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

### **Contributors**

Rotherham (England). County Borough Council.

### **Publication/Creation**

1913

### **Persistent URL**

https://wellcomecollection.org/works/dy2b9h2c

### License and attribution

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

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

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





COUNTY BOROUGH OF ROTHERHAM.

# ANNUAL REPORT

OF THE

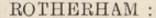
# Health and Sanitary Circumstances of Rotherham,

TOGETHER WITH

The Report of the Borough Hospital and of the Borough Laboratory, for the year 1913, by

# ALFRED ROBINSON, M.D.,

Medical Officer of Health.



F. W. CROOKES AND SONS, PRINTERS AND BOOKBINDERS, BRIDGEGATE.

### SUMMARY OF VITAL STATISTICS, 1913.

POPULATION.—Estimate, 1913, 64,500. Under 5 years, 9,650; 5-15 years, 15,750 (estimated).

BIRTHS.—Total number registered, 1945, including 77 illegitimates. Birth-rate per 1000 population, 30.15.

Smallpox		-	Ophthalmia Neonatorum	10
Scarlet Fever		417	Cerebro-Spinal Fever	
Diphtheria		91	Acute Polio-Myelitis	
Enteric Fever		23	Pulmonary Tuberculosis	15
Erysipelas		57	Other forms of Tuberculosis	90
Puerperal Fever	r	6		
DEATHS:		. 7	The same and the s	
Total uncorrecte	d	1088	Rate 16.86 per 1000 living.	
Total corrected		1004	Rate 15.56 per 1000 living.	
Under 1 year of	age	281	Rate 144 per 1000 births registered.	

	No.	Rate.				
Smallpox						
Measles	7.	0.11				
Scarlet Fever	7	0.11				
Whooping Cough	29	0.45				
Diphtheria	11	0.17				
Typhoid Fever	3	0.05				
Erysipelas	2	0.03				
Diarrhœa	49	0.76				
Phthisis	68	1.05				
Tubercular Diseases	27	0.42				
Cancer	52	0.81				
		\ F	neumor	nia	 	98
		E	Bronchit	is	 	77
		P	Pleurisy		 	7
Respiratory Diseases	190		ther Di			
		F	Respirato	orv		
Other Diseases	559		ystem		 	8

### SUMMARY OF VITAL STATISTICS, 1912.

POPULATION.—Estimate, 1912, 63,500. Under 5 years, 9,500 5-15 years, 15,500 (estimated).

BIRTHS.—Total number registered, 1875, including 86 illegitimates; Birth-rate per 1000 population, 29'53.

Smallpox		-	Pulmonary Tuberculosis	118
Scarlet Fever		269	Puerperal Fever	6
Diphtheria		58	Erysipelas	68
Enteric Fever		38	Ophthalmia Neonatorum	13
Continued Feve	r	3		

### DEATHS:

Total uncorrected	1103	Rate 17.37 per 1000 living.
Total corrected	1003	Rate 15.79 per 1000 living.
Under 1 year of age	223	Rate 119 per 1000 births registered.

Cause of Death: All ages, persons.

	No.	Rate.			
Smallpox					
Measles	93	1.46			
Scarlet Fever	6	0.09			
Whooping Cough	13	0.20			
Diphtheria	9	0.14			
Typhoid Fever	10	0.15			
Diarrhœa	11	0.17			
Erysipelas	1	0.015			
Phthisis	55	0.87			
Tubercular Diseases	29	0.45			
Cancer	56	0.88			
		1	Pneumonia	 	80
			Bronchitis	 	72
			Pleurisy	 	2
Respiratory Diseases	166	2.45	Other Disease		
riospitatory 2 rooms			Respiratory	 	12
Other Diseases	554	)	System.		

By the order of the Local Government Board, dated 13th December, 1910, Article 19, Section 14, it is prescribed that the Medical Officer of Health shall "Prepare an "Annual Report to be made at the end of December in "each year, comprising a summary of the action taken "during the year for preventing the spread of disease "and an account of the sanitary state of his district "generally at the end of the year. The Report shall "also contain an account of the inquiries which he has "made as to conditions injurious to health existing in "his district, and of the proceedings in which he has "taken part or advised under the Public Health Act, "1875, so far as such proceedings relate to those "conditions; and also an account of the supervision "exercised by him, or on his advice, for sanitary pur-"poses over places and houses that sanitary authorities "have power to regulate, with the nature and results "of any proceedings which may have been so required "and taken in respect of the same during the year. "It shall also record the action taken by him, or on "his advice, during the year in regard to offensive "trades and to factories and workshops. The Report "shall also contain tabular statements (on forms to "be supplied by the Local Government Board, or to "the like effect) of the sickness and mortality within "the district, classified according to disease, ages, and "localities."

## ANNUAL REPORT, 1913.

-:0:--

TO THE MAYOR, ALDERMEN AND COUNCILLORS OF THE COUNTY BOROUGH OF ROTHERHAM.

GENTLEMEN.

I have the honour to submit for your consideration my Annual Report on the health of the inhabitants of the County Borough of Rotherham for the year 1913, and its sanitary conditions generally.

It is, I consider, a matter of congratulation that the death rate, 15.56 per 1,000 living, is somewhat lower than that for the previous year, when it was 15.79 per 1,000.

For a manufacturing town like Rotherham this cannot but be regarded as satisfactory, as there is always a large amount of chronic poverty in our midst.

There were 1,004 deaths during 1913, as compared with 1,003 for the year 1912.

The estimated population of the Borough during the middle of 1913 was 64,500. The provisional estimates of population are based on the results of the Censuses of 1901 and 1911.

On reference to pages 2 and 3 of this Report, which contain the Annual Summaries for 1913 and 1912, it will be seen at a glance how this satisfactory decrease in the death rate has been brought about. For example, Measles only caused 7 deaths in the year 1913, as compared with 93 in 1912; Scarlet Fever, 7 deaths as compared with 6; Whooping Cough, 29 as compared with 13; Diphtheria, 11 as compared with 9; Typhoid Fever, 3 as compared with 10; Diarrhoea, 49 as compared with 11; Pulmonary, Tuberculosis, 68 as compared with 55; other Tubercular Diseases, 27 as compared with 29; Cancer, 52 as compared with 56; Respiratory Diseases, 190 as compared with 166; and all other diseases, 559 as compared with 554.

The marked diminution in the death rate from Typhoid Fever is due principally still to three causes. Firstly, to improved sanitation, in which, of course, is included the conversion of abominable filthy privy middens into water closets;

secondly, to the continued satisfactory water supply; and thirdly, to improved housing conditions. On page 29 of this Report some further remarks will be found on the satisfactory diminution in the number of cases of Typhoid Fever reported.

At the end of 1913 only 74 middens which were certified to be a nuisance by myself in 1910 remained unconverted. During the year 63 were converted. Details of this important work will be found on page 59 of this Report.

The number of cases of Typhoid Fever reported to me as Medical Officer of Health during the year 1913, was only 23 as compared with 38 in 1912. The number reported during 1912 was the lowest ever reported in Rotherham. The number reported during 1913 was of course a very satisfactory improvement on this.

Typhoid Fever is still abnormally prevalent, but with the total abolition of the privy midden system, I confidently anticipate a gradual and regular diminution of this preventible disease until it is practically non-existent in our midst.

Rotherham has for many years had the unenviable notoriety of being amongst the first five large towns in England and Wales, in which Typhoid Fever is most prevalent. During 1913, it was, I believe, somewhere about the twentieth.

This fact I consider the most satisfactory feature of my Annual Report for 1913, and a similar remark appeared in my report last year.

### CASUAL SANITARY AUTHORITIES.

When the Social Reformer hears of the deplorable sanitary conditions which exist in some of the towns in this country he immediately asks why they are not remedied and whether existing laws are powerless to effect a remedy. In the course of his inquiries he finds that, broadly speaking, the administration of the Public Health Acts is in the hands of local authorities, the members of which are elected by the inhabitants of the district, and that in some instances one of the aims of these members is, to keep down the rates—and by the rates they mean the district rates—the sickness-rates or the death rates for them often have no interest. Further research reveals the fact that for the most part these authorities are left to carry out their duties uncontrolled and without supervision, unless some dire catastrophe calls public attention to their laxity.

It is true there is nominally a central controlling authority, the Local Government Board, which, apart from newspaper reports and the statistical information furnished by the Registrar General, has only two means of ascertaining in which districts public health administration is active and in which it is practically non-existent. These are the annual or special reports of the medical officers of health and the special reports of the Board's Medical Inspectors. I have the best reasons for alleging that these reports are considered most carefully by the medical staff of the Board. As a rule, however, the result of that consideration is that the attention of a particular authority is called to the conditions which require to be remedied, and the hope is expressed that the authority will proceed to rectify them. If this communication from the Board refers to adverse criticism by the Medical Officer of Health, that official may receive a strong hint from members of the defaulting authority that he is their servant, that he holds his office at their pleasure, and that they have full power to terminate his appointment uncontrolled, except by that fickle jade "Public Opinion."

Fortunately this does not apply to the Borough of Rother-ham, for an honest attempt is now being made by the Health Authority to improve its sanitary conditions in all directions. Much, however, remains to be done. During the year 1913 63 privies were converted into W.C.s, a much needed improvement which has not cost the ordinary ratepayer one penny.

### THE VALUE OF HUMAN LIFE.

In spite of the immense value that attaches to the health, not only of the individual but of the community, it is remarkable how difficult it is to persuade even the most thoughtful and intelligent that no better investment can be made than that of money spent in securing a healthy existence. For other necessities of life, such as good roads and sufficient bridges, and for what may almost be termed luxuries, such as municipal buildings and the like, the members of a local authority will vote money in profusion, but for isolation hospitals, public baths, public parks, refuse destructors, steam disinfectors, and for public health administration generally, the purse strings are tightened and every possible argument is raised to delay such expenditure.

It seems idle for Medical Officers of Health and others to insist upon the necessity for all these, and to demonstrate how costly it is to withhold the money necessary for them. The results do not seem to be sufficiently immediate to make any impression on the individual members of local authorities, and it is only when definite outbreaks occur, like the Typhoid

Epidemic at Lincoln or the Small-pox Epidemic at Gloucester, the results of which, raised the local rates to an alarming extent, that the extravagance of this parsimonious attitude can be brought home.

In a recent communication, it was stated that the construction of the Panama Canal was only made possible through the expenditure of nearly half-a-million sterling on sanitary measures. The total cost of the canal when finished will be about sixty million pounds, but unless suitable sanitary measures had been taken it might have cost double or treble that amount.

Here is an instance of sound sanitary investment.

Probably one of the reasons why the community fails to realise the startling financial loss attributable to the ravages of disease, is that there is an instinctive feeling that from a money standpoint a human being is not a very valuable machine, and that the replacement of one of these machines by another is not a very serious drain on the community.

But it needs no argument to prove that it is good to be well and that it is wise to spend money for health. It is proper to consider cost in relation to results and financial savings, when such can be figured with accuracy, but there is much in the world which cannot be measured in terms of money, though so to measure it is perhaps the tendency of the age.

Is it not dangerous to rely upon a balance sheet of life and death when there are so many chances of error in our calculations? Should it not be enough to urge expenditure for the preservation of health because the happiness of mankind will be promoted thereby?

The following figures are given to show how Rotherham compares with the other large towns and the rest of England and Wales in regard to the birth and death rates, together with the mortality under one year of age.

	Annu	Deaths		
	Births	Deaths	Zymotic Deaths	under One Year to 1000 Births
England and Wales	23.9	13.7	1.20	109
96 great towns, including London	25.1	14.3	1.5	117
145 smaller towns	23.9	12.8	1.2	112
England and Wales, less the 241 towns	22.3	13.1	0.8	96
ROTHERHAM	30.15	15.56	1.81	144

### INFANTILE MORTALITY.

Infantile Mortality means the annual number of deaths under one year of age to every 1,000 births during the same year. It is of great importance as an indicator of the social and health conditions of towns and other sections of the community. As a general rule it is lower in agricultural districts, higher in thickly populated mining and manufacturing regions, and highest in large towns where textile industries are carried on and where female labour is largely employed.

The chief causes of infantile mortality are premature birth and various constitutional defects, inexperience and neglect on the part of mothers, adverse industrial conditions, improper feeding of infants, drink and overlaying.

The diseases which especially operate and raise it are epidemics of measles with respiratory troubles in the wet and cold months of the year, and the prevalence of diarrhoea in hot summers.

### INDUSTRIAL EMPLOYMENT OF WOMEN.

The effect of poverty upon infantile mortality can be ascertained by recording whether the wages of the father were above or below £1 weekly. Very striking are the results. In those cases in which the mother was employed in a factory and the father was either out of work or earning less than £1 a week, the mortality rate was 235 per 1,000, while where the father earned more than £1 the rate was only 146 per 1,000. That is to say, employment of the mother apparently had the effect of causing a difference of 10 per 1,000 in the rate, whereas the father's earnings being under or over £1 per week resulted in a difference of 89 per 1,000.

As the result of another year's study of the question, I cannot help expressing the opinion that industrial employment of women has a bad effect on the infantile mortality rate, principally because it interferes with breast feeding. For this reason employment in a factory is more harmful than employment at home. But the influence of industrial employment, is quite small when compared with the influence of acute poverty, for it would seem that in so far as the mother's employment reduces the acuteness of the poverty, it may even tend to lower the rate of infantile mortality.

### INFANTILE MORTALITY.

This was at the rate of 144 per 1,000 births in 1913, as compared with 119 in 1912; the number of deaths under one year in 1913 being 281, as compared with 224 in 1912.

The following table shows how the death and birth rates varied during each quarter of 1913, together with the infantile mortality:—

	No. of	1	Death Rat	te	Zymotic	I	nfantil	е			Birth
	Deaths.		per 1,000		Rate	M	ortality	y.	Births	3.	Rate.
1st Quarter	. 325		20.15		1.98		181		481		29.82
2nd Quarter	. 226		14.01		1.05		128		489		30.31
3rd Quarter	. 210		13.02		2.42		139		479		29.71
4th Quarter	243		15.07		1.79		128		496		30.76

### TABLE IV.

### ROTHERHAM COUNTY BOROUGH.

### INFANT MORTALITY.

1913. Nett Deaths from stated causes at various ages under 1 Year of Age.

Cause of	DEATH.	Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	8 months and under 6 months.	6 months and under 9 months.	9 months and under 12 months.	Total Deaths under 1 year.
All causes:	Certified Uncertified	62	21	15 	10	108	42	45	40	46	281
Atelectasis Congenital Malf Premature Birth Atrophy, Debilit Marasmus	Croup  ningitis  reculosis  Tuberculous)  forms)  rlying  ormations	6 1	         	2	1 2 1 1 2 2 2 2 10	3 13 5 3 3 1 2 2 13 45 11 5 108	3 1 4 5 3 5 1 2 1 2 2 11 2 42	5  1  5 4 9 8 4 1   5 3	3 3 6 9 1 1 1 	1 4 2	1 20 2 1 3 1 1 28 22 35 33 7 3 2 1 3 2 2 15 47 34 18 281

Nett Births in the year: Legitimate, 1868. Illegitimate, 77.

Nett Deaths in the year: Legitimate infants, 245. Illegitimate infants, 36,

February        4         3       1       7       4       2       2         23         March        3       6        2       2       4       4       4       4       2         31         April        5       3       3         4       1       3       2       1         22         May        3       5        1       3       2       2       2       3       1        2       24         June        1         2       3       4       6       1         17         July        1        1       1       2       9       1       4       2        21         August       2       4       2       3       2       2       3       3       2       1         24         September       1       4       1       3       2	DEATHS	DEATHS UNDER ONE YEAR IN THE VARIOUS WARDS.												
Totals 28 40 11 14 23 29 44 41 33 12 3 3 281	February March April May June July August September October November December	7 3 5 3 2 1 3 2 2	7 4 6 3 5 1 1 4 4 2 2 1 —	3  3  2 1 1 1 2	1 2 1 3 3 2 1	1 3 2  3 2 1 2 2 2 2 2 3	2 1 4 4 2 3 2 2 2 2  2 5	8 7 4 1 2 4 9 3  2 3 1	4 4 4 3 2 6 1 3 5 1 4 4	1 2 4 2 3 1 4 2 3 5 3 5	2 2 1 1 1 1 1 1 1 1	1     1 1	2   1 	33 23 31 22 24 17 21 24 22 21 21 22

# SHOWING THE INFLUENCE OF THE WEATHER ON INFANTILE MORTALITY.

	Number of Births	Deaths under one year	Infantile Mortality
January	159	33	207
February	159	23	145
March	163	31	190
April	169	22	130
May	165	24	145
June	154	17	110
July	163	21	129
August	156	24	154
September	162	22	136
October	168	21	125
November	167	21	126
December	160	22	138

# ENQUIRY AS TO INDUSTRIAL EMPLOYMENT OF MARRIED WOMEN AND INFANT MORTALITY (1912).

### SUMMARY.

### 1. CASES UNDER ENQUIRY,

		ase of mo		In case of
		tory or	proyeu.	mothers
		shop.	else-	not industri-
	In	Other-	where.	ally
	lead.	wise.		employed.
Children born alive and surviving first			1	1261
Children ham alim and dring in fant an	•••	***	4	The second secon
Children born alive and dying in first yr.			1	126
Miscarriages, Still Births, Premature				
Births			***	55
Age of mother:		4	0	900
25 years		***	3	388
35 years			1	763
Over 35 years			1	291
Previous confinements:				
Miscarriages, Still Births			1	233
Children born alive			1	5284
Children now living		***	1	4313
Children died in first year				1048
No previous confinement			4	247
Status of mother:				
Living with husband			1	1398
Living apart				12
Widowed				1
Single			4	31
Households (number of)			5	1442
Average number of rooms per household			3.2	4.1
Average number of persons per room				
(including lodgers)			2	1.3
Average rental			4/4	417
Average weekly earnings of mother			-1-	21
1 6			6/3	
Average weekly earnings of mother			0/3	
after confinement	930350		5/6	
Average total weekly income of family				971
Average total weekly income of family	***	***		27/-

# ENQUIRY AS TO INDUSTRIAL EMPLOYMENT OF MARRIED WOMEN AND INFANT MORTALITY (1912).

### SUMMARY,

# II. EMPLOYMENT OF MOTHER IN RELATION TO HEALTH OF CHILD.

### A .- CHILDREN SURVIVING FIRST YEAR.

	indust	ase of mot		In case of
	Annual Control of the Park Street	right con		THE CHOIC OF
			ployea.	mothers
		tory or		not
	work	shop.	else-	industri-
	In	Other-	where.	ally
	lead.	wise.		employed.
Industrial work discontinued before				
confinement:				
1 week				
2 weeks				
3 weeks				
4 weeks				
8 weeks				
12 weeks			1	
26 weeks			2	
Over 26 weeks				
Over 20 weeks				
Industrial work resumed after confinement, within: 4 weeks				
8 weeks			2	
12 weeks				
52 weeks				
Not within year				77.
Nursed at last visit :				
At home by mother	7		2	1259
At home by other person			1	2
D I I			î	
Put out			-	
Feeding—breast alone:				
1 month	1 3000		1	5
2 months				7
0 (1			***	2
0 13			1	1195
6 months	***		-	1100
Feeding—breast partly:				
1 month				
2 months				
			2	19
6 months				33
Artificial entirely				00

# ENQUIRY AS TO INDUSTRIAL EMPLOYMENT OF MARRIED WOMEN AND INFANT MORTALITY (1912).

### SUMMARY.

# II EMPLOYMENT OF MOTHER IN RELATION TO HEALTH OF CHILD.

### B .- CHILDREN DYING IN FIRST YEAR.

						indust	ase of mo rially em		In case of mothers
						work	tory or shop.	else-	not industri-
						In lead.	Other- wise.	where.	ally employed.
Nursed at last visit									12000
At home by mo								1	
At home by oth									
Put out									
							103		
Feeding-breast ale	one:								
1 month						211		1	54
2 months									17
3 months									19
6 months									. 8
Feeding-breast pa	rtly:				-				
1 month									
2 months									
3 months									7
6 months									9
Artificial entire	ly					****			***
Age at death:									
1 month								1	61
2 months									12
3 months									9
6 months									18
12 months									26
Cause of death:									
Infectious diseas	ses								28
Wasting disease	es (in	clud	ling	pre	ma-				
ture birth)									57
Other diseases								1	41
Mean age at death								17 days	3.96

Table giving number of cases of Ophthalmia Neonatorum reported in Rotherham since this disease was made compulsorily notifiable:—

Year.		No.	of Cases	notified.
1910	 			4
1911	 			11
1912	 			13
1913	 			10

### OPHTHALMIA NEONATORUM.

It is very generally recognised that a large proportion of persons who have been blind from childhood, have suffered from Ophthalmia Neonatorum. Evidence which was placed before the Departmental Committee on the working of the Midwives Act, 1902, in 1909, led the Committee to believe that approximately 30 per cent. of the inmates of institutions for the blind had suffered from the disease. Among the recommendations of the Committee, was one, that the disease should be made compulsorily notifiable under the Infectious Diseases (Notification) Acts. It was also recommended that the Central Midwives Board should prescribe that medical help should be sent for whenever a midwife on attendance on a woman noticed symptons in the mother or child indicating any risk of Ophthalmia Neonatorum. Effect has been given to the latter recommendation by the Central Midwives Board.

Regarding the recommendation as to compulsory notification, the Local Government Board of England and Wales, and the Local Government Board for Scotland have each stated that they would be prepared to sanction the inclusion of the disease in the schedule of notifiable diseases under the Notification Acts. The disease is now notifiable in the County of London, and in more than 100 districts elsewhere. During 1911, there were notified in London 575 cases, in Manchester 443 cases, and in the County Borough of Stoke-on-Trent 238. In the remaining districts 123 cases were notified during 1911.

An interesting account of the cases notified in Manchester is given by Dr. B. M. Cunningham, one of the assistant Medical Officers of Health of Manchester, in Dr. Niven's last annual report. In 98 cases the attendant, either doctor or midwife, was not present at the time of birth, and as a result the eyes of the infants had not had early attention. In 55 cases other children of the family had had Ophthalmia at birth, and in one instance as many as six children had been infected at birth, while, in many, more than one of the previous children had suffered from Ophthalmia. The day of onset in most

cases was the third, and in almost two-thirds of the cases the first signs of the disease appeared during the first three days of life.

Of the total 443 cases, complete recovery took place in 431 instances, five children died before complete recovery, one child lost both its eyes, in two both eyes were damaged, and in four cases one eye was lost. Two nurses, each of whom has received special training at the Manchester Royal Eye Hospital, are employed by the Manchester Corporation to visit the cases notified, and the results I have quoted are sufficient evidence not only of the need for their services, but of the efficient manner in which they have carried out their duties.

NUMBER OF BIRTHS NOTIFIED UNDER THE NOTIFICATION OF BIRTHS ACT DURING 1913, DIVIDED INTO WARDS.

Ward.	Males.	Females	Un- stated.	Still- births.	Total.
East	86	84	2	2	174
St. Ann's	160	128	1	11	300
Clifton	62	57	1	2	122
South	65	52	1	2	120
West	78	75	5	7	165
North	120	114	11	2	247
Thornhill	124	133	11	4	272
Masbro'	137	132	21	7	297
Kimberworth	117	123	3		243
Totals	949	898	56	37	1940

PURCHASE AND DISPOSAL OF GLAXO.

Amount															2		
1913-14 received.	C	lost.			sold.			tor.		8	iven.	M	Vort	h.	E	rofi	t.
lbs.	£	s.	d.		lbs.		£	s.	d.		lbs.	£	s.	d.	£	s.	d.
April 847	35	5	10		8071		40	7	6		391	1	19	6	. 5	1	8
May 907	37	15	10		876		43	16	0		31	1	11	0	. 6	0	2
June 9741	40	12	1		9421		47	2	6		32	1	12	0	. 6	10	5
July1037	43	4	2		$991\frac{1}{2}$		49	11	6		45	2	5	6	. 6	7	4
August 962																	
September.10821	45	2	1		1044		52	4	0		381	1	18	6	. 7	1	11
October 9811	40	17	11		940		47	0	0		411	2	1	6	. 6	2	1
November., 9851																	
December. 902	37	11	8		8591		42	19	6		$42\frac{1}{2}$ .	2	2	6	. 5	7	10
January 10731	44	14	7		1031		51	11	0		$42\frac{1}{2}$	2	2	6	. 6	16	5
February 926	38	11	8		8851		44	5	6		401	2	0	6	. 5	13	10
March1049	43	14	2		1000	ţ	50	0	6		$48\frac{7}{2}$	2	8	6	(	6	4
11,727½	488	12	6	1	1,248		562	8	0		479½	23	19	6 .	78	15	6

### MIDWIVES.

Fourteen Midwives notified their intention to practise during the year 1913, two of these reside outside the Borough and only have a few cases in the Borough. One Midwife has had her name removed from the roll owing to her inability to take a temperature correctly, another has left the town, thus leaving twelve still practising.

