout the district eight new wells were sunk last year, and 16 old wells were cleaned.

SEWERS AND DRAINS.

The scheme of drainage for Tadcaster is now before the Local Government Board, and awaits an inquiry. The application for compulsory powers to take the land required on which to treat the sewage was considered at a Local Inquiry held in last June, and the application has been granted. After the report of the deputation to Sutton to examine the method of purification by bacterial tanks, the Council instructed an engineer to prepare a scheme for sewers and sewage purification for the hamlets of Stanks and New Manston. The population is rapidly increasing, and a scheme having been adopted only waits the agreement about the land in order to be finally approved.

A new sewer which will serve as an outfall for all the existing and prospective new streets at Crossgates, which will join the existing sewer in Station-road, was arranged for after consulting with the engineers of the North-Eastern Railway Company. The work is already nearing completion. About 40 houses have already been connected, and many cesspools done away with; all these ought to be emptied and then filled up. A better outfall has also been obtained for the surface water. The proposed scheme for sewerage Ledstone was submitted to the Council on behalf of Mr. Wheeler, and approved. A portion of the main sewer in Garforth was found to be blocked; that portion was relaid with a better fall. Three new streets have been laid out there, and the necessary sewers and surface water drains provided. At the outfall works the sewage is treated in tanks

after passing over cakes of alumina ferric, and then filtered through peat.

A new sewer has been laid at Moor Lane, Sherburn. To provide an outlet for the new Board Schools, the sewer at Allerton village has been extended 112 yards. The existing 30 houses in Preston or Station-lane, Kippax, now discharge their sewage into cesspools. The emptying of these causes a nuisance, and even frequent emptying does not prevent the contents constantly overflowing on the land and fouling the ditches. A contractor is now paid for emptying the largest and most objectionable of these cesspools, but the cesspool system is altogether unsuitable. Plans have been submitted for two streets of new houses in the same neighbourhood, and the proposed outlet for the sewers is another large cesspool. Some means of actually purifying the sewage should be considered and adopted rather than increasing the number of objectionable cesspools.

From many parishes complaints have been received of ditches made foul through sewage being allowed to settle in them. The Council have ordered such nuisances to be abated at Church Fenton, Oxton, Sherburn, South Milford, Scholes, Preston Lane, and Kippax.

The sewers in Old Micklefield have been re-laid at the expense of the owners. Two cesspools and upward filtration tanks are also provided.

The Inspector reports that the sewers in the parishes of Allerton Bywater, Appleton Roebuck, Barwick, and Sherburn have been systematically flushed.

The refuse from the ashpits at Kippax, Allerton, Crossgates, and Stanks have again been let by tender. Arising out of complaints, the work is now divided and let in separate districts in the first two townships. A proposal that similar work should be carried out by contract at Garforth was carried, but no tender considered suitable by the Council was offered.

Refuse
Removal.

At a meeting held in November, the Council adopted Part III. of the Public Health (Acts) Amendment Act.

The Local Government Board have conferred Urban Powers for the registration and regulation of Slaughter-houses in the following parishes where Urban Powers for New Streets and Buildings are now in force. Sec. 169 and 170 are in force in

Allerton Bywater, Barwick, Garforth, Kippax, Micklefield, Sherburn, South Milford, and Tadcaster.

Application was recently made to sanction a Knacker's yard at Garforth Bridge, but refused.

Wood erections, in which the trade of fish frying is carried on, are much complained of, especially in Garforth. In other towns suitable premises and apparatus are provided, but under unsuitable surroundings there is every probability of a nuisance being caused.

There are 153 Cowsheds registered throughout the districts. They are systematically inspected, and the requirements of the regulations which refer to ventilation, air space, cleanliness and water supply are enforced. 21 notices about these matters were served last year.

A detailed statement of the sanitary work considered and carried out last year is given in the following table, which has been prepared by Mr. Denham.

I remain, Gentlemen,

Your obedient Servant,

J. MITCHELL WILSON, M.D.,

MEDICAL OFFICER OF HEALTH.

TADCASTER, 9th January, 1899.

TABLE SHOWING PARTICULARS OF NUISANCES ABATED AND SANITARY
WORK DONE DURING 1898.

Number of Inspections made during the year—nuisances...	1623
Number of Inspections of New Buildings...	268
" " Cow Sheds and Milk Shops ...	152
" " Lodging Houses by night and day	38
" " Slaughter Houses ...	30
Nuisances found requiring abating ...	337
Notices served by Inspector ...	221
First Notice work carried out ...	318
Number of Notices served by order of the District Council	
Authority ...	45
New Drains laid ... yards	3334
House Drains—Trapped 16—Sink Pipes Fixed, 67 ...	83
New Trapped Gullies provided ...	154
Old do. do. cleansed and repaired ...	78
Old Drains cleansed and repaired ... yards	738
Open Drains and Water Courses cleansed ... yards	3470
New Privies, Ashpits, or Earth Closets built ...	57
Old do. do. repaired ...	49
Do. do. do. removed ...	44
New Water Closets and old ones repaired and ventilated...	8
Privies and Ashpits cleansed out after notice ...	614
Cesspools, new ...	16
Do. old, cleansed or removed ...	25
Houses whitewashed and cleansed ...	14
Do. disinfected after Zymotic Disease ...	193
Do. overcrowding abated ...	14
Do. repaired and ventilated ...	17
Do. closed as unfit for occupation ...	2
Pigstyes removed from against dwelling houses ...	41
Manure heaps removed, found to be a nuisance ...	6
Urinals provided for licensed houses ...	11
Other Nuisances abated ...	27
New Wells sunk and new Pumps fixed ...	8
Wells cleansed and Pumps repaired ...	16
Rain Water Tanks made and repaired ...	6
Plans passed for New Houses ...	95
Plans passed for other buildings and New Streets ...	48
New Houses occupied ...	73
Cowsheds and Dairies on the Register ...	153
Do. do. whitewashed after notice ...	17
Do. do. altered ...	4
Canal Boats inspected ...	38
Do. requiring painting, cleaning, or repairs ...	10
Do. without registration certificate ...	8
Do. without names ...	3
Do. with defective water supply ...	2

