[Report 1909] / Medical Officer of Health, Exeter City & County.

Contributors

Exeter (England). City & County Council.

Publication/Creation

1909

Persistent URL

https://wellcomecollection.org/works/a3j6txrp

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.



City and County of the City of Greek



ANNUAL REPORT

FOR 1909,

OF THE

Vital Statistics.

SANITARY WORK, &c.,

EDWARD A. BRASH, L.R.C.P., LOND.,

Medical Officer of Health.

EXETER:

BURRIDGE & CANNICOTT, Printers, Musgrave Alley, High Street, 1910.

CITY & COUNTY OF THE CITY OF EXETER.

SANITARY COMMITTEE.

Mayor:

HENRY HUGH WIPPELL, Esq.

Chairman:

ALDERMAN CHARLES COLE.

Deputy Chairman:

COUNCILLOR P. KELLAND, J.P.

ALDERMAN J. G. COMMIN, J.P. COUNCILLOR R. M. CHALLICE.

F. T. DEPREE, J.P. ,, T. W. GARNSWORTHY.

A. McCREA, J.P. " A. M. HUTCHINGS.

, J. PETERS. " F. G. MANSFIELD.

COUNCILLOR T. C. PRING.

" W. S. VICKERY.

Town Clerk: H. LLOYD PARRY, Esq.

STAFF OF THE HEALTH DEPARTMENT.

Medical Officer of Health and Medical Officer of Sanatorium:—
E. A. Brash, L.R.C.P., Lond., &c.

Assistant Medical Officers of Health and Medical Officers of Sanatorium:—

G. T. CLAPP, M.B.

C. J. VLIELAND, M.D.

Matron of Isolation Hospital: -MISS MARION JONES.

Chief Inspector of Nuisances and Inspector under the Foods and Drugs Acts:—

WILLIAM J. WREFORD, Cert. San. Inst.

Inspectors:—

R. B. Pearse, Cert. San. Inst.

S. E. Fulford.

A. E. TROUNSON.

Clerks : - T. WREFORD.

S. HAWKE.

House Disinfector :- W. RODBOURN.

Hospital Porter: - C. Holland.

Health Visitor :- MISS E. WEAVER.



I have the honour to present to the Right Worshipful the Mayor, Aldermen, and Council of the City of Exeter, my Annual Report for the Year 1909.

EDWARD A. BRASH.

February, 1910.



CONTENTS.

Sanitary Committee and Staff of the Public Health Department			2
General Observations	5	to	8
Vital Statistics	9	to	20
Disease Incidents (Notifiable Diseases)	21	to	31
Disease Incidents (Non-Notifiable Diseases)	32	to	38
Summary of Infectious Diseases and Action Taken	38	to	40
List of Articles Disinfected			41
Sanatorium Report (by Medical Officers in Charge)	42	to	50
Sewage of Exeter	50	to	52
Water Supply of Exeter			52
	53	to	60
Common Lodging Houses, Slaughter Houses, Bakehouses	61	to	63
Dairies, Milkshops, Sale of Food and Drugs Act, Midwives Act, Notification of Births Act, Factory and Workshops Acts	63	to	72
Legal Proceedings			73
Meteorological Readings	74	to	75
Summary of Tables			76
TABLE I.—Vital Statistics of whole District during 1909 and Previous Years			77
TABLE II.—Vital Statistics of Separate Localities in 1909 and Previous Years	78	to	
TABLE III.—Cases of Infectious Diseases Notified during the Year from various Localities			80
TABLE IIIA Monthly Return of Cases Notified to Medical			81
TABLE IV.—Causes of, and Ages at, Death during the Year			82
TABLE V.—Showing Infantile Mortality during the Year			83
TABLE VI.—Showing the Number of Deaths from all Causes			84
TABLE VII.—Showing the Ages of Peaths from all Causes			85
TABLE VIII.—Being a Table of Deaths from all Causes set			00
out under their different Diseases and Ages	86	to	90
SANITARY INSPECTOR'S REPORT—			
Public Abattoir, Slaughter Houses, Drain Testing, New Buildings, Unsound Meat, Vegetables, &c.,; Bakehouses, Dairies and Cowsheds, Factory and Workshops Act, Housing of the Working Classes Act, Legal Proceedings, Report of Sanitary Work Com- pleted in the Year 1909	1 t	0 1	107
CHART I.—Showing Weekly Notifications of Scarlet Fever, Typhoid Fever, and Diphtheria	th	e E	nd
CHART II.—Showing Weekly Mortality from the above Diseases			
SPOT MAP of the City of Exeter, indicating the Numbers and Locality of each Death from the principal Zymotic Diseases			



Annual Report.

GENERAL OBSERVATIONS.

In presenting this my Annual Report dealing with the work General Observadouble the Health Department for the year 1909, I have,
for the purpose of comparison, carefully followed the lines of previous Reports and the requirements of the Local Government Board.

The population of Exeter at the census of 1901 was returned as 47,185, divided as follows:—Males, 21,401; Females, 25,784; showing an increase since the census of 1891 of 1,419. The number of houses then was returned as 10,322, out of which 356 were void, and there were 47 houses in course of erection. Since that date 1,303 houses have been erected, making a total of 11,625.

Taking this number of houses and the estimated population of Exeter at 48,500 it gives about 4.2 persons per house, while in the census of 1901 there were five persons per house.

The surface of Exeter varies from 25.9 feet above Ordanance Datam on the Quay, to 136.5 feet at the Guildhall, 225.9 at Elmside, and 433.5 on the top of Pennsylvania. The fall from the City towards the river is very rapid.

GEOLOGICAL FORMATION.

The greater part of the ancient City and its immediate surroundings is built upon the new red sandstone—that to the north is on the carboniferous shale, a portion of St. Leonard's stands on gravel, and the eastern side on the clay. The annexed parts of St. Thomas's Parish are chiefly built on the old bed of the Exe, and the sub-soil is gravel.

The area of the City is 3,168 acres. The density of population for the City and County of the City is 15 per acre, and reckoning the portion of the City built upon at 950 acres, we have a density of population of 50 per acre.

The following Table taken from the Census Returns for Devon, shows the population and number of houses in each Ward in the City, and also the number of houses, &c., occupied as tenements:—

TABLE
Showing Houses and Population of each Ward.

				нои	SES.		POP	ULAT	ION.
WARDS	WARDS.				ed.	bio.			
					Uninhabited. Not in occupation	Building.	Persons.	Males.	Females.
Belmont			765	9	39	7	3436	1519	1917
Cowick			700	7	25	_	3184	1524	1660
Exwick .			710	8	12	7	3370	1629	1741
Holy Trinity			651	13	19	_	3375	1594	1781
Rougemont			525	88	16	2	3072	1481	1591
St. David			685	30	30	2	3263	1431	1332
St. James			830	23	28	2	4003	1709	2294
St. John			589	76	24	5	3867	1874	1993
St. Leonard			624	10	33	4	3028	1176	1852
St. Matthew			714	10	16	2	3500	1643	1857
St. Paul			647	110	56	2	3408	1521	1887
St. Petrock			541	107	19	_	2899	1087	1812
St. Sidwell			866	27	21	-	3877	1819	2058
St. Thomas			592	9	18	14	2903	1394	1509

TABLE

Showing the number of Tenements of less than five rooms distinguishing those occupied by various numbers of persons at the time of the last census.

URBAN DISTRICT.	in nt.	ts of less rooms.	P	ERS	ONS	Pl	ER	TE	NI	EM	EN	T.	
Exeter, City of (C.B.)— Tenements of less than	Rooms in Tenement	Tenements than 5 ro	1	2	3	4	5	6	7	8	9	10	11
five rooms 3974	-			-	-	-				-	-	-	-
Over five rooms . 6832	1	598	346	159	56	22	10	3	1	1			
	2	1062	289	366	191	97	69	30	12	8			
Total 10806	3	1194	102	244	248	198	168	118	64	29	19	9	
1000	4	1120	37	202	227	199	159	129	84	48	27	5	35

In estimating the population of Exeter I have assumed that the increase has been in the same ratio as for the ten years from 1891 to 1901, which would give it a population of 48,500, and for the purpose of these statistics I have used this figure.

VITAL STATISTICS.

The total number of Births registered in Exeter in the year Birth-rate.

1909 was 1,115, divided as follows:—572 males and 543 females.

Of this number 42 males and 40 female births were certified as illegitimate.

This gives a Birth-rate of 23 per 1,000, being 4 lower than that of last year, and 2.6 below that of England and Wales.

The Registrar-General, in his summary for 1909, gives the Birth-rate for England and Wales as 25.6 per 1,000 of the population, and for the 143 towns in which Exeter is classed as 24.8 per 1,000.

The total number of Deaths registered in Exeter during the Death-rate. year 1909 was 762, giving a Death-rate of 15.7 per 1,000. From these deaths, however, we should deduct 77 of non-residents dying in Public Institutions in the district, and add the deaths of 29 persons who died in Public Institutions beyond the district, giving a net Death-rate of 14.7 per 1,000.

The Public Institutions within the district are the Royal Devon and Exeter Hospital, the City and St. Thomas Workhouses, the Eye Infirmary, the Home Hospital, and H.M. Prison.

The Public Institutions outside the district are the City
Asylum, the Sanatorium or Fever Hospital.

CORRECTED DEATH-RATE.

Corrected Death rate. In order that the Death-rate of various places can be fairly compared, it is essential to know whether the respective populations are made up of sexes in the same proportion, and whether they contain the same proportion of persons in the various age groups.

To correct a Death-rate for age and sex distribution the Registrar-General has published Tables giving factors by which the Death-rate has to be multiplied. For Exeter the factor is 9,526, and this being applied, gives a Death-rate corrected for age and sex distribution of 14 per 1,000.

AGES OF MORTALITY.

The following Table shows the number of Deaths (distinguishing males and females) at different age periods:—

					Males.	Females.	Totals
Under 1	ear				James Control of the		
	months				42	29	71
	,,				12	10	22
	2 ,,				8	12	20
Totals und		r			62	51	113
Over 1 ye	ar and r	inder 9	veere		10	9	19
,, 2	-	3			4	4	8
	"				3	2	5
-,, 3	"		"				
,, 4	,,	5	1.7		1	2	3
Totals 1 t	o 5 year	s		••	18	17	35
Over 5 a	nd unde	r 10 y	ears		12	8	20
,, 10	,,	15	,,		9	10	19
,, 15	,,	25	,,		17	25	42
,, 25	,,	35	,,		21	20	41
,, 35	,,	45	,,		16	18	34
,, 45	,,	55	,,		39	39	78
,, 55	"	65	,,		46	52	98
,, 65	,,	75	,,		69	66	135
,, 75	,,	85	,,		50	88	138
,, 85					10	28	38
Totals at	ages over	5 years	5		289	354	643
Totals at a	all ages		,,		369	422	791

Included in the above are Deaths of Non-Residents occurring in Public Institutions in the District and of Residents of the District occurring at the Sanatorium and Digby's Asylum. The corrected Death-rate for England and Wales is given for the year 1909 as 14.5 per 1,000.

The corrected Death-rate for the 76 Great Towns was 15.6 per 1,000, and in the 143 Towns in which Exeter is classed it was 14.5 per 1,000.

The corrected Death-rate for England and Wales less the 219

Towns was 13.6 per 1,000

The corrected Death-rate for Exeter is 1.6 per 1,000 below the 76 Great Towns, and is 5 below that for the 143 Towns in which Exeter is included, and 4 per 1,000 above that for England and Wales less the 219 Towns.

INFANTILE MORTALITY.

Infantile Mortality. The number of Deaths under One Year of Age was 113, the number Births being 1,115; this gives an Infant Mortality Rate of 101.3 per 1,000 Births, as compared with 126.6 for the previous year.

The Infant Mortality for England and Wales was 109 per 1,000 Births, in the 76 Great Towns it was 118, in the 143 Towns in which Exeter is included it was 111, and in England and Wales less the 219 Towns is was 98 per 1,000 Births.

The Infantile Death-rate in Exeter has decreased from 141.6 per 1,000 Births, which was the average for the 8 years 1901 to 1908 inclusive, to 101.3 per 1,000 Births for the present year, showing a decrease on the average Infantile Mortality for the past 8 years of 40.3 per 1,000 Births.

This decrease in the Infantile Mortality fully justifies the action taken by the Council, when it decided to add a Lady Health Visitor to the Staff of the Health Department, as, we feel sure, it is greatly through her work, and the manner in which she has carried out her duties, as well as to the interest taken and the work done by the Ladies of the Babies' Welcome Club that this good result is due. I find that the services of the Health Visitor and those rendered by the Babies' Welcome Club are more appreciated every year.