One hundred and twenty visits have been paid to the Midwives at their houses, their bags inspected, and registers examined.

Nine hundred and ninety-four births have been notified by the Midwives, an increase of ninety-two on the previous year. Some of the Midwives do not yet seem to understand the rules of the Central Midwives Board, and their registers are by no means satisfactorily kept. Sore eyes and Thrush amongst the babies and high temperatures amongst the mothers are far too prevalent, indicating that sufficient care is not taken.

This year no cases have been traced that have been undertaken by an uncertified woman. At the beginning of the year Mrs. Fisher was again prosecuted and convicted for undertaking cases without a doctor.

Owing to the death of Colonel Sir Charles Stoddart the fund provided by him for the benefit of lying-in-women was not available this year, only five cases receiving help. There were several other instances where milk and groceries would have been a great boon if they could have been procured, for despite the thirty shillings National Maternity Benefit, help during the lying-in-period is often urgently needed.

### GENERAL REPORT.

The total number of visits paid by the Health Visitors has been 6,504. The visits have included births, consumption, dirty houses, sublet and over-crowded houses, outworkers chicken-pox, scabies, ringworms, infective enteritis, marasmus, ophthalmia, puerperal fever, and visits to midwives.

In spite of the cool summer, flies were very numerous. This fact may have accounted for the epidemic of Infective Enteritis which started at the end of July and did not cease until November. To combat the disease pamphlets and fly papers were distributed, and special visits paid to those babies known to be bottle fed. Besides the flies another factor in the spread of Summer Diarrhoea or Infective Enteritis is the

ever popular "Dummy." These so-called "comforters," are often indescribably filthy. Before the dummy is put into baby's mouth it is usually lubricated by someone sucking it, it is dipped into gravy, Swiss milk, jam, sugar, etc., which makes it attract all the flies and dust that may be about, it is frequently dropped upon the floor, and generally the only "cleaning" it gets is a wipe on mother's dirty apron.

Eight hundred and seven visits have been paid to the houses of consumptive patients, simple instructions and advice given, pamphlets left, and in many cases tickets for free disinfectants allowed.

Three hundred and one rooms have been sprayed with Formalin. Owing to the increase of work with regard to consumption, it was found impossible to cope with the spraying of the rooms. To be done thoroughly much time would have to be spent over it. Sometimes two or three visits are necessary before an appointment can be made, and even then on arrival one may be politely but firmly requested to call again another day.

There is a good deal of overcrowding in Rotherham which it is difficult to abate. It is chiefly due to the dearth of houses let at a reasonable rent and also to the fact that small four roomed houses, two rooms up and two down, are those most usually met with. Generally the second downstairs room is used to deposit rubbish, or it is kept as a parlour and hardly ever entered, while the family crowd into the two upper rooms to sleep regardless of health and decency. It is not easy to persuade the housewife to use the downstairs room as a bedroom. A far better type of house is the one with a big airy kitchen and good scullery and three bedrooms.

Only five notices have been served during the year for dirty houses, and no prosecution was necessary. In most cases repeated persuasion had the desired effect, and the necessary cleaning has been done. Unfortunately the improvement is not always lasting, the houses relapsing into their former dirty condition in an incredibly short time. In some of the lower quarters of Rotherham no improvement will be made until drastic measures are used and many prosecutions undertaken.

### GLAXO OR DRIED MILK SCHEME.

Over three hundred babies have been wholly or partially fed on Glaxo. Only six deaths have occurred amongst those infants entirely fed on Glaxo. Ten deaths occurred amongst the babies fed partially on Glaxo, but in none of these cases was the food properly given, and in three it was only tried for a few weeks.

It is a pity that many people start to use the food without any idea how to mix it. In the majority of cases where
Glaxo has apparently been a failure, it has been given in an
entirely wrong way. Milk and sugar have been added, it
has been used too weak, or too strong, not made with boiling
water or given when much too hot. In one case where Glaxo
was said to be "killing the baby," though the mother declared
all instructions were followed, as soon as the child (three
months old) went to live with its grandmother, all signs of
malnutrition vanished and Glaxo suited it admirably, showing that mother, not Glaxo, was at fault.

Twenty-seven babies, and one adult consumptive, have been allowed free Glaxo. All the babies throve as long as they were brought to the office. Two died of Summer Diarrhoea after the free allowance had been stopped but they had both been taken off Glaxo and put on to other food, one on to Nestle's Milk the other on to cow's milk and water.

Altogether, 980 packets of Glaxo have been given away during 1913. While a baby is having free Glaxo it has to be brought to the office and weighed regularly.

When a parent can afford to buy the Glaxo the free allowance is stopped.

No, of Cases.         Children Children Gereased, births, deceased, fed.         Still stil	Danietorad											-	During First Month.	First N	fonth.					2	Medical		
244       213       23       1       223       13       1	Number of Midwife.		No, of Cases.		Children living.		Childrer deceased,		Still- births,		fothers	(	Breast fed.		Bottle fed.	Oph	thalmi		Fever.		help required.	Illeg	Illegitimate Children
141       126       7       8       128       5       8       1       6       6       8       1       115       2       2       9       6       8       1       115       2       9 <td< th=""><th>3857</th><th>:</th><th>244</th><th>:</th><th>213</th><th>:</th><th>23</th><th>:</th><th>8</th><th>:</th><th>н</th><th>:</th><th>223</th><th>:</th><th>13</th><th>:</th><th>1</th><th>:</th><th>1</th><th>:</th><th>35</th><th>:</th><th>14</th></td<>	3857	:	244	:	213	:	23	:	8	:	н	:	223	:	13	:	1	:	1	:	35	:	14
120       112       5       8       1       115       2       2       9         103       98       6       4       95       4       1       1         80       76       8       4       75       4       1       1         65       56       6       8       1       74       4       1       9         64       58       2       4       6       8       2       4       9       9         62       54       4       4       6       8       9       9       9       9       9         11       12       11       2       11       13       11       10       2       11       10	820	:	141	****/	126	:	7	:	00	:	:	:	128	:	5	:	:	:	9		878	:	9
103       93       6       4        95       4       1        1        1        4       1        1        1        4       1        2        4        1        2        2        2        2        2        2 <td>8590</td> <td>:</td> <td>120</td> <td>:</td> <td>112</td> <td>:</td> <td>5</td> <td>:</td> <td>00</td> <td>:</td> <td>1</td> <td>:</td> <td>115</td> <td>:</td> <td>57</td> <td>:</td> <td>67</td> <td>:</td> <td>:</td> <td>:</td> <td>80</td> <td>:</td> <td>4</td>	8590	:	120	:	112	:	5	:	00	:	1	:	115	:	57	:	67	:	:	:	80	:	4
83       76       3       4       1       74       4       1       1       1       4       1	4924	;	103	:	93	:	9	:	4	:	:	:	95	:	4	:	1	:	::		23	:	00
80        75        8        1        58       4        2        4        58       4        2        9        1   <	8698	:	83	:	76		60	:	4	:-	:	:	42	:	4	:	-	:	:	1	6	:	20
65       56       6       3       58       4       2       4       2          64       58       2       4       4        58       2            62       54       4       4        56       2 <t< td=""><td>2910</td><td>:</td><td>80</td><td>:</td><td>75</td><td></td><td>60</td><td>::</td><td>67</td><td>:</td><td>1</td><td>:</td><td>74</td><td>:</td><td>4</td><td>:</td><td>:</td><td>:</td><td>2</td><td>:</td><td>8</td><td>:</td><td>4</td></t<>	2910	:	80	:	75		60	::	67	:	1	:	74	:	4	:	:	:	2	:	8	:	4
64     58     2     4      58     2        62     54     4     4      56     2     1        13     11     2      18      18          12      10     2           8      9             8                 9      61      40      8      9      9	2144	:	. 65		99	:	9	:	60	:			58	:	4	:	67	:	::	:	1-	:	:
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	34006	:	64	-	58	:	2	:	4	:	:	::	58	:	2	:	:	:	:	:	6	:	5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1993	:	63	:	54	-	4	:	4	:	:	:	99	:	2	:	1	:	:	:	9	:	00
12     12       3     3       3     3       41     993         12     10       12     1       13     1       14     10       15     1       16     1       17     1       18     1       10     1       11     1       12     1       13     1       14     1       15     1       16     1       16     1       17     1       18     1       10     1 <tri< td=""><td>31560</td><td>:</td><td>13</td><td>::</td><td>11</td><td>***</td><td>67</td><td>:</td><td>:</td><td>:</td><td>:</td><td>:</td><td>13</td><td>:</td><td>:</td><td>:</td><td>:</td><td>:</td><td>:</td><td>1</td><td>1</td><td>:</td><td>:</td></tri<>	31560	:	13	::	11	***	67	:	:	:	:	:	13	:	:	:	:	:	:	1	1	:	:
3     3     1     1     1     1     1       31     3     1     40     3     10     43     9     9     1	5767	:	12	:	12		:	- :	:	:	:	:	10	:	5	:	:	:	:	:	4	:	:
1 998 892 61 40 8 910 48 9 9	31534		8	:	3	:	:	:	:	:	:	:	12	:	1	:	н	:	:		:	:	:
998 892 61 40 8 910 48 9 9	19376	:	00	:	60	:	:	:	:	:	:	:	00	:	:	:	:	:	:	:	:	:	:
	Total	:	866	:	892	:	19	:	40	:	00	:	910	:	43	1	6	1 :	6	1	138	1	44

### STATISTICS re 994 BIRTH FORMS.

994	Number visited.
44	Illegitimate.
61	Children deceased.
40	Still-births.
75	Prematurely born.
142	Lodgers kept.
190	Dirty houses.
131	First born.

Average Rental-5s.

### INFORMATION re 6 DEATHS OF GLAXO FED BABIES.

Disease.	Method of Feeding.	Condition of House.
Broncho Pneumonia	Instructions said to have been followed	Clean.
Broncho Pneumonia	Instructions said to have been followed	Clean.
Diphtheria	Correctly fed	Clean.
Infective Enteritis	Given irregularly in incorrect quantities. Not freshly made for each feed, bottle fllthy	Dirty and Overcrowded.
Chronic Gastritis	Cocoa and sugar added, baby not fed regularly, teething powders frequently given	Clean.
Prematurity		
Malnutrition	Baby fed irregularly, food not freshly made for each feed, sugar added	Fairly clean.

WORK OF THE FEMALE HEALTH VISITORS.

# COMBINED REPORT.

Total.	6504
Measles.	7
Есгета.	18
Ringworm.	10
Scabies.	14
Summer Diarrhea.	129
Midwives.	136
Puerperal Fever.	10
Out Workers.	45
Morkshops.	40
.simlshthqO	48
Marasmus.	. 59
Death Enquiries	279
Overerowded Houses	143
Houses Sub-let.	285
Dirty Houses.	874
Consumption.	807
Births First and Re-visits.	0098

### PAYMENT BY PATIENTS IN ISOLATION HOSPITALS.

When Isolation Hospitals were first established it was a very common practice to charge patients for maintenance and treatment, with the result that many cases were treated at home which ought to have been taken to an institution, for a charge of two or three guineas a week during several weeks is altogether beyond the means of an ordinary working man. It has gradually come to be realised by sanitary authorities that an infected patient is removed for isolation not so much for his own sake, and in order that he may have skilled nursing, as to protect the community. It is manifestly unfair, therefore, that an individual should have to bear the cost of safeguarding the community. Indeed, it may be that a person has become infected through the neglect of the community as represented by the sanitary authority, and it is possible that stricter justice would be met by the community compensating a person suffering from an infectious disease rather than by penalising him. The most far-seeing sanitary authorities have for many years abandoned the practice of making any charge for patients treated in isolation hospitals, even though such patients may be in circumstances which might be thought to warrant such a charge.

### ISOLATION HOSPITAL, BADSLEY MOOR LANE.

During the year 1913, 466 cases were admitted into the above institution, as compared with 312 for the year 1912.

The following table gives details of the cases treated:-

		Cases.	Ι	eaths.	
Scarlet Fever		 354		7	
Enteric Fever		 20		3	
Diphtheria		 56		4	
Phthisis		 35		1	
Cerebro Spinal	Fever	 1		0	
				_	
Total		 466		15	

The details of the previous year (1912) were as follows:-

			Cases.	eaths.
Scarlet Feve	er		 216	 2
Enteric Fev	er		 36	 3
Diphtheria			 35	 8
Phthisis			 22	 1
Measles			 2	 0
Tubercular	Mening	gitis	 1	 1
				_
To	otal		 312	15

### NUMBER OF CASES TREATED SINCE THE OPENING OF THE HOSPITAL IN JANUARY, 1906.

	Scarlet Fever.	Diphtheria	Enteric Fever.	Other Diseases.	Pulmonary Tuberculosis.	Total.
1906	464	17	14			495
1907	213	18	20	7		258
1908	86	19	48	4		157
1909	82	35	29	4	7	157
1910	113	32	19	19	13	196
1911	138	43	30	4	19	234
1912	216	35	36	3	22	312
1913	354	56	20	1	35	466
Total	1666	255	216	42	96	2275

The average number of patients daily was 53 during the year 1913.

### ISOLATION HOSPITAL.

# ADMISSION INTO THE ROTHERHAM ISOLATION HOSPITAL IN EACH MONTH OF 1913.

			Scarlet Fever.	Enteric Fever.	Cerebro-Spinal Fever.	Diphtheria.	Pulmonary Tuberculosis.	Total.
January	 	 	14	1		5		20
February	 	 	23	1		6 7	7	37
March	 	 	9	2			2	20
April	 	 	26	3		1	1	31
May	 	 	16		1	6	4	27
June	 	 	26	5		1	5	37
July	 	 	28	1		4		33
August	 	 	31	2		1	3	37
September	 	 	44	1		4	2	51
October	 	 	49	1		3	5	58
November	 	 	46	1		11	3 2 5 3	61
December	 	 	42	2		7	3	54
Totals	 	 	354	20	1	56	35	466

# CASES OF INFECTIOUS DISEASES ADMITTED INTO THE ISOLATION HOSPITAL DURING 1913.

### DIVIDED INTO WARDS.

	East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill	Masbro'.	Kimber- worth.	TOTAL.
Scarlet Fever	41	61	34	28	19	44	35	46	46	354
Diphtheria	4	12	4	5	3	5	4	6	13	56
Enteric Fever	0	1	2	3	2		7	1	1	20
*Pulmonary Tuberculosis	1	7	2	2	3	6	2	8	3	34
Cerebro-Spinal Fever							1			1
m	10	01	40	20	07	EE	10	C1	00	ACE
Totals	49	81	42	38	27	55	49	61	63	465

<sup>\*</sup> One case of Pulmonary Tuberculosis was from outside the Borough.

ISOLATION HOSPITAL.

DETAILS OF CASES TREATED DURING 1913.

	es.	at.		_		56.8	1	1 ,
in in	cas	Per cent.	-	20	1	5		1 '
Deaths in	home treated cases.	Pe		:	:	:	:	1
Dea	e tre							4 -
	hom	No.	-	7	1	67	1	74
			:	;	:	:	:	:
	Cases tre'd	ome.	00	5	63	80	1	219
	ases	at p	63	35		118		1
	0	t.	1.9	:	:	2.85	:	:
18	ital.	cen	1.9	7.14	15.0	2.8	1	1
Deaths	in Hospital.	No. Per cent. at home.	:	:	:	:	:	- :
	in	.0	<u>-</u>	4	00	П	1	15
		Z	:	:	:	;	1	1
	rys	in Hospital.	**	-				
	Aver. days	Iospi	39.56	18.93	30.5	90.66	58	1
	Ave	in E	***		Ç.J	0,	40	1
			:	:	:	:	:	:
	s in	al.	0	~			-	
		+			7	100	8	1 =
	. day	ospit	14010	1062	604	3467	58	19201
	Tl. days in	Hospital.	1401	106	60	3467	58	19201
			:			:	:	1
			85			23		1
			85	61	87	:	:	:
			:	19	87	23	:	:
	Cases admitted.	No. Per cent.	354 85	61	87	23	:	466
	Cases admitted.	No. Per cent.	354 85	56 61	20 87	35 23	1 100	466
			417 354 85	91 56 61	23 20 87	153 35 23	1 1 100	685 466
	Cases admitted.	No. Per cent.	417 354 85	91 56 61	23 20 87	153 35 23	1 1 100	685 466
	Cases admitted.	reported. No. Per cent.	417 354 85	91 56 61	23 20 87	153 35 23	1 1 100	685 466
	Cases admitted.	reported. No. Per cent.	417 354 85	91 56 61	23 20 87	153 35 23	1 1 100	466
	Cases admitted.	No. Per cent.	354 85	56 61	20 87	35 23	1 100	685 466

### MEASLES.

The following table gives details of the deaths occurring from measles in Rotherham during the last eleven years:—

	1	-5 Yrs.	5-	10 Yrs	. O	ver 10	Yrs.	Total.
1903		24		_		_		24
1904		3.6		1		_		37
1905		_		_		_		_
1906		57		7		_		64
1907		25		3		-		28
1908		47		5		_		52
1909		13		1		_		14
1910		29		1		_		30
1911		50		4		1		55
1912		89		3		1		93
1913		7		_		_		7
				_		-		_
		377		25		2		404
				_		_		

### ERYSIPELAS.

Cases reported each month.

		East	St. Ann's	Clifton	South	West	North	Thornhill	Masbro'	Kimberworth	Total
January	 	 		1	2	3		2		2	10
February	 	 		1		1	1		1		4
March .	 	 1		1		1			1		4
April	 	 1			1	2	1				
May	 	 1	1	2							4
June	 	 			2		1	1			4
July	 	 1				2		1	1		ŧ
August		 		1	1		1	2		1	6
September	 					1			1		
October	 	 					2				9
November	 	 2						1	1	1	2
December	 	 			1	1	1	2	1		(
Tota	 	 6	1	6	7	11	7	9	6	4	57

# NUMBER OF CASES OF INFECTIOUS DISEASES REPORTED IN EACH MONTH OF THE YEAR 1913.

				Scarlet Fever	Diphtheria	Enteric Fever	Puerperal   Fever	Ophthalmia   Neonatorum	Erysipelas	Cerebro-Spinal Fever	Acute Polio-Myelitis	Total
January			 	19	7	1	2		10		1	40
February			 	25	7	2			4			38
March			 	12	10	3		1	4			30
April			 	30	3	.3		1	5			42
May			 	17	9	1		1	4	1		33
June			 	32	4	5	1	2	4			48
July			 	34	6	1		1	5			47
August			 	34	2	2			6			44
September			 	50	10	1			2			63
October			 	54	8	1		3	2			68
November			 	60	15		3		5			83
T 1			 	50	10	3		1	6			70
	T	otals	 	417	91	23	6	10	57	1	1	606

No case of Small Pox has been reported during the year 1913. It is seven years since a case occurred in the Borough.

### GROWTH OF ANTI-VACCINATION.

Replying to a question by Mr. Ramsay Macdonald, the President of the Local Government Board stated that the total number of exemption certificates or declarations of conscientious objection to vaccination during the years 1907-12 and the percentage of such objections to total births were as follows:—

Year.	Exemptions.	age to total registered.
1907	 57,675	 6.3
1908	 162,799	 17.3
1909	 190,689	 20.9
1910	 230,947	 25.7
1911	 248,483	 28.2
1912	 275,929	 31.6

The following table shows the increase of "conscientious" objectors in Rotherham during the last seven years.

		No. of
	" cor	scientious "
Year.	ol	ojectors.
1907		17
1908		126
1909		174
1910		257
1911		300
1912		394
1913		546

STATIST	CICS AS T		IC FEVER		HERHAM S.	DURING
YEAR.	Esti- mated Popula- tion.	No. of Cases of Enteric Fever Notified or Ascer- tained.	No. of such patients isolated in Hospital.	Total Deaths registered from Enteric Fever.	Mortality per cent. of Cases Notified.	Percentage removed to Hospital.
1906	61,500	66	14	8	12.12	21.21
1907	62,500	. 47	20	6	12.77	42.55
1908	64,000	99	48	16	16.6	48.48
1909	65,000	43	29	10	23.25	67.44
1910	66,500	31	17	9	29.03	54.84
*1911	62,700	48	30	13	27.17	62.5
1912	63,500	38	36	10	26.7	94.7
1913	64,500	23	20	3	13.04	86.95

<sup>\*</sup> Census year.

The number of cases of Typhoid Fever, 23, reported during the year 1913 is the lowest for any one year since I have been connected with the Public Health Department and constitutes a most satisfactory record. The cause is the whole-sale conversion of filthy privy middens into water closets. All insanitary conditions in respect of draining of houses and localities furnish the most ready means for the spread of the contagion of this fatal disease; and the most certain means of preventing its appearance or checking its spread are those which provide a thoroughly trustworthy and secure drainage, a safe method of disposal of sewage, and a pure and abundant water supply.

The bacillus which is the cause of Enteric Fever resides in the stools and urine of typhoid patients, and when these decompose it seems to multiply and acquire increased attacking power. Thus, in badly laid drains, where the contents stagnate the bacillus may multiply indefiinitely, and, by the contamination of drinking water in places where wells or cisterns are exposed to sewage pollution, convey infection to a whole community. During a hot and dry summer when drains are not flushed out, an epidemic is very apt to break out in the autumn.

Dust also may act as a medium which conveys the bacillus, in cases where the discharges of a typhoid patient, or the sewage is allowed to dry, and so is blown into drinking water or on to food. There is also abundant evidence that milk may readily be contaminated by the bacillus and form the cause of an epidemic, where a case of fever has occurred in a dairy.

The source of an epidemic has also been traced to the eating of oysters or mussels, taken from oyster or mussel beds near which contaminated sewage is discharged.

During an epidemic, it can be readily understood that flies may also form a means of contamination between uncovered excreta and uncovered food.

In almost all cases therefore, it may be said that the spread of Typhoid Fever depends upon food or drink contaminated by a bacillus which is derived more or less directly from the discharges of previous Typhoid cases. It undoubtedly is a preventible disease and should be prevented.

Typhoid Fever is most common among the young, the majority of cases occurring between the ages of 15 and 25, though it does occur in rare instances at or beyond middle life. It attacks the well-to-do as frequently as the poor. The greater number of cases appear to occur in autumn, and it prevails in all countries though some of its features may be modified by climate and locality.

For many years past the Borough of Rotherham has had the doubtful notoriety of being placed amongst the first half dozen towns having 'an excessive prevalence of this disease,' It is 20th on the list for the year 1913. This result is due as I have previously stated to the wholesale conversion of privy middens. This has been accomplished without a cost of one penny to the ratepayers. Both owners and ratepayers are to be congratulated on the result of this enlightened policy.

I trust and believe that "excessive prevalence" of Enteric Fever in Rotherham will in future be a thing of the past.

The mortality rate during 1913 was only 13.04 per cent. as compared with 26.7 for the previous year. This is another satisfactory feature, and may be due to the fact that back yards which for years have been permeated with the contents of privy middens are beginning to lose their virulence.

### TYPHOID FEVER.

Table showing the number of cases occurring each month in the various Wards during 1913.

		East	St. Ann's	Clifton	South	West	North	Thornhill	Masbro'	Kimberworth	Total
January		 			1						1
February		 						1	1		2
March		 		1		2					3
April		 1			1			1			3
May		 				1					1
June		 						5			5
July		 1									1
August		 						1		1	2
September		 			1						1 2 3 3 1 5 1 2 1
October		 				1					1
November		 									
December	.,	 			1		1		1		3
Totals		 2		1	4	4	1	8	2	1	23

### DIPHTHERIA ANTITOXIC SERUM.

During the year 1913, 168 phials of Antitoxin were distributed free to houses where diphtheria had been reported.

The successful results obtained by the use of sera in the treatment of diphtheria are now well known; reports and statistics from many parts of the world are unanimous in recording a remarkable decrease of percentage mortality from diphtheria since the introduction of this method. It has been well said that it is the only treatment we know in diphtheria. Its efficacy has been fully proved, both as a curative and a prophylactic agent.

Curative use of Diphtheria Antitoxic Serum. The dose for a case of moderate severity should not be less than 2000 units, and in severe cases 4000 units at least should be given at once. Even larger doses are recommended by many authorities. These doses should be given irrespective of age, because diphtheria is very fatal to young children. If any difference were to be made, adults would have the smaller doses, as the prognosis in diphtheria improves with the age of the patient.