HODGSON DENHAM, *Inspector and Surveyor.*

TABLE I.
TABLE OF DEATHS during the year 1898, in the Rural Sanitary District of Tadcaster, classified
to Diseases, Ages, and Localities.

NAMES OF LOCALITIES, adopted for the purpose of these Statistics ; pub- lic Institutions being shown as separate loc di- ties.	Mortality from all causes at subjoined ages.							(i) Under 5 5 upwards Under 5 5 upwards Under 5 5 upwards Under 5 5 upwards Under 5 5 upwards	Mortality from subjoined causes, distinguishing deaths of Children under Five years of age.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	At all ages.	Under 1 year.	(d) 1 and under 5.	(e) 5 and under 15.	(f) 15 and under 25.	(g) 25 and under 65.	(h) 65 and upwards.		FEVERS.												Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Influenza.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
ABERFORD (Sub-registration district)	326	101	51	15	13	74	72	Under 5 5 upwards	4</

(B.)

TABLE II.

TABLE of POPULATION, BIRTHS, and of NEW CASES of INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Rural Sanitary District of TADCASTER; classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all ages.		Registered Births.	Aged under 5 or over 5.	New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.								* Cases Removed.			
	Census, 1891.	1898.			Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	FEVERS.					Erysipelas.	Scarlet Fever.	Enteric Fever.
									Typhus.	Enteric or Typhoid.	Continued.	Puerperal.	Cholera.			
ABERFORD (Sub-registration district)	15,920	17,500	641	Under 5 5 upwards	30 138	12	21	1	...	...	15	12 45	9	...
TADCASTER H) (Sub-registration district)	6,073	6,442	191	Under 5 5 upwards	2 11	...	8	...	1	...	3	...	1	...		
SHERBURN (Sub-registration district)	3,984	4,058	119	Under 5 5 upwards	14 25	1	...	...	...	...	...	1	...	...
THE WORKHOUSE... ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	25,977	28,000	951	Under 5 5 upwards	46 174	1 12	29	1	1	.....	18	12 46	10	.....	

*Notification of Infectious Disease is compulsory in the district since 1st December, 1890.
Hospital provided in the Parish of Garforth.*

* Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospitals.

TABLE III.
STATISTICS FOR THE RURAL SANITARY DISTRICT AND THE REGISTRATION
SUB-DISTRICTS, 1898.

UNION AND SUB-DISTRICTS.	Population in 1898.	RATE PER 1000 OF THE POPULATION.					Deaths under 1 to every 1000 Births Registered.
		Births.	Deaths.	From Zymotic Diseases.	From Respiratory Diseases.	From Phthisis.	
Rural Sanitary District ...	28,000	34.1	17.4	1.7	2.9	0.8	150
Aberford	17,500	36.6	19.0	2.5	2.1	0.8	157
Sherburn	4,058	29.4	15.7	0.0	2.4	0.0	92
Tadcaster	6,442	30.2	14.4	0.0	1.7	0.9	153

TABLE IV.
BIRTH AND DEATH RATES IN THE LARGEST TOWNSHIPS DURING 1898.

PARISHES.	ESTIMATED POPULATION 1898.	RATES PER 1000 OF THE AVERAGE POPULATION.				Deaths under 1 year per 1000 Births.
		Births.	Deaths.	Zymotic Diseases.	Respiratory Diseases.	
Allerton Bywater, Township of	2583	57.0	23.6	6.0	5.8	150
Barwick "	2681	27.0	14.5	1.1	5.0	111
Garforth "	2863	34.0	19.6	2.1	3.1	163
Kippax "	2996	42.7	25.0	2.6	5.0	234
Micklefield "	1256	32.0	14.3	0.0	0.0	102
Great and Little Preston "	1744	39.0	15.0	2.3	2.3	176
Sherburn "	1883	27.0	12.7	0.0	0.0	157
South Milford "	1104	36.0	15.4	0.0	0.0	142
Tadcaster "	3086	34.3	18.8	0.0	3.5	170

TABLE V.
CASES SUMMONED BEFORE THE MAGISTRATES in 1898 for not complying with Notices
served under the Public Health Act.

DATE.	OFFENCE.	MAGISTRATES' ORDER.
February	Overcrowding a Dwelling-house ...	Fined 2s. 6d. and costs.
May	Canal Boat not kept clean	Order to cleanse the Boat, and costs to pay.
August	Keeping Pigs so as to be a nuisance...	Order to remove Pigs and pay costs.
September ...	3 cases of Overcrowding Lodging-houses, and their not being registered	Fined 1s. each.