From result of enquiries by the Health Visitor I find that the mortality among hand-fed infants is 15.1 per cent., as compared with 3.6 per cent. of breast-fed infants. 113 Deaths occurred to children under one year of age.

They may be classed as follows:—

Debility from Birth		 26
Bronchitis		 5
Pneumonia		 9
Premature Birth		 15
Whooping Cough		 1
Convulsions		 5
Suffocation		 2
Diarrhœa		 13
Enteritis		 8
Gastritis		 4
Congenital Defects		 3
Diseases of Stomach		 1
Meningitis, Tuberculous		 2
Peritonitis Tuberculous		 2
Other Forms of Tubercu	losis	 2
Syphilis		 1
Rickets		 1
Other Causes		 13

The following Table shows the Ratio of Deaths under one year per 1,000 Births for the year 1909, compared with the eight years 1901 to 1908:—

1901	1902	1903	1904	1905	1906	1907	1908	Average for the Eight Years 1901—1908.	1909
155	167	131	166	124.5	129	134	126.6	141.6	101.3

Deaths in Public Institutions:-

The Royal Devon and Exeter Hospital	78
The City Workhouse	45
The St. Thomas Workhouse	29
The Home Hospital	3
City Asylum Residents of	20
City Asylum { Residents of } Exeter Sanatorium { City only }	9
H.M. Prison	1

185

By agreement with the Registrar-General five-sevenths of the Deaths (78) which occurred in the Royal Devon and Exeter Hospital are deducted for Non-Residents,

INQUESTS.

During the past year the Coroner decided that an Inquest was necessary in 69 cases, compared with 87 in the previous year.

The verdicts of the Juries as to the causes of death were recorded as follows:—

Accidents :-

	Ву	Injuries cau	used by Falli	ing Downstai	irs, &c.	7
	Ву	being Run	Over by Ca	arts		2
	Ву	Cycle Acci	ident			1
	Ву	being Run	Over by a	Railway Tra	in	1
	Ву	Injuries ca	used by Tre	ees Falling		2
	Ву	being Caug	ght in Mach	inery		1
	Ву	Burns				3
	Ву	Suffocation	1			3
	Ву	Want of A	Attention at	Birth		1
	Ву	Poisoning	***			1
	Ву	Drowning				1
Suicides :	_	,				
	Ву	Hanging				2
	Ву	Poisoning				2
	Ву	Gunshot V	Vounds			1
Murder :-						
	Ву	Suffocation	and Negleo	et at Birth		1

Judicial	Execution:—		
	By Hauging	 	1
Other Ca	tuses :—		
	Diseases of Heart	 	19
	Bronchitis	 	5
	Pneumonia	 	3
	Tuberculosis	 	2
	Congestion of Lungs	 	2
	Convulsions	 	2
	Premature Birth	 	1
	Bright's Disease	 	1
	Peritonitis	 	1
	Old Age	 · · · ·	1
	Diarrhœa	 	1
	Gastro Enteritis	 	1
			_
			69

The Registrar-General gives the Death-rate among persons aged 60 years and upwards for the year 1909 as 70.5 per 1,000 of the estimated population at that group of ages.

The Death-rate in Exeter of persons in the same group of ages was 76 per 1,000.

The Death-rate for the last ten years in Exeter and the 76
Great Towns was:—

THE FOLLOWING TABLES

Will show the comparative Rates for each Month or Year:-

CITY OF EXETER

Death-rate Statistics.

Month.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Jan.	21 97	17'4	16.5	19:0	24.4	19-26	17:58	20.4	17:76	15 5
Feb.	26.5	21.63	21 46	18.5	19.2	16.24	14.56	20.0	17.72	19 1
Mar.	17.92	23.67	19.6	16.75	16.7	15 12	17.5	22.2	22:03	19:5
April	19.55	17.2	15.44	15:30	17.2	12.53	14.4	18.0	18 67	19 2
May	15.7	16.98	15.0	12.70	13.2	13.65	12.8	23.6	14.9	11 4
June	15'44	13.0	15 25	12.40	14.6	11.52	10.73	12.21	10.72	13.9
July	14.81	14 08	14:45	13:50	14.9	12.2	11.66	11.62	10:06	12.2
Aug.	15.97	19 4	14.7	14:00	13.9	14.28	13.06	9.88	13:08	12.1
Sept.	14.84	10.34	13.7	13.20	10.7	10.68	14.66	15 15	14.12	10.1
Oct.	15 4	13.27	14.8	13.20	13.4	13:55	14.0	15 72	14'22	10 3
Nov.	18:34	143	15.73	15'00	11.8	15 81	13.28	11 91	17:85	13 9
Dec.	8 44	17.2	29.2	15.80	20.7	17:86	14'3	11.80	15:46	18:9

The Death-rate per 1,000 for each year being-

17.9 16.4 16.5 15.3 16.8 14.4 14.0 16.4 15.57 14.7

IN THE 76 GREAT TOWNS

Month	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Jan.	25.12	18-1	18:34	18.25	19:2	18.5	16.3	19.8	18.58	16.95
Feb.	23.5	20.5	22-72	(7.1	17.9	17.1	16.8	19-4	18.16	18:35
Mar.	20.98	19.1	18:97	16.8	18.9	16.3	16.4	17 6	17:5	21:32
April	51.72	18 67	17:57	15:37	17:1	16.1	17:0	16.9	15.7	16'46
May	18.5	16.71	16.86	16.0	15.5	14.8	14.8	15'2	13 3	14.1
June	16.5	14.87	13.12	14:20	13.8	13.1	12.8	13.0	11.7	12:25
July	16:47	17:45	10.10	13.75	14.4	13.5	12.1	12.16	11.66	11.12
Aug.	20:36	21 68	13:40	15.40	21:3	17 0	16.4	11:75	14.9	11.92
Sept.	18.19	17.8	16.87	13.7	16.8	14.5	20.25	13 15	13.84	12.67
Oct.	17:32	16.5	17 20	15.80	15.3	14.3	15:28	15:30	13.9	12:27
Nov.	17:54	10.17	17.65	17:20	17.2	16'4	15'6	15.3	15.2	14'5
Dec.	16.87	19.6	18-32	18:32	19.8	17.1	18:0	15.9	15.48	16.0

The Death-rate per 1,000 for each year being-

19.5 18.6 17.40 16.3 17.2 15.7 15.9 15.4 15.8 14.7

The Table for 1899 to 1901 is for the 33 Great Towns, and for 1902 to 1909 for the 76 Great Towns.

The Deaths in Exeter due to the Notifiable Zymotic Diseases were:—

Small Pox	Diphtheria	Membranous Croup			Puerperal	Erysipelas	Total
0	8	0	4	2	0	1	15

Notifiable Zymotic Deaths.

Of these 4 died from Diphtheria, 3 from Scarlet Fever, and 2 from Typhoid Fever at the Sanatorium.

The Deaths from Non-Notifiable Diseases were :-

Measles	Whooping Cough	Diarrhœa	Total
1	3	15	19

Non-Notifiable Zymotic Deaths.

Giving a Death-rate for Notifiable Zymotic Diseases at 31 per 1,000, and the Non-Notifiable Diseases at 39 per 1,000.

The Death-rate from the seven commoner Zymotic Diseases in England and Wales for 1909 was 1.12 per 1,000; in the 76 Great Towns it was 1.42 per 1,000; in the 143 Smaller Towns it was 1.08 per 1,000; and in England and Wales less the 219 Towns, it was .80 per 1,000.

The Death-rate in Exeter was '67 per 1,000.

The following Table shows the Annual Birth-rate per 1,000 and Death-rate per 1,000 for all causes from the several Zymotic Diseases during the year 1909:—

Annual Death-rate.

			ANNU	AL RAT	E P	ER 1,	,000	Livi	NG.			
		Dear	th-rate	ases			Jr.		Congà.	-		er 1 ,000
	Birth-rate.	Crude.	Corrected.	Principal Epidemic Diseas Cols. 5-11.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria	Whooping Cor	Fever.	Diarrhoea.	Deaths under year per 1,00 Births.
Cols.	1	2	3	4	5	6	7	8	9	10	11	12
England & Wales	25.6	14.5	14.5	1.12	0.00	0.35	0.09	0.14	0.20	0.06	0.28	109
76 Great Towns	25.7	14.7	15.6	1.42	0.00	0.48	0.11	0.15	0.24	0.06	0.38	118
.143 Smaller Towns.	24.8	13.9	14.5	1.08	-	0.33	0.09	0.16	0.17	0.06	0.27	111
England & Wales Less the 219 Towns	25.6	14.5	13.6	0.80	0.00	0.21	0.06	0.14	0.16	0.06	0.17	98
Exeter	23	14.7	14.0	6.7	_	0.02	.082	0.16	0.06	0.04	0.31	101.3

DISEASE INCIDENTS.

Dotifiable Diseases.

SMALLPOX.

I am again glad to be able to report that no case of Smallpox occurred in Exeter during 1909.

TABLE

Showing the actual number of cases of Smallpox notified for ten years and mortality for same:—

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Total
Cases Notified	0	2	6	0	0	3	0	0	0	0	11
Deaths	0	0	1	ő	0	0	0	0	0	0	1

DIPHTHERIA.

Diphtheria.

The number of cases of this disease notified was 48, of whom 25 were males and 23 females.

All these were examined bacteriologically, 43 were confirmed, and 5 not confirmed.

Twenty-nine were removed to the Sanatorium, 19 of whom were discharged cured, and 8 died.

Five cases of Diphtheria occurred in Public Institutions, 3 of which were imported from outside the City.

Thirty-two bacteriological examinations were made from suspicious throats, all were negative.

One hundred and eighty-eight specimens from patients at the Isolation Hospital were examined previous to the patients being discharged.

Diphtheria Antitoxin is supplied free of cost, and free bacteriological examinations made on application at the Health Office for cases of Diphtheria, as well as for prophylactic purposes. This arrangement is much appreciated.

During the past year I have been considerably exercised by the large proportion of cases of this disease that is notified from the Western side of the River Exe. Out of the 48 cases notified no less than 21 came from this district. For the purpose of comparison I have estimated the population of the Western side of the river at 12,000, and that on the City side at 36,500. Taking these figures I find that the attack-rate per 1,000 on the City side is '73, whilst on the Western side it is 1.75. An interesting fact in connection with these cases is that in the Western side the majority of the houses in which the cases have occurred are new, and in considering the causes the Sanitary condition of the premises can be excluded.

TABLE

Showing the number of cases of Diphtheria notified and mortality from same for the past ten years:—

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Total
Cases Notified	20	40	32	17	37	14	12	12	29	48	261
Deaths	8	6	8	3	5	3	4	1	3	8	49

TABLE

Showing Age and Sex Incidents:-

	Ca	ases Notif	ied	Removed to Isolation Hospital				
	M	F	Т	М	F	Т		
Under 1 Year	0	0	0	0	0	0		
Between 1 and 5 Years	3	3	6	2	0	2		
" 5 and 10 "	15	9	24	. 9	6	15		
,, 10 and 15 ,,	6	6	12	3	4	7		
Over 15 Years	1	5	6	1	4	5		
Total	25	23	48	15	14	29		

Scarlet Fever.

SCARLET FEVER.

During the past year 120 cases of Scarlet Fever have been notified, 52 males and 68 females, of whom 103 were removed to the Sanatorium. This is a considerable increase on the past two years. The majority of these cases were of a mild type, and several cases were only recognised when in the desquamative stage. Four deaths were registered as due to this disease.

TABLE
Showing the number of cases of Scarlet Fever and mortality
from the same for the past ten years:—

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Total
Cases Notified	65	533	338	321	88	70	139	69	69	120	1812
Deaths	1	10	13	6	2	1	1	3	1	4	42

TABLE
Showing Age and Sex Incidents:—

	Ci	ases Noti	fied	Removed to Isolation Hospital				
	М	F	Т	М	F	Т		
Under 1 Year	0	0	0	0	0	0		
Between 1 and 5 Years	11	14	25	10	12	22		
,, 5 and 10 ,,	24	29	53	-22	26	48		
,, 10 and 15 ,,	12	17	29	11	14	25		
Over 15 Years	5	8	13	1	7	8		
Total	52	68	120	44	59	103		

TYPHOID FEVER.

During the past year 48 cases of this disease were notified, Typhoid Fever.

divided as follows:—28 males and 20 females. This is the largest number of cases notified since the epidemic due to cockles in 1899, 1900, when the number of cases notified was 186 and 91 respectively.

The increase this year is entirely due to an epidemic caused by milk, no less than 35 out of the 48 cases notified were attributable either directly or indirectly to milk supplied from one Dairy within the City, particulars of which I will deal with later. Excluding the 35 cases before mentioned, the number of cases, 13, would have been the lowest on record. Of this number 1 case was contracted in Paris, and in another case the patient had been nursing a probable case of Typhoid Fever. Of the 48 cases notified, 41 were examined by the Widal's Test; in 28, positive reaction was obtained, and in 13 the result was negative. Seven suspicious cases were examined with negative result.