In hospital practice, other rules of dosage apply, owing to the fact that many cases are received in which the disease has reached an advanced stage. Such patients receive antitoxin for the first time on the fifth or sixth day, or even later, and are at once injected with two to four times 4000 units.

A very useful table showing the initial dose that should be given in various circumstances has recently been published by a medical officer of health.

This illustrates very well the necessity for larger doses when treatment is delayed. Thus, in ordinary cases of diphtheria, if the first dose of antitoxin is delayed until the second day, the dose should be increased three-fold, and still larger doses are necessary if treatment is delayed to the third or fourth day.

Tabular Guide to Initial Dose of Antitoxin required:-

	Tonsillar lesions only	Pillars of fauces also in- volved	Uvula also involved	Posterior Pharyn- geal wall also in- volved	Laryn- geal symptons also	Nose also invol- ved
1st day	 1000	2000	3000	4000	6000	8000
2nd day	 3000	4000	5000	6000	6000	8000
3rd day	 4000	5000	6000	7000	7000	8000
4th day	 5000	6000	7000	8000	8000	8000

The fact that the amount of antitoxin which is necessary to save life increases at a rapidly accelerating rate, according to the length of time which elapses between infection with the diphtheria virus and administration of the serum, is amply proved both by hospital experience and by animal experiments.

Wernicke and Behring for instance, having determined the amount of antitoxic serum necessary to save from death a guinea pig which had immediately before been injected with a lethal dose of diphtheria toxin, found that ten times this amount was required to effect a cure if this administration was deferred until eight hours after the injection of the toxin; whilst twenty-four hours afterwards, fifty times the initial quantity was required.

The efficacy of antitoxin given early in the disease, and the urgent necessity of beginning the treatment at the earliest possible moment, are well illustrated by the following statistics from the Brook Hospital, published in the Metropolitan Asylums Board Report for 1902:—

Day of the disea which tre		MOI	RTALITY	PER	CENT.		
commend		1897	1898	1899	1900	1901	1902
First	 	.0	.0	.0	.0	0	.0
Second	 	5.4	5.0	3.0	3.6	4.1	4.6
Third	 	11'5	14.3	12.2	6.7	11'9	10.5
Fourth	 	19'0	18'1	20.0	14'9	12.4	19.4
Fifth	 	21-0	22.5	20.4	21.2	16.6	19'4

Apart from the possibility of the production of serum rashes and the rise of temperature in susceptible individuals, the chief factor which limits the administration of antitoxin is the bulk of the fluid in which it is contained. A large dose should therefore be given at the earliest possible moment whenever diphtheria is suspected; in cases which progress unfavourably, at least double the initial dose should be given six hours afterwards. The same results, however, cannot be expected from repeated injections at intervals, as are obtained from one full dose at the onset of the attack.

The injection of antitoxin at the earliest possible moment may be a matter of such importance to the patient that this should be done on the clinical evidence alone, where the diagnosis is doubtful; but immediate steps should be taken to confirm the diagnosis by bacteriological methods. In no case, however, should either the administration of antitoxin or the repetition of the dose be delayed until the result of a bacteriological examination has been made known.

Prophylactic Use of Diphtheria Antitoxic Serum. Diphtheria Antitoxin is quite as valuable for prophylactic purposes as for curative treatment. It must be remembered, however, that the passive immunity produced by the injection is only of a temporary nature, lasting probably not more than three weeks.

As a prophylactic, doses of at least 1000 units may be administered to the rest of the family whereof one member has been attacked by diphtheria. It should be carefully noted that when once a phial of serum is opened it is highly undesirable, owing to risk of contamination, to reserve any portion of the contents for future use. The whole of the serum should at once be used on one or more patients.

34

### DIPHTHERIA.

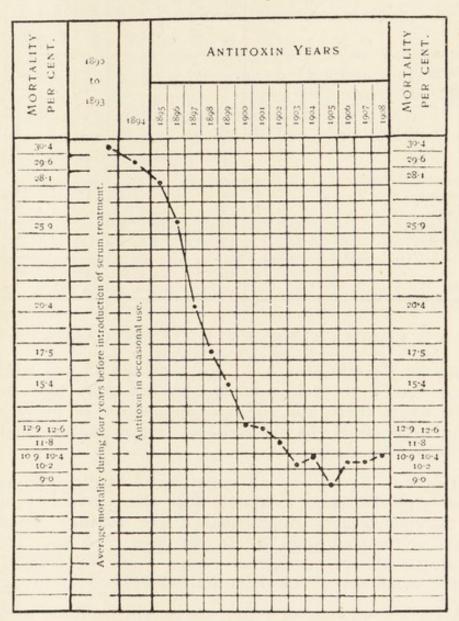
Year.	Estimated Population.	Total No. of Cases Notified.	No. of Deaths Registered.	Fatality per cent.	No. of Cases treated in Hospital.	Attack Rate per 1,000 Population.	Percentage removed to Hospital.	Mortality per 1,000 Population.
1890	38000	27	6	22.2	-	.71 .28 .4 .21	-	.16
*1891	43000	12	2 2	16.6	-	.28	-	.05
1892	44000	17	2	11.8	-	.4		.04
1893	46000	10 15	1	10	-	.21	-	02
1894	47000	15	2 3	13.3	-	.32	-	.04
1895	48000	15	3	20	-	.31	-	.06
1896	50000	29	5	17.24		.58	-	.1
1897	52000	30	12	40	-	.58	-	.23
1898	53000	15	5	33.3	-	.28 .37		.09
1899	57000	21	9	42.86	-	.37	-	.16
1900	59000	46	12	26.0	-	.78	-	.2
*1901	56000	43	6	13.3	-	.80	-	.10
1902	57000	81	9	11.1	-	1.4	-	.16
1903	58000	115	16	13.9	_	1.98		.28
1904	59000	77	8	10.4	6	1.3	7.8	.13
1905	60000	43	8	18.6	4	.70	9.3	.13
1906	61500	62	7	11.3	17	1.01	27.4	.11
1907	62500	44	9	20.4	18	.70	41	.14
1908	64000	56	7	12.5	19	.87	33	.11
1909	65000	58 47	8 6 2	13.8	35	.89	60	.12
1910	66500	47	6	12.7	32	.71	68	.09
*1911	62700	67		3.0	48	1.07	64	.03
1912	63500	58	9	15.5	35	.91	60	.14
1913	64500	91	11	12.1	56	1.41	61.5	.17

<sup>\*</sup> Census year.

### CHARTS

Showing the mortality rates amongst Diphtheria patients at the Hospitals of the Metropolitan Asylums Board, before and after the introduction of Antitoxin treatment of Diphtheria. (From the Annual Report, 1908.)

All forms of Diptheria.



#### DIPHTHERIA.

Showing the Ward distribution of this disease during 1913.

			East.	St. Ann's.	Clifton.	South.	West.	North.	Thornhill.	Masbro'.	Kimberworth.	Total.
January		 				1		1	1	2	2	7 7
February	 	 		3	1			1 3				7
March	 	 		3	2	2					3	10
April	 	 			1	1		1				3
May	 	 	2	2	1				1	1	2	9
June	 	 		1	1	1				1		- 4
July	 	 		1	1	2		1	1			6
August	 	 	***		1				***		1	2
September	 	 	5	1			1	1	1		1	10
October	 	 	1	2	1	1			1	2		8
November	 	 				2	1	2		1	9	15
December	 ***	 		2	1	1	1		2	1	2	10
			8	15	10	11	3	9	7	8	20	91

### SCARLET FEVER RETURN CASES.

Scarlet Fever Cases have not been discharged whilst their hands or feet were peeling badly. A few cases have been discharged where there was slight desquamation or peeling. Late desquamation of the hands and feet is now disregarded as the cause of return cases.

It is now agreed by all experienced Medical Superintendents of large Isolation Hospitals that the percentage of return cases is considerably diminished if the average detention in Hospital is reduced from 42 to 30 days. In one large town for example, the percentage of return cases fell from 4.8 to 4 when the usual six weeks detention was reduced to four weeks.

A certain number of return cases will continue to occur in spite of all precautions.

Return cases are not always due to premature dismissal from Hospital, and it is now recognised that isolation in Hospital has been in the past too long.

A copy of the directions and precautions presented to each parent on the discharge of her child is attached, and I am satisfied that if these directions were followed with reasonable care, the percentage of return cases would be reduced considerably.

#### COUNTY BOROUGH OF ROTHERHAM.

## ISOLATION HOSPITAL.

#### --:0:--NOTICE TO RELATIVES.

Every precaution is taken to ensure that the children are free from infection when discharged from the Hospital, but it is extremely difficult to be quite sure of this; parents are therefore urged in cases of Scarlet Fever to observe the following precautions:—

Whenever it is possible, the child should be sent for a short time to a house where there are no children, but when this cannot be done, care should be taken that the child does not kiss, or come in contact with other children. The child should on no account be allowed to sleep with other children, as this is particularly dangerous.

A bath must be given every night, carbolic soap being used.

Discharges from the nose and ears are highly infectious, and if discovered to exist, advice should at once be sought from the usual Medical Attendant, and the child isolated.

The child should be taken into the fresh air as much as possible, but must not attend school, or mix with other children for at least a fortnight.

### ALFRED ROBINSON, M.D., Medical Superintendent.

## SCARLET FEVER. Cases reported each month.

		East	St. Ann's	Clifton	South	West	North	Thornhill	Masbro'	Kimberworth	Total
January	 	1	2	1	3	1	7		1	3	19
February	 	1	2	5	3	1 2	5		6	3	25
March	 	2	2	1		1	1	3		2	12
April	 	4	7	1	1	1	2	6	6	2	30
May	 	1	6		1		3	5	1		17
June	 	4	4	15	1		3	1	3	1	32
July	 	1	10	4	6	3	2	4	2	2	34
August	 	1	1	2	8	3	6	2	2	9	34
September	 	2	17	1	5	3	6	3	4	9	50
October	 	6	5	6	2	3	9	4	12	7	54
November	 	6	14	4	1	4	1	9	7	14	60
December	 	12	9	2	1	1	6	1	7	11	50
Total	 	41	79	42	30	22	51	38	51	63	417

	STATIST	ICS AS T	O SCARLE	T FEVER	SINCE 1	888.
Year	Approxi- mate Population	Fever	No. of such Patients	Total Deaths registered from Scarlet Fever	Mortality per cent.	Percentage removed to Hospital
1888 1889 1890	36182 36807 37907	128 187 206		12 23 33	10 6 12.2 16.0	
*1891 1892 1893 1894	43000 44000 46000 47000	131 111 72 325		10 8 4 25	7.6 7.2 5.5	
1895 1896 1897	48000 50000 51000	178 259 212		12 4 19	7,6 6.7 1.5 8.9	
1898 1899 1900 *1901	52000 53000 54000 56000	219 258 726 267	2 54 61	13 14 35	5.9 5.4 4.6 1.8	0.7 7.4 22.8
1901 1902 1903 1904	57000 58000 58000 59000	127 246 168	31 17 51	5 3 9 4	2.3 3.6 2.3	22.8 24.4 6.9 30.3
1905 1906 1907	60000 61500 62500	429 657 318	174 479 218	17 15 2	3.9 3.1 .62	40.5 71.3 68.5
1908 1909 1910 *1911	64000 65000 66500 62700	125 110 147 176	86 92 115 138	3  4 3	2.2  2.72 1.70	68.0 74.5 78.2 78.4
1912 1913	63500 64500	269 417	216 354	6 7	2.23 1.67	80.0 80.1

\* Census years.

## SHOWING DENSITY OF POPULATION AND PREVALENCE OF CERTAIN DISEASES IN THE VARIOUS WARDS DURING 1913.

							Cas	ses noti 19	fied du 13	ring
Ward			Number of Houses	Population	Acreage	Density per acre	Scarlet Fever	Diphtheria	Enteric Fever	Pulmonary Tuberculosis
East			1258	5953	480	12.40	41	8	2	14
St. Ann's			1901	8984	131	68.58	79	15		25
Clifton			1188	5590	524	10.67	42	10	1	4
South West		•••	1351 1058	6422 4967	436	14.73	30	11	4	10
Non-th			1783	8380	530 318	9.37	22	3	4	23
701 1. 2.11		***	1677	7882	196	26.35 40.21	51 38	9 7	8	17
Masbro'		***	1762	8306	412	20.16	51	8		20 21
Kimberworth	***		1704	8016	2985	2.68	63	20	2	19
									-	13
Totals			13682	64500	6012	10.73	417	91	23	153

#### SCHOOL CLOSURE.

The following Schools were closed during 1913 on account of the excessive prevalence of epidemic diseases:—

St. Ann's Road Council Infants, 15th to 31st January, Mumps.

Doncaster Road Council Infants, 7th to 20th March, Measles, Mumps, and Chicken Pox.

Thorpe Hesley Council Infants, 12th March to 11th April, Measles.

Alma Road Council Infants, 1st to 16th May, Measles, Mumps, and Chicken Pox.

#### ILLNESS AMONGST SCHOOL CHILDREN.

The following tables give:-

- (1). The months during which various non-notifiable infectious diseases have been most prevalent during 1913 amongst the children attending the Public Elementary Schools.
- (2). The number of children examined as to their fitness or otherwise to attend School.

		Measles	Whooping Cough	Chicken Pox	Mumps	Ring- worms
January	 	 18	80	28	31	21
77 7	 	 29	83	22	55	25
3.5 1	 	 126	87	95	81	20
April	 	 141	85	79	62	24
May	 	 54	91	34	28	28
June	 	 19	70	13	11	17
July	 	 14	61	14	4	15
August	 	 3	14	3	2	8
September	 	 3 9 8	18	14	41	12
October	 	 8	26	7	61	17
November	 	 14	18	11	75	10
December	 	 22	14	15	60	12
Totals	 	 457	647	335	511	209

### INFECTIOUS DISEASES AMONGST CHILDREN, 1913.

No.	of Children	examined at	the Public	Health	Department	161
No.	certified as	fit to attend	School			57
No.	certified as	unfit to atte	end School			104

### AMOUNT OF POOR LAW RELIEF IN ROTHERHAM.

The amount of money expended on the relief of the poor in the County Borough of Rotherham during the year 1913 was £3362 10s. 0d.

# WORK DONE IN THE PUBLIC HEALTH LABORATORY DURING THE LAST FIVE YEARS.

#### BACTERIOLOGY.

### TABLE I.—1909.

	Positive	Negative	Doubtful	Total
Diphtheria	56	113	23	192
Typhoid Fever	29	18	. 4	51
Pulmonary Tuberculosis.	37	53		90
Ringworm	7	1		8
Ringworm Other Examinations				5
	129	185	27	346

### TABLE II.—1910.

	Positive	Negative	Doubtful	Total
Diphtheria	43	133	13	189
Typhoid Fever	23	32	3	58
Pulmonary Tuberculosis	63	73		136
Ringworm	12	4		16
Other Examinations		4		4
	141	246	16	403

### TABLE III.—1911.

	Positive	Negative	Doubtful	Total
Diphtheria	79	153	11	243
Typhoid Fever	34	32	2	68
Pulmonary Tuberculosis.	94	90		184
Ringworm	45	4		49
Other Examinations	8	6	1	15
	250	285	14	559

TABLE IV.- 1912.

	Positive	Negative	Doubtful	Total
Diphtheria	93	174	1	268
Typhoid Fever	42	78	2	122
Pulmonary Tuberculosis.	94	121		215
Ringworm	35	6		41
Other Examinations	5	8	1	14
	269	387	4	660

## TABLE V.—1913.

	Positive	Negative	Doubtful	Total
Diphtheria	120	182	2	304
Typhoid Fever	20	21		41
Pulmonary Tuberculosis.	118	155		273
Ringworm	14			14
Other Examinations	5	11	2	16
	277	369	2	648

## TABLE SHOWING AGES & CAUSES OF DEATH FOR THE YEAR 1913.

DISEASES.						AC	ES							All
	0	1	5	10	15	20	25	35	45	55	65	75	85	A's.
Measles														
	. ,	7	1				- 2							7
	1	5 1	1		1		1		2	1	1			7 9
Epidemic Influenza		8	1	100	1		1		2	1	1			
Whooping Cough Diphtheria	20	4	4	1						-				29
	2	4	4	1		1			2					11 3
	11	3				1			2	137		1	1	15
	22	12										1		34
0 1 11	2	12										8-		2
Erysipelas	1							1						2
Puerperal Fever	1						1	1						1
Pyæmia							1		1	-			1	2
Infective Endocarditis				1		1			1				1	2
Other Allied Diseases		1		1		7			1		-			2
Rheumatic Fever	7 11	1		1					1			1		2
Rheumatism of Heart				1					1					1
Tuberculosis of Brain	3	5	2	7		1							+	11
Phthisis	0	1	4	3	3	9	18	20	8	5	1			68
Abdominal Tuberculosis	1			1	.,	9	2	20	0	0	1			6
General Tuberculosis	1	2	1	1		1	1							5
Other forms Tuberculosis		1	1	1	3	1	1							5
0-4		1	1		0			-	1	1	100			2
O.							2	6	12	17	9	6		52
D' 1 / M 11'4							1	2	12	1	9	1		5
	-					1	1	2	1	2		1		4
Anæmia Premature Birth	47			10		1		1	1	4				47
Injury at Birth	2								>					2
Debility at Birth	2													2
Atelectasis	2													2
Congenital Defects	15		1											15
Atrophy, Debility, Maras-	10													10
mus	34	11	1		1									46
Dentition	3	1	1										-	4
Pielzete	1	3	-											4
Old Ago Sanila Deser	1	0								1	12	25	7	45
Convulsions	28	4	1				2			1	14	20		35
Meningitis	1	2	1	1			-	1						6
Apoplexy	-	-	-	1				1	1		9			3
Softening of Brain									1		2 2	2		4
Hemiplegia					-						1	-		1
General Paralysis of Insane								2	2		T			4
Other forms of Insanity								4	4		1			1
Chorea				2			1				1	-		2
Cerebral Tumour				-				1		1				2
Epilepsy				1		1		1	1	1				2
Cerebral Hæmorrhage		1		-		1	1	2	3	3	13	9	1	
Other forms, Brain Disea's		-				-	-		1	1	1		-	3
Otitis	3			1	1				-	-	-			5
Pericarditis	0			1	1			1	-					1
Endocarditis	3		3	2			1	7	5	7	4	3		29
Angina Pectoris				-			-	'	0	1	-	0		1
American									1	1				2
Embolism, Thrombosis									1	3	6	1		11
Zanoononi, Tintonioooio									1	0	O	1	-	

Table Showing Ages and Causes of Death for the Year 1913—contd.

DISEASES.						A	GE	S.						All
DIOINOID.	0	1	5	10	15	20	25	35	45	55	65	75	85	
Phlebitis Diseases of Heart Laryngitis Croup	2	1 2	1	1			1 1	5	10	11	1 23	4		1 58 2 2
Diseases of Larynx and Trachea Acute Bronchitis Chronic Bronchitis Lobar Pneumonia Lobular Pneumonia Pneumonia Emphysema, Asthma	22 3 23 9	3 25 3	3	1	1 2	1	1	2 2 3	2 1 5 1 4	3 10 3 3	4 14 2 1 3 1	1 5		2 36 41 12 54 32 2
Pleurisy Other Diseases, Respiratory System Diseases of Mouth and		2	1					1		1	2			6 2
Annexa Ulcer of Stomach and Duodenum Other Diseases of Stomach	2		1				1		2	1 1	1	1	1	1 6 4
Enteritis Appendicitis Obstruction of Intestine Cirrhosis of Liver Other Diseases of Liver Peritonitis	2 7 2	6 1 1	2	1			3	1 2 1	1 4 2	2	1	1		18 3 10 6 3
Other Diseases, Digestive System Diseases, Lymphatic System and Glands Acute Nephritis Bright's Disease Calculus	3	1				1	4	2 3 1	1 1 3	1 1 6	1 2			5 1 6 18 1
Other Diseases, Urinary System Diseases of Ovaries Diseases of Uterus and Appendages						1			1		1	1		1 2 1
Puerperal Convulsions Child Birth Diseases, Osscous System Eczema Accidents & Negligence:	1					1	1	2				1		1 3 2 1
In Mines and Quarries In Vehicular Traffic On Railways In Building Operations		2	1			1	2	5			1			9 3 4 1
Burns and Scalds Drowning Suffication, Overlaid in Bed ,, Otherwise Falls not specified	3	3				3	3	1 1	1	1	1		1	6 8 3 1 5
Otherwise, not stated							1	1	1	1	1	2	1	4

Table Showing Ages and Causes of Death for the Year 1913—contd.

DISEASES.							AG1	ES.						All
	0	1	5	10	15	20	25	35	45	55	65	75	85	
Homicide Suicides ;		-					-	1					-	
By Poison									1					
By Hanging and Strangu- lation							1	1		1				
By Drowning Ill defined and unspecified				1		1			1	1				
causes	1							1	2	2				
Grand Totals	281	123	24	20	11	26	57	80	88	97	114	65	18	100

TABLE SHOWING FURTHER DETAILED STATISTICS SINCE THE YEAR 1892.

			HE TEAK			
Year	Birth Rate	Death Rate	Infantile Mortality	Zymotic D.R.	Typhoid D.R.	Diarrhœa D.R,
1892	35.61	17.86	157	1.97	.25	.5
1893	37.13	19.91	175	3.23	.13	1.65
1894	32.21	16.51	156	2.08	.27	.14
1895	36.18	16.66	154	1.97	.23	1.18
1896	34.36	15 00	149	1.40	.22	.56
1897	34.00	17.78	177	1.78	.36	.75
1898	33.00	16.05	161	1.15	.22	1.26
1899	33.56	16.38	166	1.87	.33	1.00
1900	33.15	16.86	170	2.47	.13	.83
1901	35,26	17.64	145	3.57	.14	2.12
1902	34.56	15.17	141	1.70	.15	.58
1903	33.33	17.31	187	3.19	.17	1.58
1904	32.70	15.83	164	2.69	.203	1.49
1905	31.91	13.93	123	1.16	.03	.41
1906	31.66	16.3	158	2.16	.13	.83
1907	32.29	15.45	146	1.39	.09	1.02
1908	32.75	15.62	142	3.0	.35	1.18
1909	31.78	12.94	. 116	1.08	.15	.49
1910	28.21	13.73	130	1.71	.13	.21
1911	28.85	16.63	161	3.18	.21	1.74
1912	29.53	15.79	119	2.22	.15	17
1913	30.15	15.56	144	1 81	.05	.76
Averages from 1892 —1913	32.83	16.13	151	2.12	.185	.91

VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 AND PREVIOUS YEARS.

	estimated to each year		Birth		Regi in	Deaths stered the strict	Transf	ferable aths	Un	death to the der 1 of age	Distri At	
Year	Population estim middle of each	Uncorrected Number	Number	Rate	Number	Rate	Of Non-residents registered in the District	Of Residents not registered in the District	Number	Rate per 1,000 Sett Births	Number	Rate
1908 1909 1910 1911 1912 1913	64000 65000 66500 62700 63500 64500	1826 1887	1875	32 75 31.78 28.21 28.85 29.53 30.15	915 950 1083 1103	16.92 14.08 14.29 17.27 17.37 16.07	74 63 72 100	19 17 23 32 35 50	312 240 245 292 223 281	149 116 130 161 119 144	1005 841 913 1043 1003 1004	15.62 12.94 13.73 16.62 15.79 15.56

Area of District in acres (land and inland water), 6,012. Total population at all ages, at census, 1911, 62,700. Number of inhabited houses, 13,440. Average number of persons per house, 4.7.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

	Potal Cases Retification		56	354	20		35	466
	Kimberworth		20	63	1		119	118
ocalit strict 8	Masbro,		8 9	51	64		111	100
ch Lone Di	ПідплодТ		L- 6	38	8	-	10 10 3	96
in ea of th	North		6 1	51	1	1	113	101
ified /ard)	West		13	22	4	-	23 10 10	76
Not or W	Routh		111	30	4		10	69
Total Cases Notified in each Locality (e.g. Parish or Ward) of the District.	Olifton		10	42	1		13	77
otal (	St. Ann's		15				25 10 1	131
T (e	East		00 00	41	61	4	14 5	81
	65 years and upwards		10	2			23	14
hed	45 and under 65 years		1 000	3	62		26	56
Notif Years	25 and under 45 years		17	9	4	5	64	112
ases	STED YEARS		14	19	6	-	32	100
Number of Cases Notified At Ages—Years	5 and under 15 years		54	308	9	-	277	431
nber	I and under 5 years		15	87	C4		15	120
Nu	Under 1		01 -	1 07			10	16
	At all Ages.		91	417	23	1	153 90 10	849
		:	тр)	: :	: :	1 : : :	1:::	1:
N = 4		:	(including Membranous croup)	: :	::		::::	
			snou					
	ase.		nbra	: :	: :	1111	ii. ii	1:
	Dise	:_	Men	: :	::	···	sis sulos um	rls
of late	ble	9	ding			ning	culo	Totals
	Notifiable Disease.		nelu	: :	: :	er	uber of Tu	
	×	35		ver	ver	fev- fev- fev-	litis ry Tr ms c	
		rod-	sheri	pera	us fe	sing nuec peral ro-sp	onal for	
		Small-pox	Diphtheria	Scarlet fever	Typhus fever Enteric fever	Relapsing fever  Continued fever  Puerperal-fever  Cerebro-spinal Meningitis	Poliomyelitis Pulmonary Tuberculosis Other forms of Tuberculosis Ophthalmia Neonatorum	
		000	7 1 1	4 00	5 11	-040		-

DEAT	гнѕ							VARI				AN	D	
	East	St. Ann's	Clifton	South	West	North	Thornhill	Masbro'	Kimberworth	Workhouse	Rotherham Hospital	Isolation Hospital	Other Public Institutions, etc.	TOTALS
January February March April May June July August September October November	11 3 7 8 4 3 3 4 3 10 5	19 11 12 6 11 8 4 7 7 6 11	3 2 4 5 5 1 5 5 3 3 3 3 3	9 11 11 6 3 2 10 7 6 4 4	9 9 10 3 9 5 5 3 5 5 5 5	8 10 12 10 5 8 5 6 5 5 11	13 11 10 5 5 9 15 6 4 15	17 11 15 5 7 12 5 14 10 8 8	10 3 13 7 9 8 7 4 8 7 9	14 15 6 9 7 3 11 8 9 10 5	3 3 4 2 3 7 3 2  2 6	2 2 3 1 3  1 1 1 4 1	4 1 4 2 6 14 2 4 3 4 3 3	122 92 111 69 77 80 75 71 64 81
December Total	67	5 107	42	79	7 75	9 94	107	16 128	92	9	38	- <del>1</del>	50	1004

#### DEATHS IN PUBLIC INSTITUTIONS.

During the year 1913, there were in the County Borough of Rotherham, 1,004 deaths. Of these 106 died in the Workhouse Hospital, 38 in the Rotherham Hospital, 19 in the Isolation Hospital, and 50 in other Public Institutions (including Wadsley Asylum), or about 16 per cent.

How many patients were treated can only be a matter of conjecture.

The connection between the Voluntary Hospital and the Poor Law Infirmary is doubtless obscure to many, and to superficial observers probably never appears to be so close as it really is.

Yet it is an undeniable fact that of late years the distinction upon which so many people have laid stress, viz., that the Workhouse Infirmary reaches sick paupers, whilst the function of the voluntary Hospital is primarily to prevent the poorer classes being reduced, through sickness or accident, to the level of absolute poverty, has scarcely been so clearly apparent as it was, say, 30 years ago.

The tendency has been in modern times towards pauperising the community, towards creating invidious class distinctions, towards undermining the independence of the wage earner by exhorting him to put his trust in M.P.'s and to look to the State to secure him those comforts which his forefathers attempted to attain through thrift and self-help.

In these circumstances it is only natural that the Hospital worker should be gravely concerned about the future of charitable institutions, and should consider very seriously the probable effects of whatever may tend to alter existing conditions.

Among the factors that promise to be most potent in effecting such alterations are the reports of the Commission on the Poor Laws recently issued.

The proposals regarding medical relief contained in the Majority Report are eminently unsatisfactory.

They have not placated advanced social reformers, and they have scarcely commended themselves to thinking men, and the probability is that we shall hear nothing more about them.

The proposals embodied in the Minority Report, on the other hand, have aroused widespread interest, not only because of the thoroughness with which they attack the whole problem, but largely also because of their probable revolutionary character.

The lively satisfaction felt by those who are in wholehearted agreement with the Minority Report, has been opposed by the vehement antagonism of objectors to these proposals, and the fight has been waged with more zeal than discretion.

About the pros. and cons. of the argument, every practitioner and every one interested in institutional work should be clear, and for that reason I recommend every one to study the Minority Report for himself, and to become personally acquainted with the objections put forward against it.

These objections are very serious, so grave indeed that they cannot be lightly considered, and it is evident they must be weighed with most scrupulous care and attention.

As has been clearly shown, and as most objectors have pointed out, the acceptance of the proposals put forward by the Minority involves the creation of a state medical service, and the expenditure of huge sums of money annually, and the serious probability of the break-up of the present Voluntary Hospital system.

Whether these results are desirable or not I need not consider or whether they are inevitable or preventible. The main fact is that they are possibilities, and as such should be very carefully considered. It is, however, permissible to ask how long Voluntary Hospitals can exist if additional financial burdens are placed upon the community, if a huge competing

combine, receiving preferential treatment from the State, is to deal with the indigent sick, and if the already heavy task of the ratepayer is to be doubled by making him bear the expense of treatment of the sick belonging to the wage-earning classes.

I venture personally to think that in those circumstances the inevitable result must be that the Voluntary system will break down.

People will certainly not subscribe to an institution for the relief of the sick poor when they are already supporting a State Medical service. In fact, the existence of a Voluntary system of Hospital relief alongside a State system of such magnitude as the Minority Report proposals is a logical absurdity.

If the State service be efficient the Voluntary Hospital, not supported by the rates, must go to the wall; the latter then sinks to the level of a mere private undertaking with private aims and a very limited scope.

On the other hand, if Voluntary Hospitals are efficient, if they are worked upon a scheme of co-operation such as has been suggested, helped by the State and municipalities and helping these in their turn, not dependent upon these nor controlled by them, but acting as self-dependent units in a great combination, their usefulness would be much increased, their position strengthened, and their future assured.

## BOY LABOUR, APPRENTICESHIP, AND THE PREVENTION OF DESTITUTION.

There are few subjects fraught with such grave import to the future of this country as the proper education of its youth. The slightest acquaintance with the German system of education and the co-ordinated methods that country employs of training for an industrial career, makes it manifest how far this country is behind in this respect. For many years complaints have been pouring in to the Education Department and to Education Authorities generally with respect to that intervening period of youth between the leaving of the Elementary School and manhood. It has been pointed out that the old apprenticeship system has almost entirely fallen into disuse. and that as a result boys are no longer entering occupations in which they will be thoroughly fitted for some skilled trade. They accordingly drift into the ranks of casual labour and join the great army of inefficients and unemployed The report of the Poor Law Commissioners teems with evidence bearing on the subject. Apprenticeship is not merely practical training in preparation for a trade, but also that wider training of character and intelligence on which depends the real efficiency of the craftsman: it is in fact, a preparation for life as well as for the workshop.

An apprenticeship to be worthy of the name must satisfy three conditions:—

- 1.—It must provide for the adequate supervision of boys until they reach the age of 18.
- 2.—It must offer full opportunities of training both general and special, the training of the citizen and the training of the worker.
- 3.—It must lead forward to some opening in the ranks of adult labour for which definite preparation has been made and in which good character may find reasonable prospects of permanent employment.

It is clear that indentured apprenticeship, supposing it could be duly revived, would not properly solve the problem of boy labour, for two-thirds of the children as they leave the Elementary Schools enter occupations which lead only to unskilled labour, and provide no adequate training even for that.

Any system which ignores the majority must be regarded as unsatisfactory. The old system of apprenticeship even supplemented by technical training will not meet all the needs of the case.

What is required is that the State should organise a new apprenticeship system providing supervision in all directions until the boy reaches the age of 18.

The three reforms that are most urgently necessary are:

- The raising of the age of compulsory attendance at school to 15 years.
- 2.—The complete prohibition of the employment of school children for wages.
- 3.—The compulsory attendance of lads between the ages of 15 and 18 at some school for at least half a day.

Until quite recently the problems connected with boys and girls have received but scant attention, and yet they are most urgent. Parental control in many homes is almost entirely absent, and there is little supervision in any other quarter over physical and moral development. The boy with his three years' course of special training will be launched into life prepared to meet and to stand the shocks of those great changes which are constantly taking place in the industrial world. It is hoped by these means in time to make "blind-alley" occupations a thing of the past.

#### THE MENTAL DEFICIENCY ACT.

#### NOTIFICATION OF CHILDREN.

The Mental Deficiency Act of 1913 comes into operation on April 1st, 1914. The Board of Education has issued provisional regulations relating to the notification of children. The Medical Officers for the purpose of the regulations are to be the School Medical Officers and such other practitioners approved by the Board of Education under the Defective and Epileptic Children's Act, 1899, as the Local Education Authority may nominate, and are to be called Certifying Officers. The regulations provide for the notification by the Certifying Officer to the Local Education Authority, and by them to the Local Authority under the Mental Deficiency Act, of the names and addresses of children, over seven years of age, incapable by reason of mental defect of receiving or continuing to receive instruction in a "special" school or class, in order that they may be dealt with under the Act. There is provision also for the notification by the Local Education Authority of children receiving instruction in "special" schools who should be placed under supervision or guardianship. In certain cases the notification must be sanctioned by the Board of Education.

#### CONTROL.

At first sight there is everything to be said for, and nothing against, the proposals of the Bill for the segregation of the feeble-minded which was discussed in the House of Commons recently. It is a terrible thing to reflect that many thousands of people are wandering about without the mental equipment needed to make them useful citizens, but with liberty and ability to propagate the race. This is a part of the extraordinary chaos of the grossly unscientific method of our general dealing with the appalling ravages of mental disease, con genital or acquired. Here we are in the presence of the most dreadful plague that can afflict humanity, compared with which cancer is, merciful and consumption a minor ailment, yet we do nothing to cure and combat it beyond the crude quackery of huge asylums and homes for imbeciles.

Surely, it may be argued, it would be better to take charge of those who fall short of perfect sanity, though they are not insane, and by segregation, or other means, prevent them at least from handing on to posterity the evils of which they are the victims. The world is not a happy place for such people, and we should do well to shut them out of it. They are, innocently, enemies of society, and society must protect itself against them. We isolate the sufferer from an infectious di-

sease, and we should apply a similar method to persons who suffer in a way which may be transmitted to others, though it has that quality only in a special sense.

That is all very well, but it may be urged that there are great dangers attached to such measures. Who is to decide whether this or that person is to be deprived of the principal human goods—liberty and the pursuit of happiness? The answer is: "We shall entrust the matter to experts. Certificates from two doctors and a magistrate will be required before a person can be taken charge of, and shut up in an imbecile asylum. He must also have shown signs of being harmful to himself or to others." A great step this towards the time expected hopefully by the grim holders of advanced eugenic doctrines, who hope to marshal us all like cattle in a pen, and mete out life and liberty, or imprisonment or death, just as the stock-breeder selects the calves which he will turn into veal, and those which he will reserve for beef. As such the measure needs to be scrutinised with the utmost care.

For my part, the tendency to inspect us to death is an alarming one. It is quite obvious, too, that all such measures are aimed in the first place at the poor. The new "stud doctors" will be very carefully kept out of the homes of the well-to-do, where mental disease is not unknown, but doubtless they will have statutory access to the workman's cottage, and will be able to drag his family off to confinement without taking his opinion on the matter. In the days to come, if we are not extremely careful, it will be far easier to confine a person to lifelong incarceration than to get another fined five shillings and costs for some petty breach of a bye-law.

The danger is one of putting the absolute control of the lives of others into the hands of selected individuals who certainly are not gifted with the omniscience which such judges of human fate should have. There is a point, of course, when a person must be secluded, not only in the interest of society but in his own, but we must be very cautious how we enlarge the power of seclusion. Take the case of drunkenness or habitual criminality. Is the drunkard or the confirmed thief fit to be at large? "No!" the expert would say, then some other law would be passed and the gaols would overflow. Some would even go further, and even to-day it is possible to hear people speak lightly of such a damnable institution as a lethal chamber to which the experts could consign those who failed to pass their preposterous examinations. Every step which tends to put us further under the control of a scientific or other bureaucracy should be taken only as a matter of urgent necessity. Yet the House of Commons actually jested over the Bill!

# TABLE SHOWING STATISTICS IN ROTHERHAM SINCE THE YEAR 1874.

Year.	Bi	rth Rate.	De	eath	Rate	. Zy	moticD	.R*	Population.
1874		49.33		26.	21		4.70		28,379
1875		47.92		27.	44		5.69		29.319
1876		43.58		20.			3.66		30,149
1877		43.41		18.	98		1.31		31,029
1878		43.97		21.	62		5.94		31,631
1879		41.94		18.	71		1.52		32,091
1880		41.50		20.	16		2.55		34,404
1881		†40.16		17.5	22		1.89		34,782
1882		40.20		20.	98		2.84		35,547
1883		33.32		20.	56		1.99		35,650
1884		42.46		19.	20		3.90		35,650
1885		32.70		18.	26		1.96		35,650
1886		41.95		20.	25		2.61		35,550
1887		37.61		20.	30		2.87		36,000
1888		36.72		18.	10		1.38		36,182
1889		38.60		22.0	65		3.26		36.087
1890		38.39		20.8	84		3.17		37.907
1891		†35.50		24.9	93		3.51		43,000
1892		35.61		19.	00		1.97		44,000
1893		37.13		19.9	91		3.23		46,000
1894		32.00		16.	51		2.08		47,000
1895		36.18		16.	66		1.97		48,000
1896		34.36		15.0	00		1.40		50,000
1897		34.62		18.	33		1.65		51,000
1898		34.32		16.	75.		1.26		52,000
1899		35.90		17.	54		0.92		53,000
1900		36.24		18.3	31		1.62		54,000
1901		†35.26		17.	64		3.57		56,000
1902		34.56		15.	17		1.70		57,000
1903		33.33		17.3			3.19		58,000
1904		32.70		15.8			2.69		59,000
1905		31.91		13.9			1.16		60,000
1906		31.60		16.3			2.16		61,500
1907		32.29		15.			1.39		62,500
1908		32.75		15.6			3.0		64,000
1909		31.78		12.			1.076		65,000
1910		28.21		13.			1.71		66.500
1911		†28.85		16.			3.18		62,700†
1912		29.53		15.			2.22		63,500
1913		30.25		15.	56		1.81		64,500

<sup>\*</sup> Principal Zymotic Diseases.

<sup>†</sup> Census year.

The decay of the upper middle and more capable artisan classes in this country is proceeding with great rapidity, and is already bringing the nation face to face with grave problems. The evidence goes to show that in a single generation the birth-rate per marriage in these classes has shrunk from  $4\frac{1}{2}$  to 2, and now is only half the size required to keep up the numbers of those classes. The evil is aggravated by social reform legislation. This requires money, which is raised by taxation that bears heavily on the middle classes, who meet it by postponing the date of marriage, with the consequence that the size of their families has been reduced. One of the chief effects, therefore, of our present methods of improving social conditions is to bring about a deterioration in the race by eliminating the middle class and promoting the survival of the unfit and defective.

#### BIRTH RATE.

Now that the final quarterly returns for last year are available it is seen that there is little change in the trend of population. The birth-rate is slightly above that of 1912, but with that exception is lower than for any other year on record, and when the average of the preceding decade is reckoned a fall is shown of considerably over two per thousand. In the death rate, too, there has been a small increase over the previous twelve months, with a substantial decline compared with the decade. The preponderance of births over deaths makes the natural increase of population in England and Wales about 375,000, but against this has to be set the loss by emigration No one need, however, have anxiety as to the maintenance of the number of people in this country. The problem is that the decrease is almost wholly among the healthiest and most useful sections of the community, leading to a disproportionate multitude of undesirables. Each year's vital statistics emphasise afresh the gravity of the questions thus raised.

## DECLINING BIRTH RATE. SOME SUGGESTED EXPLANATIONS.

Is there a general decline in fertility amongst Western civilised nations? Is the declining birth-rate an index of physical deterioration? Or why are our families smaller than they were? The marriage rate has scarcely varied during the period under survey; the marriageable age has remained fairly constant, although later marriages are becoming the rule, especially amongst the professional classes, and the population increases, yet the birth-rate declines. All manner of explanations of this singular phenomenon come to mind—the high standard of living and greater love of pleasure, and the consequent shirking of parental responsibility; the higher

education of women and their wider entrance into industrial and professional pursuits; even fear of the pains of parturition have been pressed into the argument; our alleged moral degeneration has been frequently upon the lips of preachers, whilst the view that the most worthy desire to give the fewer children born a better chance than the many had in earlier days is quoted with applause. Some biologists have come to the rescue with the plausible statement, which strongly appeals to our pride, that a lower birth-rate is a sign of our advance in the scale of civilisation, whilst "over-populationists" triumphantly argue that a lower birth-rate actually increases the productive capacity of the nation. Indeed, the catalogue of explanations is limited only by the ingenuity of the makers. But when it is finally exhausted, the one question the answer to which all must dread comes uppermost, not whether the birth-rate is falling, but whether the fertility of our people is failing.

### JEWS AND INFANTILE MORTALITY.

Returns show that infantile mortality is considerably greater in urban than in rural districts. Among the counties the mortality is highest in Lancashire.

Stalybridge is the worst in England and Wales. The rate is 189 per 1,000. Burnley is 171, Farnworth 164, and Ashton-under-Lyne 163. The manufacturing towns in the North of England have a far worse record than London.

The mortality for Manchester is 156. In Cheetham it is only 110, and in Crumpsall 242. The Medical Officer of Health entertains the opinion that the camparative immunity of Cheetham in respect of infantile mortality is largely due to the presence of Jews there.

It must be said in justice to the Jewish community that, although their homes are often poor, and not seldom uncleanly, still the fact that the married women among them stay more at home than some others, that they nurse their own children from the breast up to a proper age, and that drunkenness is little known among them, are all circumstances which give to the Jewish community an almost enviable pre-eminence in exemption from this particular evil.

There are a number of causes of infantile death which it is difficult to determine with any exactitude, known as overlaying. One finds only too many records of children found dead in bed, and a curious circumstance established by a doctor, is that the great preponderance of them occur on Saturday nights. This seems to show that the cause of death is not inseparable from the evil of intoxication.

The following table gives the infantile mortality rate in Rotherham for the past 11 years:—

1903		 187
1904		 164
1905		 123
1906		 158
1907		 146
1908		 142
1909		 116
1910		 130
1911		 161
1912	٠	 119
1913		 144

## SHOWING THE DEATH RATE AND THE INFANTILE MORTALITY RATE, &c., IN THE VARIOUS WARDS DURING 1913.

Ward		No. of Houses	Estimated Population	Births	Birth Rate	*Deaths	Death Rate	*Deaths under one year.	Infantile Mortality Rate per 1000 births
East	 	1258	5953	182	30.57	67	11.25	28	154
St. Ann's	 	1901	8984	298	33.17	107	11.91	40	134
Clifton	 	1188	5590	124	22.08	42	7.51	11	88
South	 	1351	6422	129	20.18	79	12.30	14	108
West	 	1058	4967	168	33.82	75	15.09	23	137
North	 	1783	8380	259	31.02	94	11.21	29	112
Thornhill	 	1677	7882	269	34.12	107	13.56	44	163
Masbro'	 	1762	8306	291	35.03	128	15.41	41	141
Kimberworth	 	1704	8016	225	26 82	92	11.47	33	146
Total	 	13682	64500	1945	30.15	791	12.26	263	135

<sup>\*</sup>These columns do not include the deaths in the Workhouse and Hospitals.

#### OLD AGE.

## THE SHORTENED LIVES OF DISTINGUISHED PEOPLE.

#### LONGEVITY OF WOMEN.

In England, when one is new-born, one may legitimately "expect" to live forty-five years; having reached 20, one may expect 43 more years of life; at 40 the "expectation" is 27; at 60, only thirteen; at 70 only eight; at 90 as much as two; and even at 100 yet one year more!

Women have a slightly better prospect of long life than men. Thus at 60 years of age they have an expectation of fourteen instead of thirteen years. It is found that married women have a prospect of somewhat longer life than unmarried. It not only (as some people say) seems, but actually is, longer.

It appears from such statistics as have been gathered that agricultural labourers in rural districts have at 60 the best prospects of long life of any class—three or four years better than the general population; females of the aristocracy come next; whilst business clerks are more than a year below the common figure.

Distinguished people have somewhat shorter lives than undistinguished people; they have to pay for their success.

### NUMBER OF INQUESTS HELD DURING 1912 AND 1913.

	1912		1913
Natural Causes	29	1000	33
Colliery Accidents	9		13
Accidentally Burnt	13		7
Accidentally Scalded	3		
Accidentally Crushed	4		2
Accidentally Drowned	6		0
Accidental Suffocation	5		3
Accidental falls in Sts. & blds.	4		11
Run over by Dray	1		2
Blood Poisoning result of injury	1		0
Railway Accidents. Knocked		100	
down by Train	2.		5
Found Drowned	1		4
Suicide by Hanging	2		3
Suicide by Drowning	3		2
Suicide by Cutting Throat	1		0
Suicide by Poisoning	0		1
Accidentally Poisoned by Gas	1		0
Accidentally Shot	1		0
Electric Shock	1		0
Run over by Motor	2		2
Ptomaine Poisoning	1		0
Found Dead	1		0
Accidental Fall	1		0
Wilful Murder	3		0
Accidentally buried in Dirt	0		1
Accidentally Choked	0		1
Motor Car Collision	0		1
Injury to Head (cause unknown)	0		1
Manslaughter	0		1
Run over by Traction Engine	0		2
	-		
Totals	95		96

#### PRIVY CONVERSIONS.

Satisfactory progress has been made during the past year with these filthy abominations. Sixty-three have been converted during 1913, leaving only 74 which were certified to be a nuisance by me in May, 1910. Considering that there were 1499 in existence on that date, I can only repeat what I said in my report last year that the way in which landlords and owners of property have responded to the notices served upon them has been most praiseworthy. I must again repeat that all this work has been completed without any cost to the rate-payers generally.

On referring to page 29 of this Report it will be seen that only 23 cases of Enteric (Typhoid) Fever were reported in Rotherham during the year 1913, and how this compares with previous years.

This is the lowest ever recorded and shows how a preventible disease—such as Enteric Fever—can be prevented by improved sanitation generally and a pure water supply.

Formerly Enteric Fever was more prevalent in larger towns than in country places. The reverse is now the case. This change has been brought about entirely by the vastly improved condition of sanitation when compared with what has been done in rural districts.

PRIVY CONVERSIONS DURING, 1913.

	-											
	Number	27	67	8	4	1	5	1	55	5		74
	Nu	:	:	:	:	:	:	:	:	:		
G 191	Total	က	1	15	67	1	11	2	14	16	1	63
URIN		:	:	:	:	:	:	:	:	:		
LED D	4th quarter	1	1	1	1	1	1	1	1	C7	-	C3
IVER		:	:	:	:	:	:	:	;	:		
NUMBER CONVERTED DURING 1913.	3rd quarter	1	1	7	1	1	1	1	60	1		12
UMBE		:	:	:	:	:	:	:	:	:		B
N	2nd quarter	67	1	9	1	1	4	67	1	14	-	87
	6	:	:	:	:	:	:	:	:	:		
	1st quarter	1	1	61	1	1	9	1	11	1		21
		:	:	:	:	:	:	:	:	:		
	No. outside drainage area	1	1	67	1	1	2	1	12	145	1	165
		:	:	:	. :	:	:	:	:	:		
	No. not certified by M.O.H. as a nuisance	31	15	9	60	හ	41	7	7	5	-	115
	No. 1 fied b	:	:	;	:	:	:	:	:			
No. of privies in respect of	which notices were served (May, 1910)	280	162	123	130	109	203	124	91	277	-	1499
No. of privie in respect of	which notic were served (May, 1910)									th	,	Totals 1499
	Ward	East	St Ann's	Clifton	South	West	North	Thornhill .	Masbro'	Kimberworth		Totals

#### BLACK SMOKE NUISANCE.

A system might with advantage be started in Rotherham of serving informal notices immediately after the excessive emission of smoke has been noticed, with the object of enabling a manufacturer to deal with the matter at once.

This practice would probably have the advantage of getting smoke nuisances abated more promptly, and might reduce the number of prosecutions if the Committee intend to take such drastic proceedings.

Smoke observations take a long time, and if this question is going to be tackled satisfactorily, it will be necessary in the first instance to appoint a properly qualified Smoke Inspector to devote his whole time to the duties of the office.