In reviewing the outbreak due to milk, one must take into consideration that during the first eight months of the year only 6 cases of this disease had been notified, and with the exception of 2 cases, one of which was contracted in Paris, and in the other the patient had been nursing a probable case of Typhoid, no case had been notified since April 8th, so that one may fairly assume that until the commencement of this outbreak the City was free from this disease.

On the 8th of September notification of a case of Typhoid Fever was received and the patient was removed to the Sanatorium and died from Hæmorrhage on the 16th of September. Enquiries were instituted as to the cause of this case, but none were found to account for the disease. The milk was supplied from two different Dairies, one being the Dairy in question. The next case was notified from an entirely different district of the City, it had no connection with the Dairy in question and eventually proved not to be Typhoid Fever.

On September 13th, two specimens of blood were received for suspected Typhoid, both gave positive reaction to Widal's Test and were notified the following day. One case had no connection with the Dairy in question, being in a different part of the City, the other case was in the same neighbourhood as the case notified on September 8th and had milk from the same Dairy Between September 15th and September 17th, 8 cases were notified, 7 of which were obtaining milk from this Dairy.

On September 16th, the premises in which the Dairy was carried on were examined and enquiries instituted as to any probable cause, but nothing was found to account for the outbreak. On September 17th, samples of milk were taken and submitted for examination with a negative result. Later in the day the premises were again inspected, when it was noticed that a child residing there looked very ill, the parents' attention was called to it, and they were advised to have medical assistance.

On September 18th three notifications were received, and in two of these cases they were obtaining milk from this Dairy. I at once obtained particulars of the various farms, four in all, which

supplied milk to this Dairy, and I visited each farm, but could find nothing either in the condition of the premises or those residing or employed there. On September 19th I again inspected the Dairy and was informed that the child before mentioned was now being attended by a medical man. Shortly afterwards the Sanitary Inspector informed me that he had received information that another child of the family residing at the Dairy had been ill about three weeks ago, and that he had interviewed the occupier and was informed that a boy, three years of age, was ill sometime ago and was medically treated. I arranged an interview with the medical attendant, who informed me that this child had been under treatment from the middle of July to September 3rd, when it appeared quite well. He informed me that this child suffered from Pyrexia, but there were no indications of Typhoid Fever. He then mentioned that he had just been called in to see another of the children, and he was suspicious that it might be a case of Typhoid and asked me to see it with him, which I did, and advised removal to the Sanatorium, which was carried out. This case was confirmed by Widal's Test. Precautions were at I closed the premises and caused all milk and other foods to be destroyed.

From September 19th to October 16th, 21 more cases were notified, of whom 20 had received milk from the Dairy in question.

The onset of the disease in these cases coincided with the previous cases.

The total number of cases notified from September 8th to October 16th was 37, of this number 33 were partaking of milk from the suspected Dairy. 2 other cases that were notified later contracted the disease from one of the previous cases.

Investigations disclosed the facts that about seven hundred customers were supplied by this firm, who delivered their milk from two distinct sources, one being from the Dairy in question, and the other from their farm, which is just outside the City. About five hundred of the customers were supplied direct from the farm, and no notification of this disease was received either by myself or by the Medical Officer of Health of the adjoining district in which some of the milk was distributed. The other two hundred customers were supplied from the Dairy in question and in the area in which all these cases occurred.

The premises were closed for about one month, during which time they were disinfected, cleaned, and the infected family moved to another house. From the foregoing facts it is probable that the first child, ill at the Dairy in question, had suffered from a very mild attack of Typhoid Fever, and that the contamination from this source was the cause of the outbreak, and is evidenced by the fact that this cause being removed the outbreak ceased.

TABLE
Showing the number of cases of Typhoid Fever and the mortality
for the same for the past ten years:—

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Total
Cases Notified	91	41	33	31	30	20	37	18	17	48	366
Deaths	15	6	3	1	5	.3	7	3		2	45

TABLE
Showing Age and Sex Incidents of this disease:—

	Cr	ses Notif	ied	Removed to Isolation Hospital				
	М	F	т	М	F	Т		
Under 1 Year	0	0	0	0	0	0		
Between 1 and 5 Years	4	2	6	3	1	4		
" 5 and 10 "	4	3	7	3	2	-5		
,, 10 and 15 ,,	6	1	7	6	0	6		
Over 15 Years	14	14	28	11	11	22		
Total	28	20	48	23	14	37		

CONTINUED FEVER.

No case of this disease was notified.

Continued Fever.

TYPHUS FEVER.

No case of this disease was notified during the year.

Typhus Fever.

PUERPERAL FEVER.

Three cases of this disease were notified, none of which Puerperal Fever.

ERYSIPELAS.

Thirty-one cases of this disease were notified, one of which Erysipelas ended fatally.

CHICKEN POX.

During the year 63 cases have been notified, none of which Chicken Pox.

MEMBRANOUS CROUP.

No case of this disease has been notified.

Membranous Croup.

Don-Potisiable Diseases.

MEASLES.

Measles,

As there was only one death from this disease during the year, we may conclude there were very few cases.

TABLE

Showing the number of deaths from Measles for the past ten

years :-

Year	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	Total
Deaths	12	2	17	36	0	9	0	68	1	1	146

WHOOPING COUGH.

Whooping Cough.

During the past year only 3 deaths from this disease were registered.

DIARRHŒA.

Diarrhoea.

The number of deaths from this disease exceeded that of the two previous years, being 15, as compared with 8 in 1908, and 11 in 1907.

During the past year printed leaflets dealing with this disease were freely distributed in those neighbourhoods in which deaths from this disease usually occur.

The number of deaths from this disease were divided as follows:—

Under 1 Year	 13
Between 50 and 60 Years	 1
Between 65 and 75 Years	 1
	_
	15

TUBERCULOSIS.

The number of deaths registered during the year from the Tuberculosis.

various forms of Tuberculosis was 92, divided as follows:—69 from

Phthisis; 7 from Tubercular Meningitis; 1 from Tabes

Mesenterica; and 15 from other forms of Tuberculosis.

The voluntary notification of Phthisis, as far as the City is concerned, has again been a complete failure, only one case having been notified, although the Council offers to pay the usual fee for notification.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS 1908.

The above Regulations have been framed by the Local Government Board under powers provided by the various Public Health Acts. They are compulsory on all Local Authorities and came into force on the 1st January, 1909. The object of these Regulations is the notification of cases of Pulmonary Tuberculosis by the Medical Officer of a Poor Law Institution, and a District Poor Law Medical Officer to the Medical Officer of Health within 48 hours after first recognition of the symptoms of Pulmonary Tuberculosis occurring amongst persons under their care according to agreement with the Board of Guardians. Relieving Officers have to notify all changes of residence in poor persons who have been notified by the District Medical Officers as suffering from Pulmonary Tuberculosis, and the Superintending Officers of a Poor Law Institution (Workhouse) have to forward to the Medical Officer of Health the intended address of a pauper who has been certified as suffering from this disease who has left the Institution. During the past year, 29 cases were notified under these Regulations as suffering from Pulmonary Tuberculosis, 10 of whom died. 4 of these cases were notified from the City and St. Thomas' Workhouses, and 25 as occurring outside the Poor Law Institutions. Upon receipt of notification steps are at once taken to assist these cases by visits from the Health Visitor, who instructs the patient

in the best methods of preventing the spread of infection and the destruction of infectious material. Disinfectants and Sputum Cups are supplied free of charge, and in all cases the rooms are sprayed after the death or removal of a patient.

In dealing with the prevention of this disease I have arranged with the Registrars of Deaths to send me notice of all deaths registered from this disease immediately upon the death being registered. Upon receipt of this information an Inspector is sent to the house to make enquiries and arrange-about disinfecting the premises. I am insisting upon this being done in all cases where a death occurs from this disease, and as far as possible upon change of residence of a patient suffering from this disease.

Arrangements have been made whereby the Sputum from any suspected cases will be examined free of cost, and a report sent to the medical practitioner in attendance. I am glad to be able to say that this has been much appreciated and made considerable use of.

We have again endeavoured to deal with this disease, and whenever we have known of cases amongst the poorer classes, the Health Visitor has been instructed to visit and advise the best methods of preventing the spread of infection.

We have again this year supplied disinfectants and disinfected free of cost to all who applied, and in 80 cases I was able to induce the occupiers of houses to have the premises disinfected where this disease had taken place.

The Death-rate from Phthisis for the past year was 1.4 per 1,000. This Death-rate is the same as the average for the past seven years.

The deaths from this disease in all its forms in Exeter is shown in the following Table.

TABLE
Showing the Deaths from the following diseases for the past ten
years:—

Disease	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
Phthisis	56	66	74	67	57	48	60	58	64	69
Other Forms of Tuberculosis	20	14	19	19	17	21	15	15	21	15
Tubercular Meningitis	10	10	12	4	9	9	5	10	7	7
Tabes Mesenterica	2	5	1	1	0	0	0	0	1	1
Total	88	95	106	91	83	78	80	88	93	92

Deaths from Phthisis classified according to Locality and Sex for 1909 :—

LOCALITY	M	F	TOTAL	LOCALITY	M	F	Т
Alphington Road	2		2	Erought Forward	13	21	34
Bartholomew St. E.		1	1	May Street		1	1
Beaufort Road		1	1	Mount Pleasant Rd.		1	1
Blackboy Road		1	1	Okehampton Road		1	1
Cambridge Street		1	1	Paris Street	1	1	2
Centre Street		1	1	Parr Street		1	1
Church Road	1	1	2	Poltimore Square	1	1	2
Clifton Street		1	1	Portland Street	2		2
Coleridge Road	2		2	Preston Street	1	1	2
Commercial Road	1	1	2	Prospect Park		1	1
Coombe Street	1	2	3	Queen's Road		1	1
Cornwall Street		1	1	Red Cow Village		1	1
Diamond Road		1	1	Red Hills		1	1
Dunsford Road	1		1	Russell Street	1		1
Ebrington Road		1	1	Sandford Street	2		2
Exe Street	1		1	South Street	1		1
Ewing's Square		1	1	Stepcote Hill	1		1
Ewing's Lane	1		1	Summerland Street	1		1
High Street		1	1	West View Terrace		1	1
Hoopern Street		1	1	Wonford Road		1	1
Longbrook Street	1	1	2	Workhouse, City	2		2
Magdalen Street	1	1	2	,, St. Thomas	1		1
Mansfield Road	1	1	2	R. D. & E. Hospital	1	2	3
Maple Road		1	1	Digby's Asylum	4	1	5
Mary Arches Street		1	1				
Carried Forward	13	21	34	Grand Total	32	37	69

CANCER.

Cancer.

The deaths from this disease were 67, which is the highest for the past ten years. This increase is doubtless due to a better diagnosis and knowledge of the disease.

TABLE

Of Deaths from Cancer for the past ten years:—

1900	1901	1902	1903	1904	1905	1906	1907	1908	1909
36	33	50	60	56	44	51	41	66	67

SUMMARY OF INFECTIOUS DISEASES AND ACTION TAKEN.

In reviewing the cases of Infectious Diseases dealt with in 1909, it will be seen that the Zymotic-rate is above that of last year; this is due to the increase in the number of cases of Diphtheria and Typhoid Fever, the latter being entirely due to an outbreak of this disease caused by infected milk, for if we exclude the number of cases (33) traced to this cause, the number of cases of Typhoid Fever occurring in the City would have been only 15 (one case was contracted in Paris), which would have been the lowest number on record.

The increase in the number of cases of Diphtheria has been largely on the Western side of the river, and in the majority of the cases the houses have been surrounded by open spaces. I have taken considerable trouble to ascertain the cause of the increase, but up to the present have come to no definite conclusions.

The Death-rate from the Non-Notifiable Diseases is considerably less than that of last year.

The action taken to prevent the spread of Infectious Diseases has been the same as that of former years, and consists in the prompt removal of all cases where the necessary isolation could not be provided at home, and for this cause we have removed 86 per cent. of the notified cases of Scarlet Fever, 77 per cent. of the cases of Typhoid Fever, and 60 per cent. of the cases of Diphtheria. Careful inquiries into the cause of each case, the excluding of all children from school from infected houses, by advice notices to occupiers of infected premises, and by advising schools, librarians, and the School Medical Officer. I find that the list of children sent to me every week of all children absent from school on account of illness or supposed illness is of the greatest assistance in the checking of infectious disease, as from these returns we were at once able to decide which children should be looked up by the Health Visitor or Inspector, who visited the home of the child as soon as possible and enquired into the supposed illness, and by this means I have been able to trace many cases of disease. In dealing with these returns I have received the greatest assistance from Dr. Stirk, the School Medical Officer, who kindly looks through them before they are sent on to me. I have also to acknowledge the valuable assistance rendered by the Schoolmasters and Mistresses of the various schools in the City, and from the Clerk and Officers of the Education Committee.