During the year 1913, 21 smoke observations were taken in Rotherham. No prosecutions took place.

This question is still under consideration by the Committee.

#### SMOKE ABATEMENT.

Any proposal for the legislative abatement of the smoke nuisance is certain to bring irate defenders of smoke on the warpath, and such was the treatment accorded to Lord Newton's modest little bill. The measure is based on the quite correct assumption that excessive smoke is caused, generally speaking, by improper and uneconomical construction of furnaces, and careless use of furnaces; Lord Newton, therefore, seeks to insist upon proper construction, and to place upon persons charged with causing undue smoke the burden of proving that they have been using their furnaces with care. Industries that would be crippled by these provisions may receive exemption after enquiry; this ought to silence Rotherham objections to the proposal, although I do not suppose for a moment that it will. Smoke is so great an evil in any case, and as most people believe—so unnecessary an evil in many cases, that any attempt to check it in a reasonable and legitimate way is to be encouraged.

### DISINFECTANTS-THEIR USE AND ABUSE.

In few departments of hygiene have absurd generalizations been so prevalent as in that of disinfection. "Disinfectants" or substances labelled as such, are still widely employed under conditions which a moment's reflection would show to be utterly incompatible with any real efficacy. Passing over such trivialities as "fumigation" by burning brown paper or green sticks,

we have the wholesale employment of deodorants and antiseptics under the name of disinfection, unsupported by any scientific evidence of their utility. The few true disinfectants in general use are commonly employed under such conditions as to quantity, concentration, and duration of exposure, that little benefit can result from them. Earth is popularly supposed to be a universal disinfectant, and yet earth abounds in microbes, some of which are pathogenic. Indeed, the very nitrification upon which the purifying action of the earth is so largely dependent is in great part due to the life and growth of microbes. It is often asserted that the danger of infection by diseased meat is exaggerated, because the process of cooking must destroy any microbes that may be present. Even as regards microbes, the temperature in the interior of joints obviously may fall far short of that required for disinfection, and the ptomaines and unorganised ferments (toxins) are in all probability uninjured by ordinary cooking. The gastric juice also is credited with a disinfecting power much greater than the evidence warrants. The "comma" bacillus and many others are destroyed by it, but spores may escape. Sarcinae and other microbes may be found in abundance in the stomach itself, fully exposed to the alleged germicidal gastric juice; and in the intestine, millions of microbes are always present. Moreover, it is now established beyond dispute that tuberculosis and other diseases are communicable to animals by means of the alimentary canal.

Attempts are often made to "disinfect" sewers and drains by flushing them with solutions of chloride of lime, carbolic acid, or ferrous sulphate. A little consideration will render it clear that any real disinfection of this kind is wholly impracticable even if true disinfectants such as strong solutions of mercuric chloride are used. The reagent is quickly diluted by the contents of the drain, and rapidly passes away without coming even momentarily into effectual contact with the whole of the material and surfaces it is supposed to disinfect. If the drain or sewer is properly constructed, thorough flushing by water will be more effectual than the use of disinfectants.

It was the custom in Rotherham a few years ago to give disinfectants indiscriminately to any one who asked for them. Now they are only supplied free to houses in which a case of infectious disease has been reported. The result has been that in place of an annual expenditure of £150 per annum, there has been an actual profit. The value of so called disinfectants is greatly over rated. Nothing is equal to cleanliness. The following table shows the profit for the year ending March 31st, 1914.

#### DISINFECTANTS.

													5	Sto	ck on			
					So	old		Gi	ven					Apl	. 1st,			
		Co	ost		fo	r	8	nd	used	1	V	Vort	h	19	14	1	Wor	th
	4	e s	d		g s	d	Gal	. Qt	.Pt.	Oz.	£	S	d			£	s	d
Chloros	31													.65	Galls	6	10	0
Izal and																		
Sanitas	28	0	0	.17	6	1	108	3	1		27	4	41	62	Galls	15	0	0
Disinfecti																		
Fluid	17	6	6	.18	14	0	1	3	1		0	7	6	64	Galls	12	16	0
Bottles	6	$\epsilon$	0	. 5	8	0								79	Bott.	0	6	7
Sulphur																		
Candles	1	6	6	. 0	17	9							18	37 (	Candl	es 2	6	9
Formalin	2	19	3															
	87	12	5	88	7	0				1	29	1	$5\frac{1}{2}$			36	19	4
Others	35	15	10	.88	7	0												
					1	51												
	123	8	3	36	19	4												
				154		91												

#### FLIES AND ACCUMULATIONS OF MANURE.

Strong circumstantial evidence has been accumulating in recent years of the harmful influence of flies upon the public health. It is essential, therefore, that every effort should be made to limit the breeding grounds of these pests. Masses of decomposing material should no longer be permitted to accumulate in any well-administered community. Household refuse and stable manure should be removed from the proximity of dwellings and suitably dealt with at short intervals. Existing midden steads should be completely emptied at least once a week.

They should have a smooth internal surface to prevent the breeding of flies in crevices and they should be frequently limewashed in the summer and autumn to destroy the eggs of flies. There is on record an instance where the removal of a manure midden resulted in a few days in the number of flies caught in a neighbouring house being reduced to one-tenth of the number previously caught.

#### RAINFALL.

The following information with reference to the Rainfall in Rotherham during the year 1913, has been kindly supplied to me by Mr. Kershaw, the Sewage Works Manager. The details were taken at the Corporation Sewage Works.

			No. of Wet	Rain- fall in	Maximum daily	fall
			Days	inches	Day	Inches
January	 	 	18	2.69	Saturday, 11th	.93 snow
February	 	 	12	.80	Friday, 7th	.21
March	 	 	18	2.48	Saturday, 22nd	.40
April	 	 	17	2.88	Monday, 28th	.61
May	 	 	9	1.94	Tuesday, 6th	.60
June	 		10	.49	Saturday, 7th	.25
July	 	 	4	1.16	Sunday, 6th	.79
August	 	 	6	1.46	Friday, 22nd	.70
September	 	 	10	2.69	Wednesday, 17th	1.86
October	 	 	11	3.74	Sunday, 5th	1.01
November	 	 	16	1.92	Friday, 21st	.38
December	 	 	6	1.29	Monday, 29th	.34 snow
	11-10		137	23 54		

Public Analyst's Laboratory, 67, Surrey Street, Sheffield.

Report on a sample of Drinking Water received from Dr. A. Robinson, Medical Officer of Health, Rotherham, on March 31st, 1914. Sample Mark:—"From Public Health Dept. Tap, Rotherham Town Supply."

#### Physical Characters: -

Parts per million

Suspended Matter: Traces.

Appearance of a Column two feet long: Slightly cloudy-vellowish.

Taste: Normal. Odour: None.

On Analysis, the Sample gave the following results:-

Total Solid Matter, 8.96; which lost on ignition, 2.80 grs. Chlorine, 1.00; equal to Sodium Chloride, 1.65 grs.

Nitrogen in oxidised forms, Trace; equal to Nitric Acid (anhydrous), — grs.

Poisonous Metals (Lead, etc.), none.

Degrees of Hardness, 4.40 (Each degree of hardness represents a soap-destroying power equivalent to one grain of chalk per gallon.)

Reducing Power, 0.80. (Representing the Oxygen absorbed by the organic and other oxidisable matters

in one million parts of water.)

Free and Ureal Ammonia, 0.03 parts per million. Albuminoid Ammonia, 0.06 parts per million.

These results are satisfactory. They show the water in its present condition to be free from other than normal traces of readily changeable organic matter, and negative any suspicion of contamination.

G. E. SCOTT-SMITH.

April 2nd, 1914.

Public Health Laboratory, York Place,

Manchester.

# BACTERIOLOGICAL AND OTHER EXAMINATIONS MADE DURING THE YEAR 1913 FOR THE COUNTY BOROUGH OF ROTHERHAM.

Nature No. of Samples L.B. 5957. W.B. 1108-9, Water 4 C.B. 1372-3 ... ... ... L.B. 6019. C.B. 1395, 1397, Water 2 L.B. 6032. W.B. 1134, 1135, Water 2

#### PRESERVATIVES IN MILK AND CREAM.

With the introduction of substances having antiseptic properties, the producers of foodstuffs which decompose more or less rapidly were not slow to realise the value of such substances to their wares. This was especially the case as regards milk and cream. Boron preservatives, formaldehyde, and other substances rapidly came into use and were employed with no unsparing hand without having any regard to the interests of the consumer. After making careful enquiries and investigations into the merits of the case, with a view, on the one hand, to safeguarding the interests of the consumer, and, on the other, to limiting any possible injury to those engaged in the milk and cream trade, the Local Government Board has now made regulations under the Public Health Act, 1896, with regard to the addition of preservatives to milk and cream.

As regards milk, whether from the cow or separated, skimmed, condensed or dried, the regulations provide that no preservative shall be added to it, if it is intended for human consumption. By the expression "preservative substance" is meant any substance, preparation or solution which when added to milk or cream is capable of retarding the onset of sourness or decomposition or is capable of neutralising acidity (sourness) in milk or cream. An exception is made with respect to cane or beet sugar, neither of which will be regarded as preservatives.

In August, 1909, an exhaustive report was made to the Local Government Board by Dr. J. M. Hamill, on the use of preservatives in cream. In that report it was pointed out that the indirect trade in cream had assumed large dimensions and was still increasing, with the result that cream was now sold in districts where it would be impossible to obtain it if a direct supply had to be relied upon. It was asserted that this indirect supply would have to be discontinued, and the whole of the jug cream trade would be swept away if the use of preservatives were altogether prohibited. Having this report in mind the regulations provide that there shall not be added to cream or preserved cream any thickening substance or to cream containing less than 35 per cent. by weight of milk fat any preservative substance. To cream containing 35 per cent. or more by weight of milk fat, it will be permissible to add as a preservative, boric acid, borax, or a mixture of the two, or hydrogen peroxide. The thickening substances referred to are sucrate of lime, gelatine, starch paste or any other substance which when added to cream is capable of increasing its thickness. As in the case of preservatives, cane or beet sugar will not be regarded as thickening substances.

The regulations provide that every receptacle containing preserved cream intended for human consumption shall have on it a label of a prescribed size setting out the fact that the contents are preserved cream containing boric acid or peroxide as the case may be, and if a boron preservative is used the amount calculated as boric acid must be stated. Where preserved cream is used in a public refreshment room, restaurant, or similar place there must be placed in a conspicuous position or on the bill of fare an intimation that the cream supplied

for consumption on the premises is preserved cream.

The regulations very properly apply not only to milk or cream produced in this country, but also to that which may be imported, and the officers of customs and excise are empowered to take samples of consignments of imported milk or cream, or of articles resembling milk or cream, for the purpose of examination.

## PURE MILK AND CREAM. NEW REGULATIONS COMING INTO FORCE.

When the strawberry season is ushered in the fruit will be served with thick rich cream fresh and unadulterated.

The new regulations of the Local Government Board concerning milk and cream came into force on June 1st, 1913, just in time, as it were, to welcome the fragrant berries. Besides providing that no preservatives be used in milk, they prohibit the addition of any thickening substance to natural cream. As regards "preserved" cream, the regulations specify the chemical preservatives that may be used, and in what quantity.

The manager of a large dairy, where preservatives are never used, said that the new regulations would certainly help to contribute to the health of the community.

"Of course the use of preservatives in milk is fatal," he said, "but as regards cream a great many dairies use certain chemicals to preserve it, and in many cases one is not certain whether the cream is naturally fresh or not. Now it will have to be labelled."

SUMMARY OF SAMPLES PURCHASED UNDER THE SALE OF FOOD AND DRUGS ACT AND PROCEEDINGS TAKEN THEREON AND RESULTS OF PROSECUTIONS.

No.		ticle alysed		Resu	lts		Penalties	Costs
7	Milk			Milk Fat Non-fatty Water		 8.06	£ s d Letter of Town	£ s d Caution from Clerk
45	Milk			Milk Fat Non-fatty Water			Letter of Town	Caution from Clerk
57	Milk			Milk Fat Non-fatty Water		 2.75 8.96 88.29		Caution fron Clerk
77	Milk			Milk Fat Non-fatty Water		 7.84 89.00	Letter of Town	Caution from Clerk
125	Milk			Milk Fat Non-fatty Water	Solids	 	Dismissed ment of	on pay- 0 19 6
			H			100.00		0 19 6

## SUMMARY OF SAMPLES PURCHASED UNDER THE SALE OF FOOD AND DRUGS ACT DURING THE YEAR 1913.

No,	Nature	of S	amp	ole.	Pure	Adulterated	Summonses Issued	Dismissal or withdrawn	Convictions	Penalties	Costs	
00							10000			£ s. d.		d.
93	Milk				 88	5	1		*		0 19	6
6	Milk, separ	ated	***		 6				***		•••	
12	Butter	***			 12							
9	Lard				 9							
3	Cheese				 3					***	•••	
1	Margarine				 1						***	
3	Pepper				 3						***	
1	Castor Oil				 1							
128												
	Inform	al Sa	mpl	es.								
3	Margarine				 3							
3	Butter				 3							
2	Cream				 2							
136		-	-		131	5	1				0 19	6

#### WHY FOOD IS DEARER.

The Blue-book on the cost of living issued during 1913 by the Board of Trade has demonstrated that the sovereign of the working man's wofe is only worth as much as 15s. was seventeen years ago.

To a considerable extent this is the fault of the wife. She cannot control the international currents of supply and demand, and trusts are out of her reach, but she helps to keep up prices against her own household by competing for a small variety of commodities which thereby become dear, and by ignoring and therefore discouraging the supply of other foods which are cheap.

The poorer the housekeeper the more she pays for her food. She buys chops and steaks and snacks instead of investing in an economical joint. She buys two rashers of bacon at a time, though bacon is the dearest food in the market, and there is, of course, nothing left over as the foundation of a future meal. She buys tinned salmon and tinned lobster, which is like eating money. Thirty years ago a tin of lobster cost  $6\frac{1}{2}d$ . It is now 2s.2d., with no visible prospect of a decrease.

She does not know what a stock-pot is. She will not look at lentils, a most nourishing stiffener of broth, which

can be bought at seven pounds for a shilling. She never dreams of putting suet dumplings into broth, or of serving them with treacle. They are excellent food for growing children, but few, except the children of the middle classes and the well-to-do, get them. In how many poor households do you see porridge? Yet oatmeal can be bought for 2d. and  $2\frac{1}{4}d$ . a pound. Then she buys tea which is very dear— $2\frac{1}{2}d$ . or 3d. a pound dearer than it was a few years ago, and not so good. A pennyworth of cocoa will provide a beverage for four or five people, and it is a good thing to work on when served with milk and sugar.

We "eat too soft." We have dropped into absurdly narrow grooves in our choice of food. We all want the same few things. The demand outpaces the supply, and, therefore, prices climb up. Whenever there is a national shortage in a popular commodity its cost runs to a fancy figure. Sugar is so cheap at present that I should recommend a liberal consumption of jam, which is both cheaper and better than many of the margarines.

There is a wastage in buying that is quite as serious as a wastage in cooking. Why not communal kitchens?

Twenty-six years ago in that notable book "Looking Back-ward" Mr. Bellamy described his vision of a group of families living in a great house. Two meals a day they provided for themselves. Dinner came from the common kitchen. "We put in our orders the night before, selecting anything in the market according to the daily reports in the newspapers. The meal is as expensive or as simple as we please, though, of course, everything is vastly cheaper as well as better than it would be if prepared at home. Our washing is all done at public laundries, our cooking at public kitchens. We have no use for domestic servants."

It sounded fantastic at the time, but Mr. Ebenezer Howard has turned it into fact at Letchworth, the Garden City. He has described how sixteen private dwellings have in common a kitchen, a dining-room, a tea-room, a smoke-room, a reading-room, and a garage for cycles. He has foreshadowed an elaboration of the scheme, so that forty-eight artisans' cottages in an industrial district shall be grouped with similar communal advantages, including allotments, a crèche, a play-ground for children, and a wash-house. The main cooking is to be done in the general kitchen, which is to be furnished with the best labour-saving appliances. The food would be bought wholesale and supplied to the tenants at cost price.

With a combination of the two ideas—a wider and more intelligent choice of food together with co-operative purchase and cooking—it would be strange if the housewife's sovereign did not become worth more than 15s.

## DIRTY AND DESTRUCTIVE TENANTS. HOUSING IN ROTHERHAM.

Northern towns are heavily burdened in their public reputation by the gravity of crime and the badness of housing.

It should be the duty of the Mayor and Corporation to attack the source of crime by improving, so far as they have power under the law, the conditions of living in Rotherham. The duty of the citizens is to support the Corporation loyally in their efforts, to let them know that they are grateful to them for their labours, and honour them for every measure of unpopularity which they may bring upon themselves in the course of their efforts.

During recent years the Mayor and Corporation have done much to improve housing in Rotherham, in some cases causing demolition or closing, in many more there is a substantial improvement in the tenements where the poorest townspeople are herded together. It is unhappily the case, here as elsewhere that the good work is grievously hindered by the bad conduct of the people primarily concerned. The reckless destruction of landlords' property by the worst kind of tenant is very discouraging to well-intentioned landlords and offers a serious obstacle to the necessary and indeed urgent work of improvement. It would be well worth consideration whether the law as it stands is adequate to deal with the cases of these degraded and destructive tenants who must be housed somewhere, but whose habits are so bad that such housing as they prefer can scarcely be tolerated in a self-respecting community. The law, bringing home its demands by sharp penalties, is perhaps the only moral teacher some of them can appreciate.

#### DESTRUCTIVE TENANTS.

Destructive tenants are occasionally—of course—innocently humorous. The following story which is true is a good example. A certain extensive owner of cottage property recently and very reluctantly converted some stinking privy middens into up-to-date water closets, and in a sudden fit of generosity provided a mahogany lid and seat to each, to give the job a good finish. He visited his property shortly afterwards and asked one of his tenants how she liked the new arrangement. She replied that she thought the earthenware was rather cold

to sit upon. "What" said the astounded landlord "I provided you with a most expensive mahogany seat and lid." "Oh!" quoth the good woman, "that accounts for our new piece of furniture in the parlour. You see our Bill had his likeness taken last week, had it enlarged and used the mahogany seat for a frame! Please come into the parlour and you can see it for yourself hanging on the wall, and it does look grand!! It was good of you to make us such a handsome present!!!"

## PERSONS EXAMINED FOR CERTIFICATES OF FITNESS FOR EMPLOYMENT IN FACTORIES OR WORKSHOPS, 1913

	Ex	amii	ned	Ce	rtific	ed	R	ejecte	ed
Age-Class in which employment was sought	Male	Female	Total	Male	Female	Total	Male	Female	Total
Children or Young Persons presented as being— Under 14 years of age intended to be employed half-time Between 13 and 14 years of age intended to be employed full-	2		2	2		2			
time							6	3	9
Between 14 and 16 years of age	659	118	777	653	118	771	6	1	6
Total	1042	151	1193	1030	148	1178	12	3	15

#### CAUSES OF REJECTION.

Cause					Number of Young Persons and Children rejected
A-Medical Reasons:		1.3	-		
Defective sight, disease of eyes					3
Anæmia, debility					1
B-Non-Medical Reasons:					
Under legal age					10
Non-production of certificate or oth	ner evi	dence o	of age		1
				1	
T	'otal				15

#### DANGEROUS TRADES—PARTICULARS OF DUTIES PERFORMED.

Industry	Each E	xamination xamination r is to be co	of each
	Males	Females	Total
Earthenware and China: Dipping, &c Lifting Weights in Potteries	147 4	62 9	209 13

# WORKMEN'S COMPENSATION ACT, 1906, during the Year 1913.

1—Certificates given in pursuance of Section 8 and the Regulations made thereunder

Description of Disea	espect made	of which	ch appl	lication	1	Certificates of Disablement
Nystagmus (Miners)	 					62

2-Employments of the Workmen, in respect of whom Certificates of Disablement and Suspension were given.

	Name o	f Emp	oloymer	nt		No. of Certificates given to Workmen
Coal Mining					 	62

#### INSPECTION OF WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

	Number of			
Premises	Inspec- tions	Written Notices		
Workshops (including Workshop Laundries) Workplaces (other than Outworkers' premises included in Part 3 of this Report)	122	1		
Total	122	1		

### DEFECTS FOUND IN WORKSHOPS AND WORKPLACES,

					Number	of Defects
Par	ticula	rs			Found	Remedied
Nuisances under the Pub Want of cleanliness	olic He	alth .	Acts:	 	8	8
Want of ventilation				 		
	Total	1		 	8	8

### HOME WORK.

Outworkers' List, Section 107.

	List received from Employers						
Nature of Work	Sending tw	ice in the year	Sending once in the year				
Nature of Work		Outworkers		Outworkers			
	Lists	Workmen	Lists	Workmen			
Wearing Apparel : Making, &c File making	6	54	4 1	4			
Total	6	54	5	- 5			

### REGISTERED WORKSHOPS.

D-1-1	EE
Dalahanga	55
Bakenouses	7
Total number of Workshops on Register	62

### OTHER MATTERS.

2: 11	
	2
	Factory and

## ANIMALS SLAUGHTERED AT THE PUBLIC ABATTOIR DURING 1913.

_			
Beasts	 	 	 3766
Calves	 	 	 106
Sheep	 	 	 7727
Lambs	 	 	 678
Pigs	 	 	 1029
			19906

13306

INSPECTIONS. Yard to Yard and Miscellaneous Visits... 7510 Complaints Investigated ... ... ... Re-visits re Complaints ... ... 445 ... 443 Visits re Sanitary Alterations (with Builders, etc.) 53 Inspections of Work in Progress 658 Visits to:-Canal Wharf (Inspection of Boats) 116 50 Cattle Market ... ... ... Common Lodging houses ... Dairies, Cowsheds, and Milk Shops 163 Fish, Fruit and Vegetable Markets 100 Slaughter-houses ... ... ... 2641 Tripe Boilers' Premises ... 88 Bakehouses ... ... 35 Workshops 122 ... Cases of Infectious Diseases Investigated 466 Re-visits re Disinfection, etc. ... ... 9 Visits re Diseases of Animals ... 230 Number of Houses Disinfected 500 Number of Schools Disinfected Number of Drains Tested ... ... 183 Smoke Observations ... ... ... 21 Number of Reports to Water Engineer of Wastes of Water ... ... ... 29 Number of Samples of Food and Drugs taken for Analysis ... ... ... 136 NUISANCES ABATED. Number of Drains Opened, Cleansed, Re-laid, Trapped Ventilated, etc. ... ... ... ... ... 452 Number of Water Closets Opened, Cleansed, and Repaired ... ... ... ... 264 Number of Privies converted into Water Closets 63 Number of Ashbins Provided ... ... ... 527 Number of Roofs or Spouting Repaired ... Number of Stagnant Waters removed from Cellars, etc. 31 Number of Manure and Offensive Accumulations removed 24 Number of Cases of Overcrowding Abated 9 ... Number of Yards Paved or Asphalted ... 14 Number of Pig-keeping Nuisances Abated ... 7 Number of Nuisances from Fowl and Pigeon-keeping 16 Abated 2 Number of Dirty Houses Cleansed ... 27 Number of Rain Water Pipes Disconnected ... Number of Swill Tubs Removed ... 13 Number of New Sink Pipes Provided ... 10 ... Number of Sinks Provided ... ... 1

### CANAL BOATS.

During the past twelve months thirty-seven Canal Boats have been inspected, all of which were found to be in a fairly clean condition, and no infringements of the Regulations were detected. No cases of infectious disease were found on any of the vessels.

The number of children found on board during the year was as follows:—

1 year					5
6 years					1
7 years					1
9 years				• • • •	3
12 years					1
16 years					1
					12
Number of	Private S	Slaughte	er-house	s	27
Number of				Maria I	24
Number of	Milk Sho	ps			65
Number of				s	9
Number of	Offensive	Trades			9

### PULMONARY TUBERCULOSIS (PHTHISIS).

The following table gives the number of cases notified and the number of deaths that have occurred, together with the death-rate per 1,000 living, during the past 15 years in the Borough of Rotherham:—

		Cases	Death-rate
Year	Deaths	notified	per 1000
1899	 56		 1.06
1900	 55		 1.02
1901	 42		 .75
1902	 45		 .79
1903	 43		 .76
1904	 39		 .66
1905	 45		 .75
1906	 36	 64	 .58
1907	 48	 98	 .76
1908	 62	 91	 .97
1909	 44	 131	 .69
1910	 51	 70	 .77
1911	 52	 136	 .83
1912	 55	 118	 .87
1913	 68	 153	 1.05

### SANATORIUM SCHEMES.

The Local Government Board have issued to county and borough councils a further circular with reference to the maintenance grant towards the cost of sanatorium schemes, together with a memorandum outlining the arrangements they propose to adopt for its distribution.