SUMMARY OF DISEASES FOR WHICH DISINFECTION HAS BEEN CARRIED OUT.

Phthisis		 	80
Cancer		 	9
Puerperal		 	3
Measles		 	2
Chicken Pox		 	2
Scarlet)		
Typhoid	}	 	310
Diphtheria, &c.)		
	m . 1		100
	Total	 	406

This necessitated the Disinfection of 370 Rooms.

ARTICLES DISINFECTED IN 1909.

Mattresses			 475
Palliasses			 282
Blankets			 404
Bolsters			 280
Bedties			 325
Quilts			 150
Carpets			 180
Dresses			 184
Dressing Gown	s		 143
Cushions			 169
Curtains			 217
Underlinen			 312
Coats		,	 193
Suits			 220
Rugs			 153
Other Articles			 2998
	Total		 6685

Sanatorium Report.

SANATORIUM OR FEVER HOSPITAL.

REPORT FOR THE YEAR 1909.

GENTLEMEN,

We have the honour to present you with the following Report of the cases treated at the Sanatorium during the year 1909.

We began the year with 34 cases under treatment remaining over from 1908, 27 of which were from the County. 327 fresh cases were admitted during the year, 157 of these coming from the County, and we have at the end of the year 1909, 50 cases under treatment, of which 28 are from the County.

(Vide following figures) :-

1900	Total treated a	at Sanatorium	 176
1901	>>	"	 422
1902	,,	33	 436
1903	,,	"	 398
1904	"	"	 268
1905	,,	33	 128
1906	"	.,	 321
1907	"	11	 205
1908	, "	,,	 208
1909	1)	"	 361

Half the cases treated at the Sanatorium during 1909 came from the County of Devon, and include cases, as per Schedule—from St. Thomas R.D.C., Sidmouth U.D.C., Exmouth U.D.C., Newton Abbot R.D.C., Budleigh Salterton U.D.C., Topsham Barracks, and Private Cases.

The following Table shows the number of County cases treated during the past 10 years :—

1900	Cases from	the County of	f Devon	 66
1901	22	"	"	 41
1902	31		27	 100
1903	,,	"	32	 83
1904	33 .	10	33	 90
1905	33	27	,,	 47
1906	37		,,	 169
1907	**	29	>>	 103
1908	27	,,	**	 103
1909	,,	"	,,	 184

The following is the mortality amongst the 184 cases from the County of Devon during the year 1909:—

Scarlet Fever	 	 2
Diphtheria	 	 3

Total ... §

The following is the mortality amongst the 177 cases from the City and County of Exeter:—

Typhoid Fever	 · · · · ·	 2
Scarlet Fever	 	 3
Diphtheria	 	 4
	Total	 9

Cases treated from the City and County of .

Exeter		• •••	•••	177
Cases treated	from the	County of	Devon	184
		Total		361

The average duration of each patient's stay in the Sanatorium was 48 82 days.

Against in	1900			45	days
,,	1901			48	>>
**	1902			46	>>
"	1903			45	,,
,,	1904			49	>3
**	1905			42	,,
22	1906			52	"
,,	1907	14	****	48	21
:>	1908			50	>>
.,	1909			48	27

The average number of patients per day for 1909 was 44.03,

During the year 1909 there occurred 14 deaths amongst all the patients who were treated at the Sanatorium, viz.:—

From Typhoid Fever		 2
From Scarlet Fever		 5
From Diphtheria		 7
		-
	Total	14

This gives a Death-rate of 3.88 per 100 cases treated:

DIPHTHERIA—55 cases of Diphtheria were treated during the year, of whom 7 died, 40 were discharged cured, and 8 left under treatment.

TYPHOID FEVER.—43 cases of Typhoid Fever were treated during the year, of whom 2 died, 36 were discharged cured, and 5 left under treatment.

SCARLET FEVER.—263 cases of Scarlet Fever were treated during the year, of whom 5 died, 221 were discharged cured, and 37 left under treatment.

The average duration of the fatal cases were as follows:-

Diphtheria ... 5.4 days

Typhoid Fever... 7.5 "

Scarlet Fever ... 21 "

and the mortality rate was :-

Diphtheria12.7 per cent.

Typhoid Fever... ... 4.6

Scarlet Fever ... 1.9

of the cases treated.

During the last three months of the year the accommodation of the Sanatorium was severely taxed in consequence of the outbreak of Typhoid Fever, and the difficulty of isolating those cases in which Scarlet Fever and Diphtheria, and Scarlet Fever and Chicken Pox were running concurrently.

We have again much pleasure in stating that the Matron (Miss Marion Jones) has been most efficient in the discharge of her duties. The administration of the Institution and the efficiency of the nursing has been very marked during the year.

We are indebted to the Nurses for their attention to their duties and their kind and careful treatment of the patients under their charge. Mr. W. J. Wreford has again proved a most valuable servant to the Institution. His duties are numerous and onerous, and they have all been performed to the entire satisfaction of everyone.

Appended are Schedules of cases.

We are, Gentlemen,

Yours faithfully,

EDWARD A. BRASH,
GEORGE T. CLAPP,
C. J. VLIELAND.

Schedule of cases treated at the Exeter Sanatorium during the year 1909:—

		A	Ca dm	ses	12.4	I	Dea	ths	3		har	is- rge- red		da	thy of	ini e ls ea	ch
MONTH.		Typhoid Fever	Scarlet Fever	Diphtheria	Measles	Typhoid Fever	Scarlet Fever	Diphtheria	Measles	Typhoid Fever	Scarlet Fever	Diphtheria	Measles	Typhoid Fever	Scarlet Feyer	Diphtheria	Measles
Remaining or 1st January, 1909	1	2	29	3								- 4					
January		1	23	3							16	3		3	36	3	
February		1	15	6				1		3	19	1		1	32	7	
March		1	28	2			1				22	5		2	37	4	
April			13	2			1				14	3		2	35	3	
May			15	4						2	24	3			26	4	
June			17	6							13	2			30	8	
July		ļ	12	2							23	7			19	3	
August		2	19	4		1	1				9	1		1	28	6	
September		27	19	2		1					14	2		27	33	6	
October		4	33	4			1	1		3	25	6		28	40	3	
November		3	27	9				3		21	21	3		10	46	6	3
December		2	13	8			1	2		7	21	4		5	37	8	3
Total		43	263	55		2	5	7		36	221	40					

Average Time of Patients' Treatment, 48.82 days.

Average Number of Patients per day, 44.03.

Summary of Cases treated at the Exeter Sanatorium for the year 1909:—

Disease Treated	ì	Remaining 1st Jan., 1909	Admitted during 1909	Total Deaths	Dis- charged Cured.	Total Treated during 1909	Remain- ing 1st Jan, 1910
Typhoid Fever		5	41	2	36	43	5
Scarlet Fever		29	234	5	221	263	37
Diphtheria		3	52	7	40	55	8
Measles							
Total		34	327	14	297	361	50

Summary of Cases treated at the Exeter Sanatorium from the County of Devon for the year 1909, and included in the above:—

Disease Treated	Remain- ing 1st Jan., 1909	Admitted during 1909	Total Deaths	Dis- charged Cured	Total Treated during 1909	Remain- ing 1st Jan. 1910
Typhoid Fever		3		2	3	1
Scarlet Fever	26	131	2	134	157	21
Diphtheria	. 1	23	3	15	24	6
Measles	0.0					
Total	27	157	5	151	184	28

The County Cases were admitted from the following Districts: -

Disease treated	St. Thomas R. D.C.	Sidmo'th U.D.C.	Exmouth U.D.C.		Budleigh Salterton U.D.C.	Topsham Barracks	Private Cases	Totals
Typhoid Fever	2							3
Scarlet Fever	57	63	3	1	3	2 .	2	131
Diphtheria	18		4	1				23
Measles								
Total	77	64	. 7	2	8	2	2	157

Included in the City Cases are the following from the Royal

Devon and Exeter Hospital:—Scarlet Fever, Nurses 2, Patients 8;

Diphtheria, Patients 2; Total 12.

SEWAGE.

The whole of the Sewage of the City is dealt with by bacteriological treatment on the Septic Tank principle. The alterations carried out by the City Surveyor, and the care and supervision now exercised, have greatly improved the condition of the works. I have again had close observation kept and visits paid at all times and under all conditions, and on no occasion has any nuisance arising from the works been detected.

HOUSE DRAINAGE.

The drainage of the City is by the Water Carriage System, and special attention has again been given to the house drainage during the past year.

246 drains have been tested with the water test, and 276 with the smoke test.

The drains of 33 houses have been relaid; 35 repaired, trapped and ventilated; the flushing arrangements of 56 water-closets have been improved, and 50 water-closets have been repaired.

A large amount of work has again been carried out in the way of improving W.C.'s and providing light and air to same, and in the paving of courtyards with Cement concrete.

REMOVAL AND DISPOSAL OF HOUSE REFUSE.

This work is carried out by the Council by direct labour, and in most parts of the City the house refuse is removed daily, while in the suburban parts the refuse is removed twice a week; as far as the removal from the dwelling-houses is concerned the work is done in a satisfactory manner, and there have been no complaints.

The difficulty of disposing of the refuse is greater and greater every year, and the present methods of disposing the same into large heaps to be taken away for manure by the farmers in the neighbourhood is most objectionable.

The question of providing a Refuse Destructor is still under consideration by the Council, and I regret that this question has not yet been decided.

WATER.

The Water Supply for the City, which is from the River Exe, continues to be satisfactory.

The covering in of Danes Castle Reservoir is completed, and as forecast in my last report, the Water Supply to the whole area of supply has been from covered Reservoirs since the 2nd of June, 1909.

The Analyst's Reports prove that the expense incurred in covering in the three open Reservoirs has been justified.

ANALYST'S REPORT.

Analysis and Bacteriological

Examination of the City Water.

PUBLIC ANALYST'S LABORATORY,

EXETER.

REPORT ON SAMPLE OF WATER

Analyst's Report.

Received 24th February, 1909, from Paul Street.

Physical Characters—

(a) Colour Colourless (b) Taste ... Normal

(c) Smell None

(d) Suspended Matter .. Nothing

Chemi	cal C	haracters—			. O.11
	(e)	Total Solids (dried at			ains per Gallon 7:4
		Mineral Matter (after			
	(f)				
	(g)				0.9
		Characters on Ignition	:Nothing	g chai	red.
	(h)	Chlorides (expressed a	s Chlorine)		1.0
	(i)	Hardness (total)			5.1
	(j)	Hardness (permanent)			2.0
	(k)	Nitrites			0
	(l)	Nitrates (expressed as	Nitrogen)		0.083
	(m)	Saline Ammonia			0
	(n)	Albumenoid Ammonia			0.0027
	(p)	Oxygen absorbed in 4	hours		0.021
	(q)	Poisonous Metals			absent
	(r)	Phosphates			0

ENUMERATION OF BACTERIA.

Per Cubic Centimeter

Micro-organisms developed in Peptone 330

" " " Distilled Water 180

There is no variation in the character of the water. The quality and purity remain satisfactory.

THOMAS TICKLE,

Public Analyst.

PUBLIC ANALYST'S LABORATORY,

EXETER.

REPORT ON SAMPLE OF WATER

Received 24th July, 1909, from 37, Gandy Street, Exeter.

Physic	eal Cl	haracters—				
	(a)	Colour		Nea	rly e	olourless, slight yellow tint
	(b)	Taste				Normal
	(c)	Smell				None
	(d)	Suspended	Matter			None
Chemi	cal C	Characters—			In Gr	ains per Gallon
	(e)	Total Solid	s (dried at 1	110° C)		8.3
	(f)	Mineral M	atter (after	re-carbonat	ing)	8.3
	(g)	Loss on Ig	nition			0
		Characters	on Ignition	n :—Nothin	g cha	rred.
	(h)	Chlorides (expressed a	s Chlorine)		1:1
	(i)	Hardness (total)			4.65
	(j)	Hardness (permanent)			0.85
	(k)	Nitrites				0

In Grains per Gallon

(1)	Nitrates	(expressed	as Nitrogen)		0.075
-----	----------	------------	--------------	--	-------

- (m) Saline Ammonia ... 0
- (n) Albumenoid Ammonia ... 0.0015
- (p) Oxygen absorbed in 4 hours ... 0.05
- (q) Poisonous Metals ... absent
- (r) Phosphates ... 0

Enumeration of Bacteria.