Local Authorities are reminded that the grant is available only in respect of schemes which have been approved, and those councils which have not yet submitted a scheme are urged to do so at the earliest possible date. It is pointed out that the scheme should relate to the whole population of the area, and that the services of the officers and institutions to be provided under it should be available for the treatment of all classes, whether insured or not. The Board consider it important that the agreement to be made by the Local Authority and the Insurance Committee should secure to the former a minimum annual sum. Where the scheme will involve any considerable capital expenditure, the agreement should generally be for a term of years not less than the period for the repayment of the loans to be raised by the council.

Dispensaries and other institutions in which insured persons recommended for sanatorium benefit are treated require the approval of the Board, and in cases in which temporary dispensaries are proposed and no expenditure is contemplated on structural alterations or additions, the Department will be willing to give temporary approval, where this is urgently required, without awaiting the receipt of plans and detailed particulars. Wherever practicable, arrangements should be made for linking up the dispensary with a general hospital or a hospital for consumption to which specially difficult cases should be referred.

A complete scheme of institutional treatment should, it is pointed out, include arrangements for the treatment of persons whether insured or non-insured, suffering from non-pulmonary tuberculosis, and the maintenance grant will be available in aid of the cost of this treatment. The Board are aware that there is considerable difficulty at the present time in formulating detailed proposals for the treatment of such cases, since the amount of hospital or sanatorium accommodation which may be needed cannot yet be accurately estimated, but they consider that information enabling the local authority to gauge to some extent the needs of their area in this respect may be obtained by means of the notification of cases under the Public Health (Tuberculosis) Regulations, 1912, and through information derived from the dispensaries.

It is suggested that the dispensaries may with advantage be utilised for treating some cases of non-pulmonary tuber-culosis, and that arrangements should be made, wherever practicable, for the treatment of suitable cases in general and special hospitals not provided by the council. The Board of Education should be consulted in regard to the provision of treatment for children suffering from non-pulmonary tuber-culosis.

Hospital Beds, as distinguished from sanatorium beds, are required: (a) for the treatment and isolation of advanced cases; (b) for the treatment of "emergency" cases, presenting acute manifestations of disease; (c) for patients needing observation for the purpose of diagnosis or for determining the form of treatment; (d) for patients for whom a short course of educational treatment is considered desirable, and (e) for patients requiring operative or other special surgical treatment.

The provision of beds for most of these classes of cases may properly be made in the same institution, but it will usually be desirable to make arrangements with general hospitals for the treatment of cases in the last class. In general, the Board consider that beds for the purposes of observation should be provided elsewhere than at dispensaries, as the cost of maintenance of beds at dispensaries will probably be found to be excessive, and difficulties may arise in regard to administration.

Having defined the procedure to be adopted for the payment of capital grants, the circular concludes: "It is desirable that in course of time schemes for the institutional treatment of tuberculosis established by county and county borough councils should be developed so as to make provision for all classes of the community, including poor-law cases. The maintenance grant of one-half of the net annual cost of such schemes has been provided with a view to encouraging development in this direction. The concentration in the hands of one authority of the institutional treatment of tuberculosis in any area should lead to increased efficiency and should ultimately result in some economy."

## THE DOMICILIARY TREATMENT AND DISPENSARY SUPERVISION OF TUBERCULOSIS.

Since the domiciliary treatment and dispensary supervision of the tuberculous are to form a large part of the present campaign against tuberculosis, it should be useful to consider these two elements in detail, to note their points of contact, to enquire into their mode of re-action the one on the other, and to find out how best they can be combined so that each may take its proper place in the organised scheme and so give its maximum possible yield of accomplished work. Domiciliary treatment of tuberculosis is no new thing, for so long as there have been phthisical patients and medical men so long have the vast majority of these patients been treated at home. Dispensary supervision on the other hand is something new; and, if we desire, as we should, to blend the old with the new in such a manner as to produce a harmonious and efficient combination, it behoves us to examine each—the long practised and the newly evolved—critically. The knowledge acquired from such a critical examination will make the adjustment of their respective functions a comparatively easy matter.

It may pertinently be asked, what is this dispensary supervision, and what is this domiciliary treatment about which we have heard so much lately? I think it would be difficult to give a complete and yet concise definition; but so far as domiciliary treatment is concerned, we may turn for general guidance to the Local Government Board's "General Order, Domiciliary Treatment of Tuberculosis" of July, 1912. This order related to the approval by the Local Government Board of arrangements made "with persons and Local Authorities" by Insurance Committees "with a view to providing treatment otherwise than in sanatoria or other institutions for insured persons suffering from tuberculosis." Under the National Insurance Act, 1911, Insurance Committees are directed to make such arrangements, and these, according to the Act, must meet with the satisfaction of the Insurance Commissioners and must have the approval of the Local Government Board. The order stated that the Board approved of such treatment (i.e. domiciliary treatment) provided that it was undertaken in such a manner as to comply with certain regulations contained in the body of the order. As there is unfortunately a degree of doubt in many quarters as to the obligations undertaken by those "persons and Local Authorities" who have agreed to provide domiciliary treatment. I think that it will not be a waste of time or space to quote these regulations at length. They constitute Article II. of the order, and are as follows:-

"The treatment (i.e. domiciliary treatment) shall be carried out under the care and direction of a Medical Practitioner subject to the following conditions, and to such other conditions as we may in any case from time to time approve; that is to say:—

(1) "That the Medical Practitioner attend each patient at such intervals as may be necessary in the interest of the patient"

of the patient."

(2) "That the Medical Practitioner give the patient such instructions as are required as to his mode of living diet, rest and work, and as to precautions necessary to protect the patient against re-infection."

- (3) "That the Medical Practitioner keep, on a card or sheet, in the form set out in the Schedule hereto, a continuous record of the clinical history of the illness of each patient and particulars of the treatment given to the patient under his direction."
- (4) "That the Medical Practitioner submit the said card or sheet to the Consulting Officer at such times as may be arranged between them."
- (5) "That the Medical Practitioner prepare and transmit to the Consulting Officer at such times as may be arranged between them, not being less often than once in three months, a report in regard to each person, giving particulars as to:—
  - (a) The progress of the patient.
  - (b) Whether the conditions under which the patient is living and receiving the treatment are satisfactory.
  - (c) The behaviour of the patient in carrying out instructions given to him; and
  - (d) Whether, in the opinion of the Medical Practitioner, any form of institutional treatment has become desirable."
- (6) "That the Medical Practitioner confer with the Consulting Officer at such times and in such circumstances as may be arranged between them in regard to patients under the care of the Medical Practitioner."
- (7) "That the Medical Practitioner from time to time inform the Medical Officer of Health of the Sanitary District in which the patient resides, of any circumstances known to the Medical Practitioner which may affect adversely the sanitary conditions under which the patient is living, and in respect to which action by the Medical Officer of Health or of the Sanitary Authority would, in the opinion of the Medical Practitioner, be necessary or desirable."

These regulations give us a broad general idea of what domiciliary treatment is intended to be. The Medical Practitioner is to give treatment in the generally accepted sense of the word, to give instructions "as to precautions necessary to protect the patient against re-infection," to keep records, to submit these records at periodical intervals to the Consulting Officer, and to confer from time to time with that officer. In addition he is to interest himself in the patient's surroundings, and where these circumstances may affect adversely the sanitary conditions under which the patient is living, he is required to inform the Medical Officer of Health.

The medical practitioner referred to is of course each medical man acting on the panel (who, in terms of his agreement and in consideration of the sum of sixpence per head of insured persons on his list, has undertaken to provide domiciliary treatment), and it will be seen that he is to have wide functions in the therapeutic and preventive medicine of tuberculosis. On the therapeutic side his activities do not stop short at the exhibition of tuberculin for the Insurance Commissioners have stated that "he is required to render all services connected with such domiciliary treatment, including the injection of tuberculin where treatment is considered suitable by the medical adviser to the Committee." This latter statement gives wide powers to Tuberculosis Officers, but of course, these will be used in different degrees in each district according to local circumstances. Before leaving this consideration of domiciliary treatment, it will be well to refer shortly to the provision by Insurance Committees of "special food or extra nourishment" for patients receiving sanatorium benefit in the form of home treatment. The recommendation of such provision, in a given case, will generally come from the general practitioner, and all such recommendations should receive the careful attention of the tuberculosis officer. The recommendation should receive his sanction only in cases of real necessity, and each article ordered must be of such a kind as "forms part of, or is strictly ancillary to treatment." No general provision for food in the ordinary sense of the word is permissible.

As regards the dispensary supervision, I think it is best regarded as, in part at least, an attempted solution of the "after care" problem, which problem is never out of the minds of the tuberculosis workers, and the solution of which the National Association for the Prevention of Consumption has so much at heart. Since it is generally admitted that the treatment of a given case is best initiated by a period of residence in a well regulated sanatorium in the regime of which educational methods have a prominent position, the tuberculosis officer will endeavour to place each case in such an institution as soon after the diagnosis as possible. It follows, therefore, that dispensary supervision will have its great field of work among patients who have undergone a period of institutional treatment. It will of course also be operative in cases where for any reason (such as the present shortage of sanatorium beds) the patient cannot be sent to a sanatorium. Dispensary supervision is therefore to consist of a supervision of each patient, having for its object the welfare of the infected individual, and the protection of the persons presumably non-infected; and, in its dealing with each case, taking into account the individual peculiar characteristics of that case as regards whether there has or has not been a period of educational treatment, as regards home surroundings, and as regards the type of individual and the type of disease. It is therefore, as has already been said, an attempted solution of the problem of "after care," and the extent to which it will act as a real solution will depend on the keenness and sympathetic attitude of the dispensary staff and on the efficiency of the methods and agencies used.

Organisation is the battle cry of the war now being waged against tuberculosis. Until lately the fight has been in the nature of guerilla warfare, but now the effective forces are to be systematised, and, where necessary, augmented. The centre of this organisation and systematisation is to be the Tuberculosis Dispensary, which is to be the hub of the scheme, and in intimate relation with the patients in their own homes, the general practitioners, the Public Health Department, the sanatorium, the isolation hospital, the labour colony, the charitable agencies of the district. The dispensary, is therefore, to be an institution exercising great functions of administration, diagnosis and treatment, and with lines of influence extending from it in a multitude of directions. Along a variety of these lines of influence it will exercise those of its functions which have to do with supervision and domiciliary treatment (those functions with which this note is particularly concerned), and the more important active agents which the dispensary will employ in carrying out these functions are the following: -

The tuberculosis officer and his assistants.
The general practitioners.
The tuberculosis nurses.
Charitable organisations.
The patients themselves.

The tuberculosis officer is of course, primarily responsible for dispensary supervision, just as the general practitioner on the panel is primarily responsible for domiciliary treatment, but their functions in these directions are supplemental one to the other. On the one hand the general practitioner will be a valuable aid in dispensary supervision, and on the other the tuberculosis officer is intended to take a deep interest in and to exercise a watchful care over the domiciliary treatment of the patients in his district. I think that is apparent from the Local Government Board's regulations quoted above, and that it will readily be perceived that the relations of the tuberculosis officer and the general practitioner in the organised scheme are intended to be intimate and far-reaching. Indeed, the whole-time official and the general practitioner must go hand in hand to a certain definite extent.. Unless there is a cordial co-operation between these two the efficiency of the scheme will be seriously impaired, if indeed, a scheme which did not present this feature of co-operation could be called efficient at all. This co-operation is essential and must be secured; the means for the making of it are to hand, and will, I think, be apparent to all tuberculosis officers.

The tuberculosis nurse will be a very important agent, for to her will fall the great part of the routine supervision of the patients in their own homes. Some authorities will employ specially appointed women, who will devote their whole time to this special work; others will combine the appointment with that of health visitor, school nurse, or inspector of midwives; while yet others will enter into agreements with the nursing associations or associations working in their areas for the part time use of the district nurses as tuberculosis nurses.

In some county areas, the County Nursing Association provides nurses for all the purposes mentioned—school work, health visiting work, work under the Midwives' Act, and tuberculosis work. Each principal method (the employment of whole time specially appointed women or the employment of the district nurses) has its special advantages and disadvantages.

In the first method, one will be employing a woman who has received general nursing training, who has worked for some time in a "sanatorium," and who, as a rule, holds a sanitary diploma of some kind. But this person will be a new comer, and will be looked upon by the people among whom she has to work as an interloper; it will take her a considerable time to get in touch with them and to realise the local difficulties. economic and social, which beset them as communities and as individuals.

In the second method, one is presented with the opportunity of adding to one's staff a woman who has no special knowledge of tuberculosis, who holds no sanitary certificate, but who, through being in daily intimate association with the people at times of sickness and trouble, has come to have a hold over them and to have a place in their affection and regard, to attain which the newly appointed person would have to spend a long time and would have to exercise a not inconsiderable amount of tact. Indeed, having regard to the fact that the new-comer would have a much larger area to work than falls to the lot of the average district nurse, it is very doubtful if the former would ever have the status occupied at present by the latter. The high regard in which the district nurses are already held by the people confers upon them an advantage which outweighs their lack of tuberculosis training. Their deficiency in this latter respect can be adequately overcome by a course of two or three lectures given by the tuberculosis officer. In giving these lectures the officer will feel

that he is doing something which will make for a uniformity of method throughout his district, a uniformity which, if whole-time women were employed, could have been obtained only by treating them to similar dissertations. The above defence of the employment of the district nurses applies specially to county areas. In the case of some county boroughs, special conditions (such as the smaller size of the district, the greater density of population, and the relative or total absence of district nurses) prevail; these make the appointment of whole-time specially trained women the more efficient procedure.

Charitable organisations are destined to be valuable agencies in the carrying out of dispensary supervision and domiciliary treatment. They will find their chief usefulness in the provision of articles of food and clothing in necessitous cases, in helping to find suitable work where from any cause the patient cannot engage in the occupation to which he has been accustomed, and in the provision of beds and bedding, etc., where such are required to secure the proper isolation of a case and are not otherwise available. To fulfil their high purpose, however, these agencies must be under the advisory control of the tuberculosis officer, for indiscriminate charity will do more harm than good, and will in the end bring into disrepute agents which, if properly used, are capable of the most beneficent and penetrating action. As the bulk of the money being spent is, for the present, being expended in the interests of insured persons (within the meaning of the National Insurance Act, 1911), charitable organisations should direct their operations largely among the uninsured.

A special variety of voluntary organisation is the "Care Committee." These should be formed under the aegis of the tuberculosis officer. Their composition will vary in different areas according to local circumstances, but they should consist largely of ladies who are interested in the subject and who, in addition, have time and money to spare. Both in county and county borough areas a number of committees should be formed, each one taking charge of a certain district. The extent and boundaries of the area to be administered by each committee will be determined by local conditions. In some places it will be found most convenient to make such areas to correspond with the urban and rural sanitary districts of the county, or with the various municipal wards of the county borough as the case may be; in other places the areas so formed would be too extensive to permit of efficient working, and therefore they will have to be sub-divided; and in yet others special conditions will prevail which will make it desirable to leave out of account the already existing local government boundaries.

The care and treatment of the individual patient—for his own good and for the protection of others—is the end for which the scheme is being organised, the end for which the agents specified above will be working; and as an important means to that end, the individual patient himself must not be forgotten. He can, to a certain definite extent, work out his own salvation. Both in the therapeutics and in the prevention of the disease his cordial and whole-hearted co-operation is required, and I believe that it can easily be secured if he is dealt with in a manner which is founded upon tact, a proper understanding of human nature, and a knowledge of the disease itself, and of the difficulties which beset the path of those who would fight it. Let us look at the preventive side first. When we realise that, setting aside the invasion of the disease from bovine animals, by adequate control of the patient one can control the source of infection, we shall readily understand how important is the education of each individual patient. This education must be such as will enable us to isolate the infected person in a manner comparable to the "cordon" system of isolation now being adopted with so much success in many segregation hospitals devoted to the reception of cases of the so-called infectious A ring or cordon of precautions, which will effectively prevent the spread of the specific contagion from the sick to the healthy, must be constructed around each patient. This ring must be founded on education, and should have as important components of its superstructure the use of sputum receptacles, of separate eating and drinking utensils, and of separate bedrooms, etc. On the therapeutic side, education of the patient is profoundly important, and it should have reference to his general mode of life, to his intervals of rest and his periods of sleep, to the principles which should govern his choice of a diet and the rules by which he should be guarded in the taking of his meals, and to his total abstinence from articles, actions, and amusements which will influence adversely his chances of recovery.

## THE PROVISION AND USE OF SHELTERS AS PART OF A TUBERCULOSIS SCHEME.

For a considerable time the use of shelters has been advocated in the treatment of cases of phthisis, and at the present stage of organisation in the fight against tuberculosis it should be profitable, I think, to consider some points bearing on the provision and utility of such structures in a tuberculosis scheme.

Shelters provided in connection with such a scheme will be paid for by the council of the county or of the county borough as the case may be, as only a very small number of the patients who come under the routine supervision of the Tuber-culosis Officer will be in a position to pay for them themselves. A definite sum of money will be available for the provision of these structures, and obviously the less the price of each the greater the number which will be obtained for this definite sum. Therefore the shelter must be as cheap as possible. Moreover the shelters so provided are to subserve a definite therapeutic end. Accordingly they must be constructed and used on sound scientific principles. In addition, these structures are to have human inmates; from which it follows that they must be essentially habitable.

Shelters are useful in that they enable the patient to lead an open-air life by providing him with a lodging which is freely accessible to fresh air and sunlight, while at the same time it protects him from inclement weather conditions. This definition of their usefulness emphasises the important points in shelter construction, which points, I think, are sometimes forgotten. In the first place, the shelter must be so constructed as to give its inhabitant proper comfort. It should be large enough to contain, in addition to the bed, a small table and a chair, and the unoccupied floor space must be sufficient to allow freedom of movement on the part of the occupant. The ground plan should be that of a right-angled quadrilateral figure, a convenient size being 8-ft. by 6-ft. The floor, back, ends, etc., should be constructed as separate pieces so as to facilitate transit. The shelter need not be of the revolving variety. These are more expensive than the non-revolving and do not have advantages commensurate with the greater cost. structure must be rain-proof and damp-proof. To secure these ends, the wood must be well seasoned; the joints efficiently made; the roof properly sloped, covered with some impervious material such as "ruberoid" and provided with full projecting eaves (eaves-gutters are, as a rule, unnecessary); the floor raised from the ground by means of small brick pedestals or wood blocks; and the whole well painted with several coats of good paint or of some variety of the newer "preservative" paints, such as "Selignum." To secure the free access of fresh air and sunlight, the walls must open in their upper half, and, as a protection from temporary inclement weather conditions, shutters must be provided. These are to be closed only in the presence of driving rain or violent wind. These shutters need not be in the nature of glazed windows. The presence of glass merely increases the cost of provision and upkeep. Wooden shutters are quite as efficient and less expensive. They should be attached to the shelter by hinges placed on their upper margins.

The shelter is best used as an adjunct to, and not as a substitute for, institutional treatment. The provision of a shelter cannot take the place of a period of residence in a properly conducted sanatorium. During such a period of residence the patient is broken in to an open-air habit of life and is taught how best to order his manner of living. This education is essential and can be most efficiently obtained in an institution which is run on proper lines. Moreover, patients who have not been in a sanatorium generally accept half-heartedly the offer of a shelter or even refuse the offer altogether; those who have been to an institution generally ask if they can be provided with a shelter. Since the number of patients treated at the sanatorium will be much in excess of the number of shelters provided, shelters should, generally speaking, be given to patients having a condition not more marked than represented by Turban's Stadium II. In special cases this rule may be transgressed, as for example, when one meets with a special degree of house overcrowding in a specific case in which the lung condition is graver than indicated; but shelters, unless provided in great numbers, cannot be taken as a solution of the housing problem. If one takes it as a basis that all cases conforming to the above physical standard are eligible for shelters, one must apply further tests in order to decide which of these cases are to have shelters; for the number of cases will still be much in excess of the number of shelters. Cases in which one has special grounds for giving a good prognosis, cases in which one has reason to believe that the shelter will be conscientiously and properly used, and cases in which there is a special degree of overcrowding in the patient's home (as for example, where the patient cannot have a separate bedroom) must have the prior claim.

Having come to the conclusion that a given case should have a shelter, one must find out if a suitable site is available in connection with the house in which the patient is living. provision of a shelter in a case for which a really suitable situation cannot be obtained will do more harm than good. Harm will be done to the patient by exposing him to conditions probably worse than those existing indoors in his own house, and harm will be done to the whole scheme by bringing one of its lines of action into disrepute. Suitable sites can generally be found in the garden or orchard, or in an adjoining field. Urban areas do not present the same facilities for the use of shelters as do those of a rural character, for suitable sites will be much more readily found in the latter than in the former. The site must not be too far removed from the house, which is to the shelter what the administrative block is to the ward unit. At the same time, the shelter must not

be placed in such close proximity to any building as to interfere with the access to it of fresh air and sunlight. The site should be moderately elevated, dry, exposed to the south, and sheltered from the north and east, and removed as far as possible from ash-pits, etc.

The shelter and its occupant must be under the constant supervision of the Tuberculosis Officer. The tuberculosis nurse (acting under instructions of the officer) will also make periodical visits. The method of use of the shelter and the rationale of its use should be carefully explained to the patient. It is only by securing the whole-hearted co-operation of the patient that good results can be obtained. Indeed, I believe that, if this co-operation is wanting, money expended on shelters is ill-spent.

### EARLY TUBERCULOUS STATES IN CHILDREN.

It is well-known at the present day that tuberculous infection of the lungs in children may be first manifested by persistent and chronic anaemia or bloodlessness.

One examination of the lungs may not be sufficient to detect any little dulness, it may be in patches, or some irregularity of the heart sounds, or a series of oscillatory temperatures. Persistent pallor and poor average weight are good working signs and should not be overlooked at any time. The tendency of early tuberculous condititions in children is fortunately towards recovery, or at least towards latency. A slight amelioration and improvement in the nourishment and in the surroundings of such children are often sufficient in themselves to effect improvement.

In most of the cases in Rotherham I have been fortunate in getting parents, etc., to co-operate in these points, with, on the whole, satisfactory results.

I am sure the Committee will recognise the importance of early diagnosis in children before pronounced symptoms develop and that they will consider that there is urgent need in Rotherham for a wide application of the principle of open air treatment and education by means of open air schools. The provision of an open air school might be considered with great advantage by the Rotherham Education Committee.

It is expected that the New Hospital at Kimberworth will be ready for occupation early next year. Provision will be then made for at least 12 children suffering from early symptoms of Pulmonary Tuberculosis.

### CASES OF TUBERCULOSIS AMONGST SCHOOL CHILDREN NOTIFIED DURING THE YEAR 1913.

Tuberculosis of Lungs, 31. One death.

Tuberculous Joints, 8.

Tuberculous Neck Glands, 17. One death.

Tuberculous Skin, 4. Tuberculous Hip, 3. Tuberculous Spine, 2.

Tuberculous Meningitis, 2. Two deaths.

Of the 31 cases of Lung trouble 3 are in the Workhouse Sanatorium, 1 is under treatment at the Rotherham Dispensary and 1 at the Sheffield Public Dispensary. Nine of these cases are attending school and nine are absent. These cases have all been visited, pamphlets left and instructions given as to diet, disinfection of sputum, clothing, etc., free tickets for Izal and occasionally Chloros are given, the bedrooms of advanced cases are from time to time sprayed with Formalin and Izal handkerchiefs are also given to advanced cases. The overcrowded conditions of the houses do not allow for separate bedrooms, 4 cases have rooms to themselves, 10 have a bed but not a room.

The school nurse has 67 cases of Tuberculosis on her list.

Notifications of various forms of Tuberculosis number 36; of these 29 are under Hospital treatment, 18 are attending school and 15 are absent. These cases are also visited and instructions given. There have been three deaths amongst school children during the year 1913.