Per Cubic Centimeter

Micro-organisms cultivated in

Peptonised Beef Gelatine 20

", ", Distilled Water Gelatine 42

The above results are exceedingly satisfactory and demonstrate the advantages of the covered Reservoirs.

THOMAS TICKLE,

Public Analyst.

PUBLIC ANALYST'S LABORATORY,

EXETER.

REPORT ON SAMPLE OF WATER

Received 24th November, 1909, from 17, Paul Street.

Physical Characters -(a) Colour Nearly colourless (b) Taste ... Normal (c) Smell ... None (d) Suspended Matter None Chemical Characters-In Grains per Gallon (c) Total Solids (dried at 110° C) ... 8.0 (f) Mineral Matter (after re-carbonating) 7.8 (g) Loss on Ignition ... 0.2 Characters on Ignition :- No organic matter charred. (h) Chlorides (expressed as Chlorine) ... 1.0 Hardness (total) ... 5.0 (i) (i) Hardness (permanent) 2.0 ... 0 (k) Nitrites

In Grains per Gallon

(1)	Nitrates	(expressed	as	Nitrogen)		0.09
-----	----------	------------	----	-----------	--	------

- (m) Saline Ammonia ... 0
- (n) Albumenoid Ammonia... 0.0024
- (p) Oxygen absorbed in 4 hours ... 0.029
- (q) Poisonous Metals ... absent
- (r) Phosphates... ... 0

ENUMERATION OF BACTERIA.

Per Cubic Centimeter

Micro-organisms developed in Peptone 270

" Distilled Water 270

The high rate of absorption of Oxygen previously noted is now much reduced.

The numerical data and characters of the water are now restored to normal conditions, and the results are generally satisfactory.

THOMAS TICKLE,

PUBLIC ANALYST'S LABORATORY,

EXETER.

REPORT ON SAMPLE OF WATER

Received 21st December, 1909, from 18, Northernhay Street.

Physic	eal Cl	naracters—				
	(a)	Colour		•••		Nearly colourless
	(b)	Taste				Normal
	(c)	Smell				None
	(d)	Suspended	Matter			None
Chemi	cal C	haracters—		1	n Gr	ains per Gallon
	(e)	Total Solids	s (dried at 1	110° C)		7.0
	(/)	Mineral Ma	atter (after	re-carbonati	ng)	6.6
	(g).	Loss on Ign	nition			0.4
		Characters	on Ignition	:-Nothing	char	red.
	(h)	Chlorides (expressed a	s Chlorine)		1.1
	(i)	Hardness (total)			3.8
	(<i>j</i>)	Hardness (permanent)			1.0
	(k)	Nitrites				0

In	Grai	1115	per	Gal	lon
			1000		

(1)	Nitrates (expressed as	Nitrogen)	 0.08
(m)	Saline Ammonia		 0
(n)	Albumenoid Ammonia		 0.004

(p) Oxygen absorbed in 4 hours ... 0.051

(q) Poisonous Metals ... absent

(r) Phosphates... ... 0

ENUMERATION OF BACTERIA.

Per Cubic Centimeter

Micro-organisms developed in Peptone 110

There is an improvement in the purity of the water since last month, resulting from the disappearance of autumn debris from the river.

The bacteriological purity as well as other general qualities remain satisfactory.

THOMAS TICKLE,

COMMON LODGING HOUSES.

There are only 3 Common Lodging Houses in the City; these are under the supervision of the Police, and are regularly inspected by the Police and Sanitary Officers, and are in compliance with the Regulations of the Model Bye-Laws for Common Lodging Houses.

These houses are well kept and no cases of infectious disease have occurred in them.

SLAUGHTER HOUSES.

There are 9 Private Slaughter Houses within the City, and a well-equipped Public Abattoir.

The experience of the past year confirms my opinion that the time has arrived when the Government should make it compulsory that all animals intended for human food should be subjected to a uniform inspection. Our experience is that the closer the supervision exercised in the City, the more the tendency is for animals of a doubtful character to be killed outside.

In the inspection of carcases affected with Tuberculosis, the recommendations of the Royal Commission are strictly adhered to. I have again been impressed with the good condition of many of the carcases condemned, and feel more convinced than ever that before this disease can be dealt with, some scheme of Imperial Compensation will have to be devised, whereby the disease may be dealt with at the farm, for I feel that while all carcases showing evidence of Generalised Tuberculosis should unhesitatingly be condemned, the only way to eradicate the disease is by combating it in the live animal, and from the condition of the udders of several of the cows seized I am convinced that the disease must be largely spread by the milk taken from such animals.

During the greater part of the past year a scheme of Insurance has been in force for insurance against loss sustained by condemnation on account of Tuberculosis, but from what I can learn this has not been so successful as was anticipated, owing to the fact that the whole of the animals slaughtered have not been insured.

The benefit derived from Insurance cannot be over-estimated, and I look forward to the time when it will be compulsory to insure all animals intended for human food.

BAKEHOUSES.

We have 57 Bakehouses in the City, 5 of which are underground, and 9 are factories. During the past year 5 of this number have been void, and 2 have not been used as Bakehouses, so that the actual number in use is 50, which includes 3 underground Bakehouses, and 9 factories.

In 30 cases it was found necessary to serve notices that the walls and ceilings had not been cleansed or limewashed within the time required by the Act.

With the exception that the limewashing and cleansing has not been done within the required time, there has been little to complain of, and in the majority of cases the Bakehouses are kept in very good condition.

DAIRIES, MILKSHOPS, AND COWSHEDS.

We have 22 Cowsheds, 48 Dairies, 102 Milkshops, and 6 Purveyors of Milk on our registers. During the past year we have done a large amount of work in the re-modelling of Cowsheds, particularly those in the rural part of the City, this has necessitated the re-building of 3 Sheds, and re-modelling of 4, so that out of the 22 Cowsheds now in occupation, 13 are on fairly model lines. Of the remaining number 1 will be re-built, and 6 are under notice.

During the past year 56 Samples of New Milk, 12 Samples of Scald Milk, and 7 Samples of Cream have been submitted for analysis, with the result that 6 Samples of New Milk were found adulterated. In no Sample of Milk was any preservative found; this no doubt is largely due to the Circular, re Preservatives in Milk.

SALE OF FOOD AND DRUGS ACT.

During the past year 170 Samples were submitted to the Public Analyst, with the result that 16 were returned as adulterated.

One Sample of Sausages was certified to contain 19.6 grains of Boric Acid per pound; no proceedings were taken in this case.

The following Tables shew the Samples taken; amount of Adulteration; Proceedings Taken and Fines.

ABSTRACT OF SAMPLES TAKEN FOR ANALYSIS

DURING THE YEAR 1909.

ARTICLE		Examined	Adulterated
Milk		 56	6
Scald Milk		 12	
Butter		24	4
Sausages		 7	1
Margarine		 7	
Coffee		7	
Pepper		 4	
Cream		 7	
Bread		 3	
Flour		 3	
Self-Raising Flour		 3	
Cheese		 2	
Vinegar		 3	1
Lard		 3	
Limewater		 3	1
Camphorated Oil		 3	
Sweet Spirits of Nitre		 3	1
Tartarie Acid		 2	
Citrie Acid		 2	
Castor Oil	1	 3	
Arrowroot		 2	
Prescriptions		 3	2
Preservative		1	
Rice		4	
Brawn		 3	
Total		 170	16

AMOUNT OF ADULTERATION, PROCEEDINGS TAKEN, AND FINES.

No. of Sample.	Article Adulterated.	Amount of Adulteration.	Proceedings taken.	Result of Proceedings.		
12	Butter	Contained not less than 18.5 per cent. of Water	None	Cautioned by Letter by Town Clerk		
*19	Milk	80 per cent. deficient in Fat	None			
41	Sweet Spirit of Nitre	Contained only 1.71 per cent. of Ethyl Nitrite	None	Cautioned by Letter by Town Clerk		
46	Milk	16.7 per cent. deficient in Fat	None			
54	Malt Vinegar	Artificial Vinegar	None			
63	Milk	32 per cent. deficient in Fat	Summoned	Fined £2 and Costs		
90	Milk	5 per cent. deficient in Fat	None	Cautioned by Letter by Town Clerk		
113	Limewater	18 per cent. deficient in Lime	None	Cautioned by Letter by		
120	Butter	Contained not less than 17 per cent. of Water	None	Town Clerk		
122	Butter	Contained not less than 19 per cent. of Water	Summoned	Fined £2 inclusive		
*136	Butter	Contained 95 per cent. of Margarine	None			
150	Milk	6 per cent. deficient in Fat	Summoned	Fined 5/-		
156	Milk	22 per cent. Added Water	Summoned	Fined £2 inclusive		
*158	Medicine from Prescription	50 per cent. deficient in Hydrocyanic Acid	None			
*159	Medicine from Prescription	30 per cent. deficient in Hydrocyanic Acid	None			
169	Sausages	19.6 grains Boric Acid per lb.	None	Cautioned by Letter by Town Clerk		

MIDWIVES' ACT.

There are 16 Midwives on the Register, all of whom are practising in the City. 9 of these are Trained Midwives, and certified by the Central Midwives' Board; 7 are registered by reason of their being in practice prior to the Act coming in force. During the past year 47 Still Births were recorded, 17 by Certified Midwives, 2 by Uncertified Midwives, and 28 by Medical Men. Notices of sending for Medical assistance were received in 14 cases, in 1 case the child was dead before the arrival of the Midwife, and an Inquest was held, and a verdict of Accidental Death due to want of attention was recorded.

NOTIFICATION OF BIRTHS ACT, 1907.

This Act was adopted by the Council and came into force on the 13th January, 1908.

During the year notifications were received of 1,160 Births (including 45 Still Births).

From inquiries made, 374 Births were attended by Medical Men; 540 by Certified Midwives; 179 by Uncertified Midwives; 13 Births took place in the Workhouses; 2 were unattended, and 7 of which we have no record.

Of the Still Births, in 26 cases a Medical Man was in attendance; and in 19 cases Midwives were in attendance.

FACTORIES AND WORKSHOPS ACT.

We have on our Registers 101 Factories and 409 Workshops.

The following Tables will show the work done.

TABLE

Showing Number of Workshops and Inspections made under

Factory and Workshops Acts:-

WORKSHOPS, Etc.	No on Register	No. of Visits	WORKSHOPS, Etc.	No. on Register	No. o Visits,
			Brought Forward	1 212	329
Bakers	42	97	Lace Manufacturers	. 1	1
Bag and Trunk Makers	2	2	Laundries	. 11	17
Basket Makers	2	2	Leather Merchants	. 2	3
Bedding Manufacturers	1	1	Machine Ruling	1	2
Boot Makers	22	33	Milliners	. 23	26
Brush Makers	3	5	Modellers	. 1	1
Builders	20	37	0 1/1	. 1	1
Cabinet Makers	13	20	Piano Repairers	. 1	1
Carpenters and Joiners	3	4	Photography	. 5	7
Chemists Specialities	1	2	Plumbers & Gas Fitters	17	21
Carvers		1	Picture Frame Makers	. 8	11
Clock Makers	1	1	Rope Makers	. 1	1
Coach Makers	4	7	D GI	. 3	3
Confectioners	2	4	Saddlers	7	9
Corset Makers	1	2	Scale Makers	3	5
Cycle Repairers	10	10	Stained Glass Window		
Decorators	2	2	Makers	. 3	5
Dress & Mantle Makers	62	69	Scenic Artists	. 1	2
Drug Manufacturers	1	1	Shoeing Forges	5	5
Engravers	2	3	Sculptors	. 3	3
Engineers	11	17	m-:1	. 84	99
Fish Packing		1	Tannia Davis	. 1	1
Furriers	0	4	m1: 35 1	. 3	6
Flag and FêteContractors	1	1	Tea Factors		1
Glove Cleaners	1	1	IIhll. D	. 3	3
Hat Makers	1	2	Tinhalatanana	. 6	7
			Wheelwrights .	. 2	3
Carried Forward	212	329	Grand Total	409	573

TABLE
Showing Number of Factories and Inspections made under the Factory and Workshops Acts during 1909:—

FACTORIES.	No. on Register		FACTORIES.	No. on Register	
Aërated Water Makers.	. 4	4	Brought Forward	48	57
Bakers	. 9	18	Ice Manufacturer	1	1
Baryta Manufacturer .	1	1	Ironmongers	3	3
Blouse Manufacturer .	. 1	1	Laundries	3	3
Builders	. 10	10	Motor Car Works	3	3
Brewers	. 2	2	Paper Mills	2	2
Brush Maker .	. 1	1	Paper Bag Manufacturer	1	1
Boot Maker .	. 1	1	Paint Factors	1	1
Cabinet Maker .	. 3	3	Printers & Bookbinders	21	21
Cutler	. 1	1	Plumber	1	1
Collar Manufacturer .	. 1	1	Rag Sorter & Bone Boiler	1	1
Coach Builder .	1	1	Soap and Candle Works	1	1
Drug Manufacturers .	. 2	2	Saw Mills	1	1
Dyers and Cleaners .	. 1	1	Tobacco Factor	1	1
Electric Light Works .	. 1	1	Tanner and Fellmonger	1	1
Cycle Repairer .	. 1	1	Tent & Tarpaulin Makers	1	1
Engineers	. 6	6	Tramway Depot	1	1
Flour Mills	. 2	2	Wood Carvers and Sculptors	3	3
			Wood Turning	3	3
	12:51		Wheelwrights	4	4
Carried Forward	48	57	Grand Total	101	110

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

The following Report is made in accordance with the requirements of the Home Office, to whom a copy of this Report has been sent:—

1.—INSPECTION.