Nine cases have not been notified; 7 are Tuberculosis of the Lungs, (4 attending school, 3 absent) 1 boy is having Tuberculin treatment, the rest were advised to try Hospital treatment. One case of Hip Joint Disease is under Hospital treatment

# THE POSITION OF SANITARY AUTHORITIES AND BOARDS OF GUARDIANS WITH REGARD TO TUBERCULOUS PERSONS.

There appears to be some doubt as to the duties of sanitary authorities and boards of guardians with respect to insured persons who are tuberculous. Questions have accordingly been addressed to the Local Government Board on the subject. In reply to the question whether the fact of a man being an insured person freed the sanitary authority and its officers from all the liabilities under the Orders as to tuberculosis and whether a sanitary authority was at liberty to allow

an insured person who was tuberculous to go about lodging in different houses with the liability of carrying infection to others, the Board stated that the fact that a person was suffering from tuberculosis did not affect the powers and duties of a Sanitary Authority or the Medical Officer of Health under the Tuberculosis Regulations. It was the duty, said the Board, of the Medical Officer of Health to take such steps as were necessary or desirable for preventing the spread of infection, and for removing conditions favourable to infection, though the Sanitary Authority was under no obligation to provide accommodation for persons who were unable to maintain themselves, although they were empowered to provide isolation hospitals for the reception of the sick.

A further inquiry was made as to whether an insured person suffering from tuberculosis, who had been discharged from a sanatorium, had no home or person to attend on him, and was destitute except for the sickness benefit under the Insurance Act, could claim admission to the workhouse or whether the guardians could repudiate all liability in respect of the case by reason of the man being insured. The reply of the Board was that the duty of the Guardians to relieve the destitute was not in the least affected by the Insurance Act. In this connection it may be opportune to refer to a circular of the Board relating to the definition of destitution. The guardians, wrote the Board, are entrusted with the task of deciding upon the evidence before them whether a particular person, whose case is under consideration, is or is not destitute, and in determining this question they have to remember that a person may be destitute in respect of the want of some particular necessity of life without being destitute in all respects, as, for instance, a person who is not destitute in the sense that he is entirely devoid of the means of subsistence, may yet be destitute in that he is unable to provide for himself the particular form of medical attendance of which he is in urgent need.

### UNHEALTHY COWSHEDS AND TUBERCULOSIS.

There can be no question but that much of the excessive susceptibility of dairy cattle to tuberculosis results from the unhealthy conditions under which they are kept in cowsheds. The ill-lighted, ill-ventilated, and overcrowded cowshed is an ideal place for propagating the disease, and unless we can get dairymen and farmers, assisted as they should be by their landlords, to improve the sanitary conditions of their cowsheds, in respect of the points I have mentioned, we can never hope to eradicate tuberculosis from our cattle herds. It is unfortunately my duty from time to time to seize tuberculous cows in

our slaughter-houses, cows that have been bought apparently in good health in the open market, and for which good prices have been paid. Most of these cattle—one may say all of them—have acquired the disease very largely through being kept under insanitary conditions, and I think it is an injustice that the butcher should have to pay the penalty, which should properly fall on the shoulders of those responsible for the conditions under which the disease is known to be propagated.

MEAT AND FOOD INSPECTION.

FOOD SEIZED OR SURRENDERED AND DESTROYED DURING
THE YEAR 1913

Articles of Fo	od	No.	Weight in lbs	Proceed- ings	Penalties
Carcases of Beasts		 29	17411		
Sheep		 30	1679	1	£5 and costs
Calves		 4	271		
Pigs		 25	4301		
Pieces of Meat:					
Portions of Carcases		 4	462		
Organs		 15	118		
Sets of Offal		 66	3366		
Lungs		 209	2090		
Livers		 181	2172		
Hearts		 14	56		
Heads		 36	288	DEL S	
Plucks		 117	936		
Udders		 23	138		
Frozen Meat		 6	168	1980	
Tripe		 6	180		
Fish		 	984		
Mussels		 11 Bags	616		
Tinned Food		 0	154		
Eggs		 550			
Brazil Nuts			175		
Fruit			2022		
		1326	37587	1	£5

TUBERCULOUS FOOD SEIZED OR SURRENDERED & DESTROYED DURING THE YEAR 1913

Articles of Food	1	No.	Weight in lbs	Proceed- ings	Penalties
Carcases—Beasts		25	15305		
Pigs	***	13	2268	111111111111111111111111111111111111111	
Pieces of Meat					
Sets of Offal		43	2580		
Lungs		158	1580		
Livers		66	792		
Heads and Plucks		32	256		
Udders		6	36		
Parts of Carcases		2	396		
	111	345	23213		

### REPORT FOR THE YEAR ENDED 31st DEC., 1913.

1. Milk and Cream not sold as Preserved Cream.

	(a)	(b)
	Number of samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk		-

Nature of preservative in each case in column (b) and action taken under the Regulations in regard to it.

2. Cream sold as Preserved Cream.

Cream

- (a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.
  - (i) Correct statements made ... 2
    (ii) Statements incorrect ... 0

    Total ... 2
- (b) Determination made of milk fat in cream sold as preserved cream.
  - (i) Above 35 per cent. ... -
  - (ii) Below 35 per cent. ... -

Total ... —

### TUBERCULOUS FARM STOCK.

Probably not less than 25 per cent. of adult indoor cattle in this country, are affected with tuberculosis, while swine also are frequently attacked. Horses, cats and dogs are susceptible to tuberculosis, but very few cases have been recorded in sheep and goats.

Most of the preventitive schemes involve the periodical use of the tuberculin test, followed by the isolation, segregation, or even destruction of reacting animals. No doubt these plans if adopted generally would involve a large expenditure, but it is beyond dispute that the disease has been eradicated from many herds by employing these methods, and sometimes with comparatively small expense.

The chief factor in the spread of the disease amongst cattle and also from cattle to man is the existence of animals in an advanced stage of the disease, and particularly of cows with tuberculous udders. These sources of infection can be removed on detection, and their removal involves no more than the destruction of animals which are either already unprofitable or would soon become so.

It should further be pointed out that the more animals are kept indoors and crowded together in insanitary surroundings, the more likely is the disease to flourish, though tuberculosis has been known to spread alarmingly in excellent cowsheds, and even cattle at pasture run serious risk of infection if they are in association with other badly-infected cattle.

The milk of tuberculous cows should not be used to nourish animals or human beings. Creamery products can be rendered harmless by exposing them to a temperature of 85 degrees Centigrade (185 degrees Fah.) for fifteen minutes, or by bringing them to the boiling point. Common feeding or drinking troughs should not be used, especially in infected herds, while cowsheds should be frequently cleansed and disinfected. The Tuberculosis Order of 1913 requires the notification of affected cattle.

### TUBERCULOSIS ORDER, 1913. REPORT.

This order has now been in operation sice May 1st, 1913, and already its effects are evident.

A superior class of milch cow is now kept and greater care is exercised by cow-keepers in the selection of cattle for purchase, they themselves being more zealous of having clean cows with clean udders than before.

It is now a very reprehensible policy on the part of owners of milch cows to purchase any cow as to the soundness of which there is the slightest suspicion of doubt, as under this order, a far greater supervision is possible than formerly existed.

The sanitary conditions under which milch cows are housed and kept have improved, greater attention is now paid to the cleanliness of cowsheds, and also to the cleansing of utensils employed in the production of milk.

Still, however, there is much to be desired in connection with the buildings themselves, many of them requiring complete reconstruction, with proper sanitary arrangements, ventilation, and lighting, all of which conduce to the health of the animal producing milk.

During the time the order has been in operation periodical visits of inspection have been made to every cow-keeper, of whom there are thirty-one within the Borough. Each milch

cow has been examined separately, special attention being directed to the udders, and if any suspicious symptom or lesion has been detected, the animal has at once been isolated and the sale of milk from the cow temporarily stopped, until a proper and careful examination could be made.

Samples of milk have been taken and examined, either microscopically, or subjected to the Biological test, whilst in other cases the Tuberculin test has been applied.

In cases which have proved that the animal was suffering from Tuberculosis with emaciation, giving tuberculous milk, or showing tuberculous lesions in the udder, measures have been taken to have the animal valued and at once destroyed, a post mortem examination has been made, and compensation paid according to the Order.

The premises where the disease has been certified to exist, have at once been thoroughly disinfected.

To insure further that the milk supply in the Borough should be as pure as possible, samples of "bulk" and "mixed" milk have been taken from supplies brought into the Borough, but produced from outside. These have been subjected to the same tests as before mentioned.

The following are cases in which compensation has been paid:—

Da	te	Animal affected. C	omper	isati	on.
19	13.		£	S	d
May	30th	Milch Cow	2	10	0
		(Tuberculosis with emaciation)			
Sept.	17th	Milch Cow	1	10	0
-		(Tuberculosis of the udder with			
		emaciation).			
Sept.	30th	Milch Cow	1	10	0
		(Tuberculosis with emaciation).			
Oct.	31st	Bullock	1	10	0
		(Tuberculosis with emaciation).			
Nov.	12th	Milch Cow	2	0	0
		(Tuberculosis with emaciation).			

The following samples of Milk were taken and subjected to the Biological Test at the Sheffield University:—

May, 1913. Sample of Milk from Cow. August, 1913. Sample of Milk from Cow. September, 1913. Sample of Milk from Cow. September, 1913. Sample of Milk from Cow. November, 1913. Sample of Mixed Milk. November, 1913. Sample of Mixed Milk. November, 1913. Sample of Mixed Milk.
November, 1913. Sample of Mixed Milk.
November, 1913. Sample of Skimmed Milk.
December, 1913. Sample of Mixed Milk.
December, 1913. Sample of Mixed Milk.

Thanks are due to owners of cattle for the facilities and assistance they have rendered in dealing with the cases which have come under this Order, and I should like to say in conclusion that the success of this Order depends to a large extent upon the manner in which the notification clause is complied with by owners of cattle.

## TREATMENT OF TUBERCULOSIS BY THE ROTHERHAM BOARD OF GUARDIANS.

A considerable number of cases of tuberculosis are treated in the institutions of the Rotherham Board of Guardians. These are chiefly uninsured persons, including children and also advanced cases. The advanced cases are treated in a special ward in the Workhouse, the more hopeful cases in the Sanatorium at Badsley Moor Lane, and female cases in an early stage are sent to Sanatoria at a distance.

During the year 1913, there were admitted to the Workhouse 45 cases of Phthisis, of whom 11 were women. These came from all parts of the Union—about half being from the Borough. The majority were in an advanced stage, and 25 of them died in the Institution. Four of those who died had been transferred from the Sanatorium as too ill for further treatment there.

In the Badsley Moor Sanatorium 60 cases have been treated during the year, all males, a considerable number being boys under 16. Three deaths occurred in the Sanatorium, and eleven others who have received treatment have died either in the Workhouse or at their own homes. Twenty-two still remain under treatment, and of the remainder who have been discharged, most are at work and apparently well, though a few come back from time to time for a further course of treatment.

The mortality amongst the patients is not surprising when it is considered that many are advanced in the disease when admitted, and that no case is refused, which presents the smallest chance of recovery.

The most successful cases have been amongst the boys, where the disease has usually been encountered in an earlier stage.

Apart altogether from the good work which they do in the treatment of tuberculosis, the Guardians perform a valuable service to the community by isolating so many cases of the disease in its most infective stages, and by educating those patients who return to work to conduct themselves so that they will not spread the disease.

Great assistance has been rendered by the Bacteriological department of the Public Health Office, in conducting examinations of sputa for the tubercle bacillus. I am pleased to have this opportunity of acknowledging this very valuable help.

I am indebted to Dr. Robert G. Riddell, the Medical Officer to the Rotherham Workhouse, for the above information.

### EMPTY HOUSES IN ROTHERHAM, NOVEMBER, 1913.

In view of the interest that has been aroused in the question of providing housing accommodation in Rotherham, the following figures, reproduced from the "Rotherham Express" of September 13th, last, showing the actual number of empty houses in June of each of the last five years, are worthy of consideration:—

Year	Empty	Houses
1909	 	311
1910	 	462
1911	 	336
1912	 	159
1913	 	76

There is undoubtedly a great shortage of suitable housing accommodation for the working classes in Rotherham at the present time.

## HOUSING AND TOWN PLANNING. VENTILATION IN ITS RELATION TO CONSUMPTION. PREVENTION IS BETTER THAN CURE.

As measures for the cure of consumption are now engaging so much attention, and the Government seem prepared to spend millions of money in attempts to effect it, is it not time to consider how to prevent its spread among the poor by adopting suitable safeguards. This would not only save those millions to the already overburdened tax-payer, but would preserve the lives of the majority of those infected from time to time owing to the defects in their habitation conditions.

Consumption is now recognised as one of the infectious diseases, and it is also admitted that atmospheric conditions have much influence upon it. Yet the condition of air in workmen's dwellings has not been given the attention which should be the first care of a parental government.

The crowded state of very confined quarters renders them devoid of any proper ventilation, and the atmosphere, particularly in winter, becomes vile and poisonous, and constitutes the most favourable medium for the spread of infection.

What seems to be a necessity and perhaps the best method of ventilation is an outlet into the chimney flue at ceiling level (but one which will not let in smoke, and which is easily obtainable for a few shillings). Through this the heated air will rush out automatically both day and night, particularly when aided by the draught induced in the flue, and its place will be readily supplied by air drawn in through chinks in the windows and doors as now—without the necessity for special "air inlets," which the occupants always close, as they concentrate a draught.

The cost of this method of prevention would be so small and the saving of money and lives so great, that it surely merits and demands the consideration of the authorities concerned.

As regards the ventilation of dwelling rooms, this most important matter is left to the discretion of the often careless or ignorant architect, who generally leaves it to his inexperienced assistant; or to the "jerry builder," and it is no exaggeration to say that where a system of ventilation is specified by the architect, it is but too often sacrificed to satisfy the selfish or mistaken, economy of the owner or builder, who concludes that this item can best be left out without being missed. And yet, strange to say, the cost of this item of such vital importance would seldom amount to more than "one per cent." on the cost of the structure.

The result of this serious neglect is not at first recognised, but if we reflect, we can easily realise that if it did not exist the health of our towns and cities would be much better than it is. There would be less typhoid, diphtheria, and other zymotic diseases; our hospitals would not be so full or so expensive to maintain, and local rates would also be relieved, not to speak of the all important saving of life, particularly amongst infants.

### LANDLORDS AND DIRTY TENANTS.

The landlord has no remedy against this class of occupier, who is usually a person without means. He can only "cut his losses" and try and get rid of the undesirable tenant. This is unfair to the landlord as the tenant should in some way be made responsible. Many houses are rendered unfit for habitation by being over-run with vermin, due to the laziness and filthy habits of the occupants.

The landlord has grave difficulties to contend with under sections 14 and 15 of the Housing and Town Planning, etc. Act, in dealing with a dirty tenant, who makes no effort to keep his house clean and in good order and repair, but who will, in a large number of cases, do even malicious damage.

## THE DIRTY TENANT AS A FACTOR IN THE HOUSING PROBLEM.

Amongst the various duties of local authorities there is none more important than those which relate to the housing of the people. Wide and drastic powers undoubtedly exist for the betterment not only of individual houses, but for dealing with larger areas, and in so far as the condition of a house influences the domestic circumstances, the physical health, and the normal and social welfare of the people, it would appear that the remedy is simple, and that in theory the degradation and the objectionable habits of a certain class of the community are the direct result of bad housing conditions, and can be eliminated if these conditions are amended. I wish this were so, for then a royal road would have been opened towards that social amelioration which we all desire to see realised. But the truth is otherwise, and the so-called "housing problem" has an inner problem, the solution of which is equally essential, but much more difficult, and this inner problem or core is the "dirty tenant", as distinct from the dirty house, and although he often is poor he need not of necessity be so, and filthy and insanitary conditions are often found in others whose circumstances place them above the poverty line.

A large part of the slum problem lies in the question of casual and under-employment, and in every district there are numbers of people just above the border line of pauperism, whose earning capacity will always be limited, and whose wages therefore must be low. They cannot afford much rent, and have to acquire cheap and inferior accommodation, and there is therefore a tendency for the poor, the idle, the incompetent, and the thriftless to settle in certain localities. No one ever builds for this class of individual, and as a rule it is old cottage property in which he lives-property which has become secondhand, and which no self respecting workman would live in if he could possibly avoid it. Much of this class of property has been purchased at very low rates, and can be let at low rents, and in spite of the contingent liabilities for repairs I presume it gives a lucrative interest. In many instances old houses containing a large number of rooms are farmed out, the occupier paying the owner a good rent, and in his turn making profit by subletting the rooms, furnished with a few worthless articles at an average price of 4s. and more per week. This

method is a partial solution of the housing difficulty, because under by-laws the occupier who sublets is compelled to keep them in a clean and orderly condition—in other words, there is someone on whom to fix responsibility—but it has the disadvantage of overcrowding dwellings by increasing the number in a house whilst limiting them in a room. The majority of the artisans' dwellings here in Rotherham are satisfactory as regards accommodation and space, but in the older parts of the town there are several houses existing which must have been built without supervision, and which age has not improved, and it is in this class of property that the type of tenant above alluded to is found.

It is very difficult to bring these houses into line with present-day requirements as regards light, ventilation, airspace, and dryness of site, and I think they often are allowed to get into a very bad condition because neither the owner nor his agent takes the trouble to go to look at the state of the property, and especially do they neglect the interiors. A little more supervision on their part is advisable, and would in the long run prove economical. Every house should possess a reasonable standard of habitableness, and whether the tenant deserves consideration or not this does not absolve the owner from his duty and responsibility. There are signs that owners are more and more realising this, but the duties and responsibilities must not be all on one side, and the tenant has them just as much as the owner, only in the one case it is easy to enforce, and there is willingness to comply, whilst in the other the enforcement is difficult, and a fine has no terrors for those who can't or won't pay. The chief difficulty, then, in the housing question is the dirty tenant. He is a foul parasite in the community, and a standing menace to health; but he does not mind that, and there is no other legal remedy which can be used against him with any degree of success.

There are many decent, hard-working people amongst the poor, and it is particularly unfortunate for them that, for economic reasons, they are compelled to live in proximity to the type just mentioned; and for this class I see no possible remedy but that of constant supervision, and along with this supervision should be associated compulsory cleansing powers. They ought also to be debarred from the rights and privileges of self-respecting citizens until an improvement in their conduct proves them fit to exercise these privileges. I would also encourage owners to prosecute tenants for wilful damage to property, and I see an ample field for work of a voluntary character in the direction of promoting improved habits amongst these people—work which would be a much truer charity than the doling out of money, food, or goods, much of which is misapplied and does more harm than good.

### FIRST ANNUAL REPORT TO THE HOUSING COM-MITTEE FOR THE YEAR ENDING DEC. 31st, 1913.

The Housing Committee of the County Borough of Rotherham was formed in the early part of 1913, and since its inception, and as a result of its work, the amount of attention and consideration given to housing matters locally has increased enormously.

Probably there have been no Acts of Parliament passed since the great Public Health Act of 1875, which will have so far-reaching an effect on the conditions of the people generally as the Housing of the Working Classes Acts, as amended by the Housing, Town Planning, etc. Act of 1909, if effectually carried out. In Rotherham a start has been made, but in many urban districts very little is, or has been done, and I think that the reasons will practically all fall under one or other of the headings given below:—

- (a) Financial considerations, applying to both local authorities and property owners.
- (b) Lack of a sufficiently high standard.
- (c) The adoption of unsuitable methods in the past which hinder present reforms.
- (d) The shortage of alternative accommodation.

The latter cause is the one which is at present the greatest hindrance to housing reform in Rotherham.

The effects of bad housing, both moral and physical, cannot be over-estimated, although it often seems to the casual observer that, apart from a few striking cases, such effects are relatively slight; and, again, even when considerable in degree, they are not always very definite, or attributable entirely to these conditions. It is highly probable that were it not for these two facts housing reform would have advanced more rapidly than it has done. It must be remembered that the effect of bad housing is gradual and insidious, and for accurate measurement it must be judged on broad lines and over a sufficient period of time, but to my mind nothing is more certain than that the overcrowded and insanitary dwelling-house is the home of tuberculosis. In Rotherham many of the cases of consumption notified live in overcrowded and insanitary houses.

Under Section 17 of the Housing, Town Planning, &c., Act, 1909, it is provided that "It shall be the duty of the Medical Officer of Health or other officer of the Local Authority to make from time to time an inspection of their district, with a view to ascertaining whether any dwelling-house therein is in a state so dangerous or injurious to health as to be unfit for habitation."

Prior to the formation of the Housing Committee in Rotherham, a certain amount of work had been done under Section 15 of the Act, which implies that a house let after the passing of the Act, shall be kept by the landlord in all respects reasonably fit for human habitation, and further that if this is not complied with, the Local Authority may serve notice on the landlord requiring him to execute such works as may be necessary to make the house in all respects reasonably fit for human habitation. It was found however that many difficulties arose, notably the fact that houses let before December 3rd, 1909, could not be dealt with, so therefore during the past year all houses have been dealt with under Section 17, except in one instance. The method of procedure under this section necessitates a large amount of detail work devolving upon the Housing Committee, as will be gathered from the fact that every house, after being represented as unfit for human habitation by myself, is visited by the Visiting Sub-Committee who report to the Committee the course to be adopted. The owner is given an opportunity of appearing and stating his views with regard to the property, and if a closing order is ultimately made and the owner undertakes to repair or re-construct the premises, a specification of the works required is supplied to him, and the work is carried out under the direct supervision of the Housing Inspector, who visits the premises systematically.

When the repair of a dwelling-house has been completed, the premises are again inspected by the Visiting Sub-Committee, who report to the Committee as to the satisfactory completion of the work, and an order is made determining the closing order.

The following table gives details of the houses dealt with up to December 31st, 1913:—

Property.		No. of houses.	Result.
1 House, 19 Court, Wellgate		1	Closing Order still running.
105, Wellgate		1	Work in progress.
17-20, Radley Row		4	Work done and closing orders determined.
40-42, Burrell Street		2	One house collapsed and other demolished.
46-47, Oil Mill Fold		2	Premises permanently closed as demolition is not possible owing to premises above.
10-14, 22, and 1 and 2 Co	ourts		
Sheffield Road		14	Closing orders still running, but scheme approved by Council for demolition of certain houses and alterations to remainder.
1-7, Woodstock Bower		6	Work done, and closing orders determined.

1-5 Bailey's Yard, Union Street	5	Closing orders still running.
13-15, Midland Road and 2,		eradoldhumes ularida a umin
Clough Road	3	do.
1-5, Old Hill, Wellgate	5	do.
6-18 do. do	13	Work in progress.
3-10 Barker's Yard, High Street	8	Work done and closing orders determined in respect of 6 houses.
1-8, Court 1, Victoria Street	8	Closing orders still running.
5-11, Court 16, Westgate	7	do.
44, Westgate	1	Notice served under Section 15, and work done.

Statement required by Article 5 of the Housing (Inspection of District) Regulations, 1910, in regard to the Inspection of Dwelling Houses under Section 17 (1) of the Housing, Town Planning, etc., Act, 1909.

Number of dwelling houses inspected under and for the purposes of the section	171
Number of such dwelling houses which were considered to be in a state so dangerous or injurious to health, as to be unfit for human habitation	89
Number of dwelling houses in respect of which representations were made to the Local Authority with a view to the making of	
closing orders	88
closing orders were made by the Local Authority	79
Number of dwelling houses the defects in which were remedied without the making of closing orders	1
Number of dwelling houses which after the making of closing orders, were made fit for human habitation	16
General character of the defects found to exist in the dwelling houses inspected  Dampness, insufficient air lighting, absence of through and general dilapidation.	space and

In addition, a certain amount of work, principally the rebuilding of dangerous chimney stacks, etc., has been effected without the making of Closing Orders. The number of persons turned out from their homes was 92, and of this number 16 were able to return after the completion of the required alterations, thus leaving the actual net number dispossessed at 86.

In one instance it was necessary to obtain a Magistrate's order to compel one tenant to quit.

In conclusion, I should like to state that I consider the result of the first year's working highly satisfactory, but I am hoping that still more will be done during 1914, both as regards improvements to existing dwellings, and the erection of new houses by the Corporation.

### RECOMMENDATION.

Provision for the efficient treatment of Scholes Sewerage.

### CONCLUSION.

Various Tables and other information, completed in accordance with the instructions recently issued by the Local Government Board, are included in this report. I have also to thank the Public Health, Housing, and Midwives Committee for giving their courteous consideration to all the recommendations that I have submitted to them during the year 1913, and for carrying many of them into effect.

In conclusion, I have to thank the Town Clerk for his valuable advice on many occasions, the Borough Engineer and his staff for preparing plans for the additional accommodation to the administrative block at the New Hospital, Kimberworth, to the Public Health Staff for their loyalty and support during the past year and to many others who have supplied me with much valuable information for my Annual Report upon the health and sanitary circumstances of Rotherham for the year 1913.

I am, Mr. Mayor, Mr. Chairman, and Gentlemen,

Your obedient Servant,

### ALFRED ROBINSON, M.D.,

Medical Officer of Health.