Including Inspections made by Inspectors of Nuisances.

	Number of					
Premises.	Inspections.	Written Notices.	Prosecutions			
Factories (including Factory Laundries)	110	5				
Workshops (including Workshop Laundries)	573	101				
Workplaces (other than Outworkers' Premises included in Fart 3 of this Report)	19	1				
Total	702	107				

2.—DEFECTS FOUND.

	Num	Number		
Particulars.	Found.	Reme- died.	Referred to H.M. Inspector	Prose-
Nuisances under the Public Health Acts:— Want of Cleanliness	60	60		
Want of Ventilation	3	3		
Want of Drainage of floors Other nuisances	3	3		
*Sanitary accom- modation insufficient unsuitable or defective		ii		
OFFENCES UNDER THE FACTORY AND				
Workshop Act:— Illegal occupation of underground bake-				
house (S. 101)				
for bakehouses (SS. 97 to 100) Other offences (excluding offences		30		
relating to outwork which are included in Part 3 of this Report)			23	
Total	107	107	23	

^{*}The Public Health Acts Amendment Act, 1890, has been adopted. The standard of suitable sanitary accommodation in factories and workshops fixed by the Council is a urinal and w.c. for every 20 employees of the male sex, and a w.c. for every 20 females employed.

3.-HOME WORK.

					The state of the s					 			
OUTWORK IN OUTWORK IN INVECTED SOME PREMISES, SECTIONS 109, 110.		511	orders made (a.011.8) (8.100.0) (9.011.8) (9.011.000) (9.011.001) (9.011.001)										
		aput			৩ 1						Ç1 -		
		.89	ouer	ini (17)	Ç1						03		
		's-110	ituss	(16) Pros									
		.bevy	Notices served.										
TUO	SOMI PREMIS SECTION	.89	oner	(14)									
,840	of Outwork:		adsu	(13)	208	2	00	2	4		226		
	tions.	Pailing to send		- 1									
	Prosecutions.	keep f lists.	Espection of lists.										
SECTION 107.	gaibnes to gaideex gaibnes to gaideex gaibnes to gaideex gaibnes to gaideex				H		9	5	1C	i	127		
TION		Strong Councils.			20					i	50		
	Addresses of Outworkers.	ived from		Trees other		0.1				İ	67		
ISTS	from Employers.	Employers.	kers	Work- men. (7)	55		57		-	i	25		
RS' I			n the year. Outworkers	Con- ractors (6)									
OUTWORKERS' LISTS,		Once		Clsts.	10		C3		П		13		
UTW		ear.	kers.		551		13	61	r-		578		
0	Lists received	ists rece	ists rec	Twice in the year,	Outworkers.	Con- tractors men. (3) (4)						i	
		Twice		Lists. (2)	7.7		01	ÇI	4		85		
				· · · · · · · · · · · · · · · · · · ·	vets	. · · · ·	:	:		:			
NATURE OF WORK.				Wash	and N	lster	es						
				l-	ains	Upho	Box			Total			
				ppare ng, d	Curt	pur	and	ing					
				ng Aj Maki Clean	Lace	ure	Bags	mak					
				Wearing Apparel— (1) Making, &c. (2) Cleaning and Washing	Lace, Lace Curtains and Nets	Furniture and Upholstery	Paper Bags and Boxes	Brush making					
_						I	4	1	19	 			

10 of the 13 Outworkers entered in Column 4 for Furniture and Upholstery, were taken from Wearing Apparel Lists, Column 2.

1 of the 2 Outworkers entered in Column 8, was received both in February and August.

13 of the 20 Outworkers entered in Column 9, were forwarded both in February and August.

4.—REGISTERED WORKSHOPS.

	Bakehouses			 42
	Bootmakers			 22
the part of the contract of th	Builders			 20
an tan to has as a to has as, enu-	Cabinet Makers			 13
- 5 0 - G	Cycle Repairers			 10
of sugar	Dress and Mantle M	lakers		 62
o o sees sees broken	Laundries		4.4.	11
Im p o r t classes of shops, su w o r k s bakehous may be merated	Milliners			 23
H B S × S H H	Plumbers and Gasfi	tters		 17
	Tailors			 84
	Upholsterers			6
	All Other Trades			 99

5.—OTHER MATTERS.

Class.	Number.
MATTERS NOTIFIED TO H.M. INSPECTOR OF FACTORIES :-	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	23
Action taken in matters referred by H. M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (S. 5) Notified by H.M. Inspector Reports(ofactiontaken) sent to H.M. Inspector	
Other	
Underground Bakehouses (S. 101):—	3
Certificates granted during the year	
In use at the end of the year	3

MAGISTERIAL PROCEEDINGS.

Respecting the various cases brought before the Justices during the Year 1909.

No.	Nature of Offence.	Date of Hearing.	Result.
1	Depositing for the purpose of sale for the food of man. 90 lbs. of Beef, the same being diseased and unfit for such food.	January 22nd	Fourteen days' hard labour
2	Exposing for sale for the food of man, 4 quarters of Beef, the same being diseased and unfit for such food.	February 5th	Fined £2 and costs
3	Selling Sausages mixed with an injurious article, to wit, Boric Acid, in the proportion of 35 grains per lb. of Sausages.	February 22nd	Dismissed
4	Selling Milk deficient in fat to the extent of not less than 32 per cent.	May 28th	Fined £2 and costs
5	Exposing certain clothing without previous disinfection, which had been exposed to infection from a dangerous infectious disorder, to wit, Scarlet Fever.	August 27th	Fined 10/- inclusive
6	Selling Butter containing 19 per cent. of water, whereas genuine Butter contains not more than 16 per cent. of water.	October 23rd	Fined £2 inclusive
7	Selling Milk deficient in fat to the extent of not less than 6 per cent.	December 20th	Fined 5/-
8	Selling Milk adulterated with 22 per cent. of added water.	December 20th	Fined £2 inclusive

9000		REMARKS.													
THE YEAR 1909,	OF	Number	on wet Days.	13	60	÷;	15	9	16	6	13	14	20	7	18
THE	TOTAL OF		in inches	1.38	0.40	5.03	1.91	1.08	2-74	1.54	5.34	1.27	4.61	0.49	5.35
		Thermometers in Shade.	Mini- mum.	96.0	33.7	35-2	41.8	45.3	49-7	24.8	0.40	20.0	47.3	43.5	35.5
METEOROLOGICAL READINGS FOR	OF	Therm in S	Maxi- mum.	44.8	6.97	1.45	57.4	65-9	64-1	9.89	8.11.8	63-5	2.80	52.9	45.7
EADII	MEANS	Dew	Formt,	37.6	37.1	89.7	46-2	20.2	52-1	57.1	0.09	20.8	20.0	1.97	39-3
AL B	X	Thermometers.	Wet Bulb,	89-7	99-4	41-3	49-4	. 53.4	55.3	0-09	62.3	54.3	52.1	47-7	40-8
LOGIC			Dry Balb.	41-4	41.3	42.6	52.5	9.99	6-89	63.4	1.99	58-2	54.3	49.3	42.1
EOROI	Thermometers in Shade.	Lowest	keading, keading,	25.5	24.0	24.5	32.0	35.0	94.0	49.0	45.0	45.0	28.0	26.0	23.0
MET	Therma in S	Highest	Nesaming.	52.0	29.00	0.99	0.49	74.5	73.0	75.5	0.88	0.89	685	0.69	9.99
	рэтэжие	O veter Co	Baron	30-126	30-074	29.462	29-933	30-046	29-947	926-62	30-016	30.014	29-776	30-013	29-661
		Н.		:	:	:	:	:	:	:	:	:	:	:	
		MONTH		January	February .	March	April	May	June	July	August	September .	October .	November .	December

Giving a total rainfall for 1909 of 28.11 inches, and the total number of wet days 156. A Fall of .01 inches constitutes a wet day.

TABLE Showing the Rainfall in Exeter for 10 years and number of wet days.

Year.	Gross Rain fall.	No. of Wet Days.	
1900	31.16	192	Average rain fall for the 10 years, 29.23 inches.
1901	30.64	175	
1902	27.88	174	Arrange number of met days in the
1903	38.41	191	Average number of wet days in the 10 years, 174.
1904	31.32	165	
1905	27.83	150	
1906	25.02	175	1909.
1907	28.38	197	Rain in inches, 28·11.
1908	28.55	172	Number of Wet Days, 156.
1909	28.11	156	

SUMMARY OF TABLES.

TABLE I.	TABLE II.	TABLE III.	TABLE IIIA.
Vital Statistics of the whole dis- trict for the year 1909 and the 10 previous years.	Shows Vital Statistics of various Wards in the City.	Cases of infect- ious diseases noti- fied and removed to Hospital from various localities during the year 1909.	Showing mon- thly returns of the number of cases of infect- ious diseases noti- fied.
TABLE IV.	TABLE V.	TABLE VI.	TABLE VII.
Causes of and ages at deaths in various localities during the year 1909.	Showing the number of deaths under one year from all causes, classified under the various groups of diseases.	Showing the number of deaths from all causes including residents of Exeter who died at the Sanatorium and City Asylum classified under the various groups of diseases.	Showing the ages of deaths registered from all causes under each group of diseases including residents of Exeter who died at the Sanatorium and City Asylum.
	TABLE	VIII.	
	tered from all	and deaths regis- causes, including eter who died at nd City Asylum.	

The Weekly Notifications during the Year are shown on Chart 1, the Weekly Mortality on Chart 2, and the Localities in which Fatal cases have occurred are indicated on the accompanying Map of the City.

Whole District During 1909 and Previous Vears, STATISTICS OF VITAL

		Birtho	bo.	Total Der	Total Deaths Registered in the District.	ered in the	District.	Total	A	Deaths of	Nett De	Nett Deaths at
	Population estimated to	no.	alis.	Under 1 Y	Under 1 Year of Age.	At all Ages.	Ages.	Public	Non- Kesidents		all Ages belonging to the District.	belonging District.
Year.	Middle of each Year.	Number.	Rate.*	Number.	Rate per 1000 Births registered	Number.	Rate.*	tions in the District.	in Public Institutions in the District.	in Public Institutions beyond the District.	Number.	Rate.*
1	2	60	4	ő	9		œ	6	10	11	12	13
1800	87 709	848	99.10	50	2	. 644	P-06	100	1	;		0.01
1900	37.717	831	21.9	115	138	738	19-3	117	40	10	691	18.3
1901	47,185	1085	23.1	169	155	830	17.6	134	48	27	789	16.7
1902	47,300	1021	21.3	171	167	834	17.7	126	255	13	779	16.5
1903	47,400	1071	22.6	141	131	770	16-2	131	48	2	727	15.3
1904	47.600	1115	23.4	186	166	828	17.4	145	555	27	800	16.8
1905	47,800	1060	55.5	132	124.5	723	15.1	124	56	20	687	14.4
1906	48,000	1036	21.7	134	129	708	14-7	140	46	14	676	14.0
1907	48,200	1057	21.9	142	134	823	17.0	147	55	555	790	16.4
1908	48,300	1131	23-4	143	126-6	804	9-91	157	73	21	752	15.57
Averages												
for years 1899—1908.	45,720	1025	22-37	148.6	145.2	783	17-2	132.9	53.1	15.3	743-2	16.36
1909	48,500	1115	23	113	101-35	762	15.7	156	77	29	714	14.7

*Rates in Columns 4 and 8 should be calculated per 1,600 of the estimated gross population.

In districts in which large public institutions seriously affect the statistics, the rates in Column 13 may be calculated on a nett population, obtained by deducting from the estimated gross population the average number of inmates not belonging to the district in such institutions.

Norr, .- The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in The deaths to be included in Column 12 are the number in Column 7, corrected by the substraction of the number in Column 10, and the addition of the number in Column 11.

The "Public Institutions" to be taken into account for the purposes of these Tables are the Royal Devou and Exeter Hospital, Home Hospital, the City and St. Thomas Workhouses, Eye Infirmary, H.M. Prison, the Exeter Sanatorium, the year also includes deaths of Residents at the City Asylum. Area of District in acres (exclusive of area covered by water, 3,168. public institutions elsewhere.

Norg.—In the above Table it must be noticed that before the Year 1900 the Population of Exeter was 37,717. Since 1900, when St. Thomas was annexed, the Population was increased to 47,185.

Total population at all ages, 47.185.

Number of inhabited houses, 10.322.

Average number of persons per house, 4.5.

At Census of 1901.

TABLE II.

Separate Localities in 1909 and Previous Years. VITAL STATISTICS OF

70	Deaths under I year.	d.	1 100 8 8 10	1 -
99	Deaths at all Ages.	0.	577	1 58
DAVID'S WARD.	Births registered.	0.	62	22
Q.S	to middle of each year.	:		23349 57 43
or.	Population estimated	a	3263 3307 3318 3318 3343	55
T.	Deaths under 1 year.	d.	9941-4	
AKD.	Deaths at all Ages.	0.	88 88 9 1	4
WA B	Births registered.	6.	35	51
6.ROUGEM WARD. B.	Population estimated to middle of each year.	a.	55 24 3072 52 13 3116 55 19 3125 55 14 3125 54 18 3150	9284897471534195141
	Deaths under I year.	d.	119 119 118 118 118 118 118 118 118 118	15
ZHO.	Deaths at all Ages.	С.	10 50 70 70 40	47
HUN	births registered.	6.	06	1 6
5 HOLY TRINITY WARD.	Population estimated to middle of each year.	a.	3375 3419 3430 3430 3430	2848
	Deaths under I year.	d.	1 610 13	
DE	Deaths at all Ages.	0.	833 447 477	69
≥~₹\$	Births registered.	6.	121	87
I. EXWECK WARD.	Population estimated to middle of each year.	a.	3370 3414 3428 3478 3478	9 3791 87 69
-	Deaths under I year.	d.	814440	
COWICK WAKD.	Deaths at all Ages.	0	930 937 44 44	26
WA	Births registered.	9	16	LOT
3. CC	Population estimated to middle of each year.	a.	3184 3228 3239 3341 3391	6426207
	Deaths under I year.	à.	148 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9
00.0	Deaths at all Ages.	c.	50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	88
BELMONT WAKD.	Births registered.	6.	82	61
2. BE	Population estimated to middle of each year.	a.	3436 3495 3495 3495	113 3545 61 38
.	Deaths under I year.	d.	153 1169 1171 1181 1182 1183 1184 1183 1184 1184 1184 1184 1184	113
WHOLE CITY	Deaths at all Ages.	c.	741 691 779 727 800 687 676 790 743	714
E WHO	Births registered.	. q	843 831 1085 1021 1071 1115 1060 1036 1057 1131	11115
1 THE	Population estimated to middle of each year.	a.	37702 37717 47185 47300 47400 47600 47800 48200 48300	48500 111
S OF	æ		ges to	:
NAMES OF LOCALITIES	YEAR		1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 of Years 1899 to	1909
-				

H.H.-Home Hospital. Norg.—In the above Table it must be noticed that before the year 1900 the population of Exeter was 37,717. Since 1900, when St. Thomas was annexed, the population was increased to 47,185. R.D. & E.H.—Royal Devon and Exeter Hospital. W.-Workhouse. B.-Barracks.

TABLE II-Continued.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1909 AND PREVIOUS YEARS.

A8'	Deaths under I year.	d.	111 7 7 7 9	6
	Deaths at all Ages.	0	7 + 4 + 8 + 8 × 8 × 8 × 8 × 8 × 8 × 8 × 8 × 8	12
THOM.	Births registered.	6.	128	198
	to middle of each year.			61
ES.	Population estimated	2	19.2903 11.2953 10.3003 13.3003	000
00	Deaths under 1 year.	d.	113	10
SIDWELL WARD.	Deaths at all Ages.	0	6259	99
DWEL WARD	Births registered.	6.	06	73
15 E	to middle of each year,	a.	3877 3921 3944 3944 3944	357
00	Population estimated			6385773561033618627
EEI	Deaths under I year.	d.		-
PET. WARD E. H.	Denths at all Ages.	o'	115 50 92 105 127	11
8.00	Births registered.	2	60	53
13. ST. 1 ROCK'S R. D. &	to middle of each year.	.:		133
	Population estimated	a	2899 2943 2949 2949 2949	53
50	Deaths under I vear	p	91416	15
PAUL'S WARD,	Deaths at all Ages.	0.	50 50	105 14 3419 98 41 15 2973 29 114
12 PA VA	Births registered.	6.	103	186
ST.	Population estimated to middle of each year.	a.	5408 3452 3467 3467	119
-			00 00 00 00	
MATTHEW'S WA'CD, W.	Deaths under I year.	d.	8110011	17
ST.	Deaths at all Ages.	0.	95 105 101 104	100
A 'CD'A	Births registered.	0.	011	**************************************
MAZ WA	to middle of each year.	a.	3500 3544 3564 3564 3564	98
~	Population estimated	-		23136
Z.I	Deaths under 1 year.	a	F- 41 00 F0 F0	
ARE	Deaths at all ages.	· ·	355 355 346 348	37
ZZ.	Births registered.	6.	55	9
LEONARD'S WARD, H.H.	Population estimated to middle of each year.	11.	3028 3072 3080 3080	53 15 3987
	THE RESERVE OF THE PARTY OF THE		88888	10
N'S	Deaths at all ages.	c. d	69 27 69 31 69 31 67 25	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
JOHN'S WARD.	Births registered.	-		
	to middle of each year.	9	F = 4 4 4 1	671
ST.	Population estimated	a.	4 8867 9 8911 6 8934 5 8934 5 8934	291
_	Deaths under I year	d.	46966	
ST. JAMES' WARD.	Deaths at all Ages.	0:	11441	
S. JAM WARD	Births registered.	0.	22	1 52
W.	to middle of each year.		4003 4072 4072 4072 4072 52	99
8)'opulation estimated	a.	4003 4047 4072 4072	3636 62 43
50, 30			::::::::::	- 1:
IE	of .		8.8	1899 to 1908.
ES	YEAR		8 7 6 5 4 8 8 2 1 0 9	98.
NAMES OF LOCALITIES	X		1899 1900 1901 1902 1903 1904 1905 1906 1906 1908 Averages	1899 1908.
LOZ				-
		4		

See Note at bottom of Table IV.

TABLE III.

Cases of Infectious Disease notified and removed to Hospital from various Localities during the Year 1909.

	NOTIFIABLE DISEASE.	Ils tA	Diphtheria (including Membranous Croup) 48 Erysipelas Scarlet Fever Enteric Fever Chicken Pox Chicken Pox (1908 Regulations) Culmonary Tuberculosis (Toluntary notification)	343
CASES NOTIFIED IN WHOLE DISTRICT.	vges.		210222 2102 21022 21022 21022 21022 21022 21022 21022 21022 21022 21022 2102 21022 21022 21022 21022 21022 21022 21022 21022 21022 21022 21022 2002 20	
VASES NOTIFIED II		Under I.	01 t-	9 72 23 34 68
No	At	.6 ot I 6 to 15.	6 36 25 82 6 14 6 14 2	1 67 1
Die	At Ages- Years.			ger
FIE	ger	15 to 25.	4638411 8 1	4
E SIC	59 50	25 to 65.	22 11 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3	1 80
Z :		-dn 29 99	1 6	-
-	700	wards.	C)	- 00
1		Cowin	1 2 2 1 2 2 1 2 2 1	35.4
Lou		M' E	11 00 80 11 10 01	0 2
FAL		Holy Tr	F-48 G H	60
0			94 18 9	0 1
ASE		B. Bouge		1 2 1
SES L		St. Ja	ଦାର ହେବା ର	1 20
No		St. Joh	11862 4	14
TOTAL CASES NOTIFIED IN LOCALITY.		St. Leon		40 22 30 11 25 11 40 16 24
T. IED		W. St. Ma	10 t- 10 H	6.2
. A		St. Par	8 6 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	4 59
БАСН	.H.3	B. D. &	70 8 9 4 L	9 27
H		St. Petr	H 4 8 10 10	
		St. Tho		1 22
-		Belmon	2 2 2 2	211217241114
No.		Owic	12 12 1	1.53
		M' Ex	60 00	1 =
40		T TloH	7	
		B. Rouge	0101	4
CASE		St. Day	2 11 2	15
8 9	.es.	St. Jan	2 - 2	50
CASES REMOVED FROM EACH LOCAL	's, ut	St. Joh	1 8 1	1 9
P J	.s'bra	St. Leoni	4 6	1 6
Loc		W, St. Ma	00 1 00	1-
		St. Pau	1 6 3	13
TO		B. D. &	13 2	15
н		St. Petro		
HOSPITAL		St. Tho	- 40	1 57
ITA		Total Cas	1 61 70	7 169
H	IntiquoE	moved to I	29 103 37	69

W.—Workhouse. B.—Barracks. R.D. & E.H.—Royal Devon and Exeter Hospital.

Isolation Hospital:—Exeter Sanitorium, situate in Whipton, within the Parish of Pinhoe, about Two Miles from Exeter.

Number of available Beds, 30. Number of diseases that can be concurrently treated, 4.

TABLE IIIA.

Monthly Returns of the Number of Notifications of Infectious
Disease reported to the Medical Officer of Health during the
Year 1909.

	-							-		
				DISI	EASE	NOTIF	IED.			
Month.	Small Pox.	Cholera.	Diphtheria.	Memb. Croup.	Erysipelas.	Scarlet Fever.	Typhoid.	Typhus.	Puerperal.	Chicken Pox.
January	_		5		1	3	_	_	1	3
February	_		7	_	4	4	2	_	_	5
March	_	_	-	_	4	11	1	_	1	5
April	-	_	8	_	1	7	-1		_	2
May		_	5	_	. 1	3	1		-	6
June	_	_	4	_	3	7	_	_		18
July	_	_	2	_	8	7		_	1	8
August	-	_	2	-	-	14	1	_		2
September	-	_	8		2	19	32	-	_	4
October	_	_	9	-	3	28	6	-	-	-
November	-	_	4		4	13	2	-	-	8
December	-	-	5	-	5	10	2	-		8
Total Notifications.			49	_	31	121	48	-	3	64
Notified second time.		-	1	-		1	_	_	-	1
Actual number of cases.	_	_	48	_	81	120	48		3	68

TABLE IV.
Causes of, and Ages at, Death during Year, 1909.

Caus					_					_	_		_	_					100		_	
	join	den	ago	es e	of 'neth	Re	si-	b	elo	Des	ng	to I	100	alit	ies,	f "R whe e Dis	the	r oc	curr			Total Deaths
	000	urr t)	ie I	list	rict		- 1			r d	ud.	ard	.pa	rd.		H. H. St. Leonard's Ward.	PM	d.	R. D. & E. H. St. Petrock's Ward.	ard.	Ward.	whether of "Residents"
Causes of Death.		Br.	0.	10.	15 and under 25	r 65	and upwards	Belmont Ward.	Cowick Ward.	Exwick War	Holy Trinity Ward	B.Rougemont War	St. David's Ward	Wa	Var	, ×	W.St Matthew's W	War.	I≽	M	=	or "Non- Residents"
Oatises of Down.	ages.	ye	nde	der	nde	nde	pwi	OT M	M .	rick	nity	mon	d's	8,891	18.0	red's	atth	L's	SK.	ell's	Thomas,	in Public Institutions
	1 8	er 1	tn n	(nn	q n	d b	n p	mon	wiel	EXT	Tri	agn)avi	Jam	John	F011	t Mi	Pau	etro	idw	hon	in the District.
	All	Under 1 year.	and under 5.	and	an o	5 an	5 an	Be	ပိ	3	loly	3.Ro	St. 1	St	St.	t. T.	8.8	St.	C .	5. 8	St. T	
		_	-	10	-	63	9			>	П.	ш				OD:	>		001	00	00	
Small-pox																						
Measles	1		1 2	0									2		1			1				
Scarlet fever Whooping-	4		2	2			1						-									
cough	3	1	1	1										1	1					1		
Diphtheria(in'g membranous															-				32			
croup)	8		2	6					2	1						2		2	1			1
Croup																						
Typhus Enteric	2				1	1		1	1													
Fever Other	1	L																				
contin'd																						
Epidemic influenza	9			1		1	7				1	1			1	2	3		1			
Cholera																						
Plague Diarrhœa	15	13			4	1	1	2			5				3		2 2	1	1	1		
Enteritis	11	8	2				1		1	2	1				3		2	1	2	1	1	
Gastritis Puerperal fever	5	4		1							1							1	2		1	
Erysipelas	1					1				Ħ									1			1
Phthisis					-																	
(Pulmonary Tuberculosis)				4	23	37	3	5	9	7	8	3	3	4	6	1	7	2	5	6	1	6
Other tubercu-				i i	-				1				3		1		6	1	5	1	1	8
lous diseases Cancer, malig-		6	2	1	3	9			2	3	1				423			1	0	1	1	
nant disease	66			-			38	4			4	7	4	4	2	3 2	.7	3	14	3		15
Bronchitis	80	5	3			20	52 12	3	9			5 3	2	6 3	9 2	2	14 4	3		6 2		12 4
Pneumonia Pleurisy	45	1	'	1	2		5	10	3	-		1	1	3	-	2		, a				
Other diseases	3			Г					1													
of Respiratory	11		1	1	2	5	3	12	3				1	1			2			2		1
(Alcoholism	11 8			1		7	1	1				1				1	1		2	3		3
Cirrhosis of live					1												1					1 1
Venerealdiseases Premature birth		15					1	1	1	2	1				3	1		1	2	1	2	1
Diseases and	1		1													1					1	
accidents of								1														
parturition Heart diseases	75						38	2						7	3	4	15			6	2	13
Accidents	22	A	1 3	3			2	1	1	1	1	1				1	2	1	11 2		1	10
	5				1				1		1							1	1			
All other causes	286	47	10	1	5 5	84	138	13	16	30	9	15	21	14	17	116	39	15	48	23	10	80
All causes	770	13	35	39	40	345	298	38	56	69	47	41	43	43	53	37	105	41	114	56	27	156
Zil Cadaca		-	0		1			1										1			1	