### APPENDIX.

The following scheme for the treatment of Tuberculosis in the Borough has been passed by the Rotherham County Borough Council. It is still under the consideration of the Local Government Board. When finally approved by this body we shall be in a position to deal with all forms both males and females in the Borough. The scheme will, I think, receive this final approval with, perhaps, some slight modifications.

## DRAFT REPORT OF TOWN CLERK AND MEDICAL OFFICER OF HEALTH.

The Town Clerk and the Medical Officer of Health beg to report that the following scheme, which has the provisional approval of the Local Government Board, for the treatment of patients suffering from Tuberculosis in the County Borough of Rotherham, gives all the facilities necessary for the proper treatment of such patients, and provides a scheme which will, it is anticipated, prove satisfactory and sufficient for carrying out the provisions of the National Insurance Act, 1911.

### Dispensary.

An agreement has been arrived at with the West Riding County Council to join in the provision of this unit, by converting premises known as Carnson House, Moorgate, Rotherham, into a joint Dispensary. Rotherham is to have the exclusive use of three rooms on the ground floor of the premises fronting Mansfield Road, with a separate entrance from this road. The premises are to be leased to the Corporation for a term of seven years, at an annual rent of £25, this sum to include rates and taxes together with the coal, gas, and water required for the use of the Dispensary; also the services of a joint Caretaker, with all cleaning work carried on by him.

These rooms will require altering and fitting up for the purposes of a Dispensary, and an estimate of the cost of doing this has been made by the Borough Engineer at £100 The apparatus and furniture for this unit will cost about £50. It is not proposed to disturb the present Bacteriological Laboratory in Frederick Street, and this will continue to be used by the Tuberculosis Officers as part of the general scheme.

The number of patients who attended at the Dispensaries during the period 15th July, 1912, to 31st March, 1913, was 67.

### Sanatoria and Hospital.

The Corporation will require five beds in some curative Sanatorium. The provision of this part of the scheme will have to be postponed till some adjoining Local Authority is prepared to carry out one of the projected schemes for such a Sanatorium, and until then such cases can be very well treated at the Kimberworth Hospital. For the purpose of providing the necessary capital sum that the Corporation will have to pay towards the cost of constructing such Sanatorium, the Local Government Board will retain a sum of £450 from the grant to be made to the Council in aid of their capital expenditure for Sanatorium purposes.

The chief unit of the scheme will be provided by using the Hospital at Kimberworth as a place for the treatment of Tuberculosis in all its stages.

Beds will be provided for the purposes of observation and education and for the treatment of advanced cases, and some beds for early curative cases; all such beds to be under the control of a resident Medical Officer, who will be the Tuberculosis Officer of the Borough.

It will be necessary to erect a Lodge at the entrance to the Kimberworth Hospital for the accommodation of the Porter and Portress, so as to leave free the present Caretaker's premises for the accommodation of the Staff.

In view of the requirements of the Local Government Board, hereinafter mentioned, with regard to the Badsley Moor Lane Hospital, it will be necessary to divide the Kimberworth Hospital into two parts, to provide accommodation for both male and female cases. This Division of Kimberworth Hospital can be simply carried out, as it is at present erected in two large wards. The division will also include the partitioning off of the grounds of this Hospital, and it is suggested that female cases should be given as their portion of the grounds the garden in the front of the Hospital, and that the male cases should be given the land at the rear, which contains some 10 acres of land. This land is at present in an uncultivated condition, and will afford the necessary active employment for the male patients.

The accommodation to be provided in the Hospital building itself is as follows:—

Male ... ... ... ... ... 12 Female ... ... ... 6

In order to provide additional accommodation, it is suggested that shelters be erected in the grounds of this Hospital, to provide accommodation for 10 cases. Owing to the extent of the land owned by the Corporation, as before mentioned, this is quite practicable.

The cost of carrying out the suggested division of this Hospital, together with the erection of a Caretaker's Lodge and other works necessary to make the Hospital in all respects fit for the purpose, is estimated at £396.

The cost of erecting Shelters in the grounds to accommodate 10 more persons will, it is estimated, be £75.

In addition to this, it must be remembered that the cost of erecting this Hospital, including the acquisition of the land, was £6,214 8s. 6d.

The Local Government Board desire the Council to discontinue the use of the Badsley Moor Lane Shelter, except in cases of emergency, but they have given their approval of this Shelter for a further period expiring 15th January, 1914.

With regard to the Kimberworth Hospital, the Board have formally approved the same under the provisions of the National Insurance Act, 1911, for a period expiring 15th July, 1914, subject to the following conditions:—

- (a) That the Hospital will be open to inspection at any time by any of the Board's Officers or Inspectors;
- (b) That such records will be kept in connection with the Hospital as the Board, after consultation with the Insurance Commissioners, may from time to time require;
- (c) That the Board will be informed of any proposed alteration in or addition to the Medical Staff of the Institution; and
- (d) That satisfactory arrangements will be made for the treatment elsewhere of emergency cases of Smallpox occurring in the Borough.

The Board's approval is given on the further understanding that in the event of a large outbreak of Small-pox occurring which shall necessitate the admission of cases of Small-pox to this Hospital, patients suffering from Tuberculosis will be promptly removed from the Hospital, and that before the use of the Hospital for cases of Tuberculosis is resumed after an outbreak of Small-pox, efficient arrangements will be made for disinfection.

The Staff at this Hospital, in the first instance, will consist of the Tuberculosis Officer, hereinafter referred to, with one Charge Nurse and two Probationers, in addition to the present Caretaker and his wife and three maidservants.

### Provision for Smallpox.

It must be remembered that in appropriating this Hospital for the purpose of a Sanatorium, the Corporation's accommodation for the treatment of Small-pox patients is still unprovided for. The Local Government Board require the Corporation to provide a limited number of beds in some suitable premises for the purpose of immediate transfer of the first cases of Small-pox that may be discovered within the Borough, and for this purpose three schemes have been considered.

The first one was the utilisation of the Sewage Works premises. It was found that to make these suitable the Corporation would have to incur a capital expenditure of some £400, and in addition to this the Local Government Board were strongly opposed to this scheme by reason of the population within a quarter of a mile radius of the suggested Hospital.

The second scheme was to take a limited number of beds under the South Rotherham, etc., District Isolation Hospital at Brampton-en-le-Morthen. The Sub-Committee to whom the Council delegated authority to negotiate for beds in this Small-pox Hospital have approached the Hospital Authorities, and while they are willing to agree to the Corporation having a limited number of beds, their terms are, in the opinion of the Sub-Committee, somewhat high, being at the rate of £25 per bed per annum for three beds, that sum not to apply in the event of the Corporation occupying these beds with Small-pox cases, but in that event the Corporation to pay a proportionate cost of the upkeep of the Hospital in its working condition.

The third scheme is to erect a corrugated iron building on the land owned by the Corporation, and adjoining Ulley Reservoir. The area of this land is about seven acres, and there is only one house within a radius of a quarter of a mile, and this is the property of the Corporation and is used as a Caretaker's This house, it is suggested, should be used as an administrative block for the suggested Small-pox Hospital, for which purpose it is admirably adapted. The estimated cost of erecting this Hospital for eight patients-six males and two females—with the additional cost of the necessary fittings and furniture, would be about £740. It is, of course, remembered that this scheme has not as yet received the approbation of the Water Committee, who are responsible for the control of the land in question. In suggesting this site, it must be remembered that the building proposed to be erected is only of a temporary description, and one which could be moved to a fresh site should it be found necessary at any time to use the water in the Ulley Reservoir for drinking purposes, and that while this water was not used for that purpose the Medical Officer of Health is prepared to give his absolute assurance that no possible contamination of this water could arise owing to the use of the suggested premises for Small-pox cases. The advantage of this scheme is that it provides accommodation for a minimum of eight persons, which could be increased by erecting Shelters in the grounds, and in the event of an outbreak of Small-pox which did not assume serious proportions, could be utilised to deal with all cases arising, and thus save the inconvenience and cost which would be caused by clearing the Kimberworth Hospital.

The Local Government Board have had an opportunity of considering these alternative suggestions for dealing with Smallpox, and have caused the site of the Ulley Reservoir to be visited by one of their Inspectors, and it is anticipated that the Board will give their opinion on the desirability of erecting a Small-pox Hospital at Ulley during the next few days, but the Board may find that before they are able to approve formally of the site they will require a local enquiry to be held.

### Staff.

The Medical Officer of Health to be appointed Executive and Chief Tuberculosis Officer.

That a resident Medical Officer and Tuberculosis Officer, male or female, be appointed. This official to act also as Assistant Medical Officer of Health. The Tuberculosis Officer would reside at Kimberworth Hospital, and all the beds at this Hospital would be placed under his or her control. The same officer would be responsible, under the direction of the Medical Officer of Health, for the Tuberculosis administration of the Borough. The salary to be £250 per annum, with board and residence.

The Board, in considering the question of the proposed remuneration of the Tuberculosis Officer, are of the opinion that the suggested salary of £250 a year, with board and residence is the minimum that should be offered, so as to obtain a Medical Officer possessing the medical qualifications and experience to deal with Tuberculosis. The Board have, however, had their attention called to the fact that Dr. Beatrice Garvie has for the past eighteen months been dealing with the whole of the cases of Tuberculosis treated by the Corporation, and that there is reason to believe that if offered to her she will be prepared to accept this post.

The appointment of a Charge Nurse and two Probationers at Kimberworth Hospital, together with a Cook and two other Maidservants.

The two Female Health Visitors and School Nurse to be required to visit all notified cases of Tuberculosis; the School Nurse alone dealing with children of school age.

#### General.

As mentioned in the first portion of this report, the Local Government Board have provisionally signified their willingness to approve generally of a scheme on the lines suggested herein, subject to the details of the staffing of the institutions being satisfactory to them. In view of this, it is suggested that, if the Council intend to undertake the treatment of all suitable cases of Tuberculosis arising in the Borough, the scheme set forth in this report should be approved and formally presented to the Local Government Board for their approval.

On this being obtained, the Corporation will be entitled to the Treasury grant in aid of the capital expenditure necessary to carry out this scheme.

In considering the cost that will have to be borne by the rates to provide for a scheme such as the one outlined, the Local Government Board have requested us to remind the Council that the Board will be prepared to make grants of half the nett annual cost incurred by the Council (i.e., after deducting the sums received from the Insurance Committee and from any other sources) in carrying out the scheme, and that the cost of maintenance and loan charges in respect of the Kimberworth Hospital may be included in calculating the moiety of cost payable from the Government grants, so long as this Hospital is in fact used as part of the scheme.

When the scheme, if adopted, is approved by the Local Government Board, it will be desirable to come to an arrangement with the local Insurance Committee whereby the Corporation will undertake to treat all suitable Tuberculosis cases sent to them by the Committee from amongst insured persons or their dependents, the Insurance Committee to pay the Corporation a minimum sum of  $7\frac{1}{2}$ d. for each insured person in the Borough. It is estimated at the present time this will amount to a payment to the Corporation of not less than £625 per annum. Provision is then made for the treatment of all suitable cases of Tuberculosis arising within the Borough, as before stated, and the Treasury will undertake to pay to the Corporation one-half of the nett cost of treating the same, after deducting the amount received from the local Insurance Committee. This is shown in the Tables set out hereunder.

### Financial.

The following is an estimate of the capital expenditure that will have to be incurred by the Corporation if the scheme before mentioned is to be carried out;—

		Estima	ted	cost.
Kimberworth Hospital.		£	S	d
Porter's Lodge		335	0	0
Shelters		75	0	0
Alterations		61	0	0
Sewage Disposal Works		125	0	0
Electric Cables		70	0	0
Tuberculosis Dispensary.				
Alterations and Furniture		150	0	0
Temporary Small-pox Hospital	at		1	
Ulley		741	0	0
	14		-	
	£	21557	0	0

The Local Government Board, in their communication on the subject of the scheme, state that the total grant available to the County Borough of Rotherham on the Basis of population is £1,887. Of this sum it must be remembered that the Board will retain, approximately, £450 for the purpose of the Council paying its share of the cost of building a curative Sanatorium, leaving a balance of £1437 to provide for the expenditure above mentioned. The balance, if any, would go towards the cost of furnishing the Hospital, but this expense is provided for in the loan sanctioned by the Local Government Board for furnishing, and the annual loan charges in respect thereof would come under the general heading of "Expenses in respect of the Treatment of Tuberculosis," of which the Corporation will get a return of one-half from the Treasury.

The estimated annual cost of the treatment of Tuberculosis appears to be as follows:—

To Maintenance Charges at Ki	mberwe	orth	Но	spital:		
	£	S	d	£	S	d
Salary of Tuberculosis Officer	250	0	0			
Salary of Charge Nurse	35	0	0			
Salaries of two Probationers	24	0	0			
Wages (Cook and two Maids)	50	0	0			
Wages of Porter and Portress	71	0	0			
Contributions under National Insur	r					
ance Act	5	0	0			
Provisions	350	0	0			
Furniture, Bedding, Crockery, etc.	26	0	0			
Stores and Drugs	25	0	0			
Nurses' Uniforms	10	0	0			
Printing, Stationery & Advertising	15	0	0			
Cleaning Materials	8	0	0			
Telephone Rent	12	0	0			
			_			
Carried forward	881	0	0			

		£	S	d	£	S	d
Brought forward		881	0	0			
Coal, Light, and Water		175	0	0			
Repairs, Buildings, etc		24	0	0			
Rates		61	0	0			
Insurance		4	0	0			
Horse Hire		20	0	0			
Petty Cash		10	0	0			
Sundries		25	0	0			
		-	_	-	1200	0	0
To Maintenance Charges	at Tu	ubercu	losis	s D	ispensar	v:	
Rent, Rates, Cleaning, Light, Co					1	,	
and water		25	0	0			
Salary (Assistant)		30	0	0			
Furniture and Fittings		10	0	0			
Tuberculin and Medical Sundries		30	0	0			
Repairs and Renewals		15	0	0			
Stationery		5	0	0			
Sundries		10	0	0			
					125	0	0
Estimated Total Expenditure	for						
Treatment					1325	0	0
To Loan Charges on Kimberwo	rth						
Hospital					450	0	0
					1775	0	0
Incor	ne.						
By Rotherham Insurance Comm	ittee						
(20,000 Insured Persons							
$7\frac{1}{2}$ d. each)					625	0	0
					1150	0	0
By half cost to be refunded	by						
Local Government Board					575	0.	0
						-	
					£575	0	0

It will, therefore, be seen that in the first instance, the estimated annual cost of this scheme to the Borough will be £575, but it must be remembered that if no scheme were in existence at all the Borough would have to be paying the annual loan charges on the Kimberworth Hospital, which are £450 per annum, and would no doubt continue to treat necessitous persons suffering from Tuberculosis in the Badsley Moor Lane Sanatorium. The annual cost of this in the past was approximately £300 per annum.

CHAS. L. DES FORGES,

Town Clerk.

A. ROBINSON,

Medical Officer of Health.

17th July, 1913.

### INDEX.

					PAGES.
Ages at and causes of death					42-44
Accumulation of Manure, Flies and					62
Amount of Poor Law Relief in Rotherham					39
Animals slaughtered at the Public Abattoir du	uring 1	913			72
Antitoxic Serum, Prophylactic use of					33
Anti-Vaccination, Growth of					28
Appendix					101-109
Bacteriology					40-41
Births and Birth-rate for each quarter of 1913					10
Birth-rate in Rotherham compared with other		towns			8
Birth-rate, the declining, some suggested exp.		ns			54-55
Birth-rate Enquiry Forms, Statistics from					21
Births notified under Notification of Births Ac	ct				16
Black Smoke Nuisance					60
Boards of Guardians, Position of with regard				rsons	87-88
Boy Labour, Apprenticeship, and Prevention	of Des	titution			49-50
Casual Sanitary Authorities					6-7
Cases of Infectious Diseases notified during 19					46
Causes of Deaths under one year of age		***			10
Canal Boats					74
Chart showing Mortality Rate amongst Dipht	heria	Patients	s		35
Children, Infectious Diseases amongst					39
Children, Cases of Tuberculosis amongst					87
Children, Early Tuberculous states in					86
Common Lodging Houses, Number of					74
Conscientious Objectors to Vaccination					29
Cowkeepers, Number of	•••	•••	•••		74
Cowsheds and Tuberculosis			***		88-89
Conclusion			***	•••	101
Dangerous Trades					70
Deaths and Death-rate for each quarter of 191	13			***	10
Deaths, ages at and Causes of					42-44
Deaths under one year of age, Causes of, &c.					10
Deaths under one year in the various Wards	•••	****			11
Deaths in Public Institutions	•••	•••			47-49
Deaths in the various Wards and Institutions				•••	47
Death-rate in the various Wards during 1913					56
Death-rate in Rotherham compared with other	_				8
Deaths from Measles during the last 11 years Deaths of Glaxo-fed Babies					27
Density of Population and Prevalence of certs	in Die				21 38
Details of Cases treated at Isolation Hospital					26
Detailed Statistics since 1892	44,1119		***		45
Declining Birth-rate, some suggested explanat	tions				54-55
Defects found in Workshops and Workplaces		1119			71
Diphtheria Antitoxic Serum				١	31-33
Diphtheria Antitoxic Serum, Prophylactic use					33
Diphtheria, Cases of, in the various Wards					36
Diphtheria, Statistics as to since 1890					34
Dirty and Destructive Tenants					69-70
Dirty Tenant as a factor in the Housing Prob	lem				96-97
Disinfectants, their use and abuse					60-61
Disinfectants sold during the year					62
Distinguished People, shortened lives of					56-57
	ervisio	n of Tu	iberci	ilosis	76-83
Dried Milk Scheme			•••		11
Duties performed under Workmen's Compensa	ation A	ACT	***		71

						PAGES.
Early Tuberculous states in Children						86
Empty Houses in Rotherham						94
Enteric Fever (See Typhoid Fever)						
Enquiry as to Industrial Employment of	Marrie	ed Won	nen			12-14
Erysipelas, Cases reported each Month						27
Factory and Workshops Act, Person exam	nined 1	inder		OFFICE OF	9035	70
Female Health Visitors, General report of						17-22
Farm Stock, Tuberculous						90-91
First Annual Report to the Housing Com						98-101
Flies and Assumulations of Manues						62
Food and Drugs Act, Samples purchased	-					67
Food and Drugs Act, Proceedings taken u						66
Food seized and destroyed during 1913						89
General Report of the Female Health Vi	sitors					17-22
Glaxo or Dried Milk Scheme						18-19
Glaxo fed Babies, Information re Deaths						21
Glaxo, Purchase and Disposal of						16
Growth of Anti-vaccination						28-29
Guardians, Boards of with regard to Tube						87-88
						23-26
Hospital, Isolation						94-95
Housing and Town Planning Housing Committee, Report to						98-101
TI Tit. Walnut						7-8
Infantile Mortality						9-10
Infantile Mortality, Influence of Weather						11
Infantile Mortality for each Quarter of 19				•••	•••	10
Infantile Mortality Rate for past 11 years			•••	***		56
Infantile Mortality Rate in various Ward	S				•••	56
Infantile Mortality and Jews						55
Industrial Employment of Women						9
Industrial Employment of Married Wom		Infan	tile Me	ortality		12-14
Infectious Diseases, Cases reported each						28
Infectious Diseases amongst School Child	lren					39
Infectious Disease, Cases notified during						46
Information re Deaths of Glaxo-fed Babie		•••		•••		21
Inquests held during 1912 and 1913						57
Isolation Hospital						23-26
Isolation Hospitals, Payment by Patients						23
Isolation Hospital, Cases treated in 1912						23 24
Isolation Hospital, Cases treated since 19 Isolation Hospital, Cases admitted during						25
Isolation Hospital, Details of Cases treate		ng 191	3			26
Illness amongst School Children	cu uuii					39
Inspections made by Male Staff						73
Inspections made by Female Staff				•••		17-22
Inspection of Workshops						71-72
		***		111		
Jews and Infantile Mortality			•••			55
Laboratory Work done in last five years						40-41
Landlords and Dirty Tenants						96-97
Longevity of Women						56-57
Measles, Deaths from during last eleven y	ears					27
Mental Deficiency Act						51-52
Meat and Food Inspection						89
Midwives						17
Milk and Cream, New Regulations						65-66
Milk and Cream, Preservatives in						64-65
Milk Shops, Number of						74

A CONTRACTOR OF THE PARTY OF TH			PAGES.
Mortality, Infantile			9-10
Mortality, Infantile, for each Quarter of 1913			10
Mortality, Infantile, Influence of Weather on			11
Nuisances abated			73
Offensive Trades, Number of			74
Old Age			56-57
Onbthalmia Maanatauum			15-16
Onaning Damauka			5-6
D D. Handa in T. Jadian II			23
D			70
Down Town Delich Amount of in Dothambour			39
Position of Sanitary Authorities with regard to Tuberc			87-88
Prevalence of Certain Diseases and Density of Population			38
Descention is better then ones			94-95
Drasawatives in Milk and Cream			64-65
Privy Conversions during 1913			58-59
Prevention of Destitution, Boy Labour and			49-50
			33
Provision of Shelters as part of a Tuberculosis Scheme .			83-86
			74
Public Health Laboratory Work during last five years .			40-41
			47-49
			72
			74-88
Pulmonary Tuberculosis, Cases notified during past 15 y			74 74
Pulmonary Tuberculosis, Death-rate from during past 1			
Dura Milk and Croam Now Populations			16 65-66
			63
			101
A			72
			5-6
			63-64
Penant to the Housing Committee for 1019			91-93
Potum Cases of Seculat Fores			98-101 36-37
Dethanken Amount of Door Law Police in			39
Rotherham Board of Guardians, Treatment of Tubercul			93-94
Samples of Milk and Cream examined during 1912			67
Sanatorium Schomes			90
Camitana Authorities Connel			75-76 6-7
Saarlot Fower Return Coses			36-37
Scarlet Fever Cases reported each Month			37
Saarlat Favor Statistics as to since 1999			38
Sahama for treatment of Tuberculosis (Annendix)			101-109
Shortened Lives of Distinguished Paople			56-57
School Children Illness amongst			39
Sahaal Clasura			39
Statistics from Birth Francism Forms			21
Statistics as to Enteric Fever during the last eight years	s		29
			34
			45
			45
			53
Statement of Duties performed under Workmen's Com	pensation	Act	71
Cmake Nuisanes			100
Smake Abstament			60
Smoke Abatement		***	60

					PAGES.
Tenants, Dirty and Destructive					69-70
Typhoid Fever, Statistics as to during last eight					29
m 1 13 m 0 110 31					31
Typhoid Fever, Cases of in each Ward					31
Tuberculosis, Pulmonary					74-88
Tuberculosis, Domiciliary Treatment and Disper	nsary S	Superv	rision of	f	76-83
Tuberculosis Scheme, Provision of Shelters as p					83-86
Tuberculosis amongst Children, Cases notified d		1913			87
Tuberculosis and Unhealthy Cowsheds					88-89
Tuberculosis Order, 1913, Report					91-93
Tuberculosis, Treatment of by Rotherham Guar	dians				93-91
Tuberculosis Scheme, (Appendix)					101-109
Tuberculous States in Children					86
Tuberculous Persons, Position of Sanitary Auth	orities	with	regard	to	87-88
Tuberculous Food destroyed during year					89
Tuberculous Farm Stock					90-91
Use and abuse of Disinfectants					60-61
Unhealthy Cowsheds and Tuberculosis					88-89
Vaccination, Exemptions since 1907			***		28
Vaccination, Conscientious Objectors to in Roth		1		•••	29
Value of Human Life		***	***	•••	7-8
Ventilation in its relation to Consumption		***		***	94-95
Vital Statistics, Summary of 1913	***				2
Vital Statistics, Summary 1912			•••		3
Vital Statistics of Whole District during 1913 a	na pre	vious y	rears		45
Wards, Deaths under one year in					11
Wards, Cases of Diphtheria in					36
Wards Cases of Erysipelas in					27
Wards, Cases of Typhoid Fever in					31
Wards, Cases of Scarlet Fever in					37
Wards, Deaths at all Ages in		***	***		47
Wards, Death-rate and Birth-rate in					56
Wards, Infantile Mortality in					56
Weather, Influence of on Infantile Mortality			***		11
Why Food is dearer			***		67-69
Work done in Public Health Laboratory during	g last fi	ive yes	rs		40-41
Workmen's Compensation Act, Duties performe	d unde	er			71
Workshops	***				71-72
Zymotic Death-rate in Rotherham compared w	ith oth	er lare	e town	S	- 8



and the second s