By agreement with the Registrar-General, 5ths of the deaths (56) which occurred in the Royal Devon and Exeter Hospital, are deducted for Non-Residents. The total deaths in that Institution were 78. To the 156 Deaths Registered as occurring in Public Institutions in the District must be added 29 Deaths for Residents of Exeter who died in Public Institutions beyond the District. W.—Workhouse. B.—Barrecks. H.H.—Home Hospital. R.D. & E.H.—Royal Devon and Exeter Hospital.

TABLE V.

Showing Infantile Mortality during the year 1909. Deaths from stated Causes in Weeks and Months under One Year of Age.

All Causes (Uncertified	CAU	SE OF DEATH.	Under I Week.	1.2 Weeks.	2.3 Weeks.	3-4 Weeks.	Total Under 1 Month.	1.2 Months.	2-3 Months.	3-4 Months.	4.5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10.11 Months.	11-12 Months.	Total Deaths under 1 Year.
Common Chicken-pox Measles Scarlet Fever Dip'theria: M. Croup Whooping Cough Diseases Enteritis, Muco-en's Gastro-enteritis Gastro-enteritis Gastro-enteritis Gastro-intestinal Catarrh Premature Birth Diseases Dise			25	2	11	6	44	12	15	6	8	8	7	4	1	2	3	3	113
Diseases. Wantof Breast-milk Starvation Atrophy, Debility, Marasmus 8 3 1 12 5 3 2 2 2 1 27	Infectious Diseases Diarrhoal	Chicken-pox Measles	12			2 2	2 14		4	1	4								13 8 4 15
culous Diseases. Peritonitis: Tabes Mesenterica 1 1 2 Other Tuberculous Diseases 1 1 1 1 2 Erysipelas Syphilis Sickets Meningitis (not Tuberculous) 1		Want of Breast-milk Starvation Atrophy, Debility, Marasmus Tuberculous			3	1	12	5	3	2	2					1		1	
Other Causes. Convulsions I l l l l l l l l l l l l l l l l l	culous	Peritonitis: Tabes Mesenterica Other Tuberculous									1			1			1		
Suffocation, over- lying 1 1 1	SERVICE CONTRACTOR	Syphilis Rickets Meningitis (not Tuberculous) Convulsions Bronchitis Laryngitis		1	1		1	1	1 2	1			1				2	2	5 5
		Suffocation, over- lying	3					1	1		1	1				1			

 $\begin{array}{c} \text{Population--Estimated to middle of 1909.} & \dots & 48,500 \\ \text{Births in the Year} & \text{Deaths in the year of} \\ \text{Deaths from all causes at all ages} & \dots & 774. \\ \end{array}$

TABLE VI.

Showing the Number of Deaths from all Causes, including Residents of Exeter, who died at the Sanatorium and City Asylum.

			No. of Deaths.
1.—SPECIFIC FEBRILE, OR ZY	MOTIC DISE	ASES-	
1. Miasmatic Diseases			18
2. Diarrhœal			31
3. Malarial			-
4. Zoogenous	**		
5. Venereal			
6. Septic			4
ILPARASITIC DISEASES			1
IC-PARAGITIC DISBASES		**	1
IIIDIETIC DISEASES			3
IV.—CONSTITUTIONAL DISEASE	S		171
V.—DEVELOPMENTAL DISEASES	3		81
TI TOOLT DISPLANS			
VI.—LOCAL DISEASES			
1 Discourse of Neurona Sustan			07
1. Diseases of Nervous System 2. Diseases of Organs of Spec			
2. Diseases of Organs of Spec 3. Diseases of Circulatory Sys			nn nn
4. Diseases of Respiratory Sys			3.00
5. Diseases of Digestive System			40
6. Diseases of Lymphatic Syst			-
7. Diseases of Gland-like Orga			
8. Diseases of Urinary System			40
9. Diseases of Reproductive Sy	stem		2.5
(a.) Diseases of Organs	of Generation		
(b.) Diseases of Parturit	ion		
10. Diseases of Bones and Join	its		6
11. Diseases of Integumentary	System		2
			15.70
VII,—VIOLENCE.			. 37 .
1 Assident on Neulineau			00
1. Accident or Negligence 2. Homicide			
0 (1-1-13-			P.
4. Execution			1
A. Davidou II		**	-
VIIIILL-DEFINED AND NOT	SPECIFIED (CAUSES	33
Total			791

TABLE VII.

Showing Ages of Deaths Registered from all Causes during the Year 1909, including Residents of Exeter who died at the Sanatorium and City Asylum.

							1	A G	ES	5.					
			0 to 1	to 5	5 to 15	15 to 25	25 to 35	35 to 45	15 to 55	55 to 65	65 to 75	75 to 85	85 upwards	rotals	55 to 60
I. S _I	pecific Febrile, or Zyn Diseases	actic	27	8	10	1	3			1	1	2		54	1
II. P	arasitic Diseases		1											1	
III. D	ietic Diseases							1	1	1				3	
IV. Ce	onstitutional Diseases		7	6	11	26	20	13	20	9	22	19	3	171	15
V. De	velopmental Diseases		18							2	ő	32	24	81	
VI. L	ocal Diseases		27	17	15	9	16	20	51	42	106	81	11	418	23
VII. D	eaths from Violence		5	3	3	6	2		4	2	1	2		30	2
	eaths from Ill-Defined ot Specified Causes		28	1					2			2		33	
	Totals		113	35	39	42	41	34	78	57	135	138	38	791	41

TABLE VIII.

Showing the Deaths registered from all causes during the Year 1909.

Note.—The deaths of Residents occurring in Sanatorium and
Digby's Asylum situated beyond the limits of the
District are included.

						A	GE	s.				U-		Ī
I.—SPECIFIC FEBRILE, O ZYMOTIC DISEASES. 1.—Miasmatic Diseases.	R		to	to	to	to	to	to	55 to 65	to	to	W	Totals	58 to 60
Smallpox { Vaccinated Unvaccinated No Statement Measles Scarlet Fever Whooping Cough Simple Continued and Ill-defined Fe Enteric or Typhoid Fever Other Miasmatic Diseases 2.—Diarrhæal Diseases.	ver	i i i i i i i i i i i i i i i i i i i	1 2	6		· · · · · · · · · · · · · · · · · · ·							1 4 3 8 2	
Simple Cholera Diarrhœa Dysentery Gastro Enteritis		13 12 25		1							i 1		15 16 31	1
3.—Malarial Diseases. Remittent Fever Ague					-			-					::	
4.—Zoogenous Diseases. Cowpox and effects of Vaccination Other Diseases (e.g. Hydrophobia, Glanders, Splenic Fever)													••	
5 Venereal Diseases.								1.6						
Syphilis Gonorrhœa, Stricture of Urethra	**	1											1	
6.—Septic Diseases. Erysipelas Pyæmia Septicæmia Puerperal Fever						1					1 .		1 3 	::::
II.—PARASITIC DISEASES. Thrush, and other Vegetable Parasiti						2	-	-	1		1.		4	
Diseases Worms Hydatids and other Animal Parasitic Diseases		1											1	
		1						-		-		-	1	

TABLE VIII .- Continued.

			_	_	_	A	GE	s.						
III.—DIETIC DISE	CASES.	to	to	to	to	to	to	to	to	65 to 75	to 85	M d	Totals.	55 to 60
Want of Breast Milk Starv Scurvy Chronic Alcoholism Delirium Tremens								1	1				··· 2 1	
IV.—CONSTITUTIONAL	DISTASTS						1	1	1				3	
Rheumatic Fever Rheum heart Rheumatism Gout	atism of the	1 1 2	······································	4 4 3	1 23 2	3	8 1 13	9 1 20	3 4 1 9	20 2	1 16 1 1 1 19	3	1 69 15 1 2 5	99
Old Age VI.—LOCAL DISE		_							2	5	32	24 24	63	
1.—Diseases of the Nerv Inflammation of Brain or M Apoplexy, Softening of Bra Brain Paralysis Insanity, General Paralysis Epilepsy	ous System. Iembranes in, Hemiplegia s of the Insane asm of Glottis)	5	3			2	1 1 3	4 2 1 1	11	24	13		4 10 8 6 2	

TABLE VIII.—Continued.

						A	GE	s.						1
		to 1	to	5 to 15	to	to	to	to	to	to	to	wd	Totals.	5 t 6
2.—Diseases of Organs of S	pecial Sense	1	-	-		-	-	-	-		-	-		-
(e.g., of Ear, Eye, Nose)														
3.—Diseases of Circulator	y System.													
The I can divide														1
Pericarditis Acute Endocarditis	***													
Valvular Diseases of Hea				1				1	1		.:		100	1
													11	۱
Other Diseases of Heart														ı
Aneurism	***												1	ı
Embolism, Thrombosis														ı
Other Diseases of Blood	Vessels	• • • •									1	٠.	1	ı
4.—Diseases of Respirator	u Custom]	3	1		3	13	10	22	15	3	77	ľ
1.— Discuses by Respirator	у бумет.				P									
Laryngitis			1	1									9	1
Croup			1	i									1	1
					1	11	1	1		1		1	3	
		1				i	0	6	11	99	90	3		ı
			1	1 1	9	1	1	5	1	0	20	1	45	ı
Pleurisy														1
	votory Cuck				1	1	1	1		1 2	1	1		1
Other Diseases of Respi		· · · ·			1	1			2	1	1		5 9	î
Innuenza			1	1				1		0	-3		9	
5.—Diseases of Digestion	ce System.	1	111	7	2	4	4	14	14	37	39	5	155	
Dentition														1
Sore Throat, Quinsy]											1
Diseases of Stomach	* *													1
Enteritis														
Obstructive Diseases of	Intestine		١.,	1						3	4		10	
Peritonitis					1		1	1					3	
Ascites														
Cirrhosis of Liver							1	2		1			6	
Jaundice and other Dise		rer 5	2						1	1	1		7	
Other Diseases of Digest	ive System	5	2			1	1	1	1				6	1
Appendicitis				1		1		1				-	3	
		(3]	2	1	4	3	5	2	6	5		40	
6.— Diseases of Lympha (e.g., of Lymphatics and							1						1	
			-	-	-	-	-	-	-	-	-	-	-	-
7.—Diseases of Gland-li Uncertain Use	ke Organs	of .					1						1	
(e.g., Bronchocele, Addi	son's Diseas	se).												
		1	-	-	-	-		-				-		-
					l						1.	1	10000	

TABLE VIII.—Continued.

						23.	U. M.	S.				100		
		to 1	to	to	to	25 to 35	to	to	to	to	to	D W	Totals.	5 to
8.—Diseases of Urinary System.		-	-	-	-			-	-	-	-	-		-
Nephritis Bright's Disease, Albuminuria Disease of Bladder or of Prostate					1	1 2	2	3	1	3 1 4	1		16 11 9	
Other Diseases of the Urinary System	a							2	1				4	
9.—Diseases of Reproductive System	ı.				2	3	3	9	4	8	7	1	40	
(A). Organs of Generation.														
Male Organs														
Female Organs	•••		-	-	-	• • •		-	-		-	-		-
(B). Of Parturition.		• •		**				• •	• •	• •				
Abortion, Miscarriage														
Puerperal Convulsions										• •	• •	• •		
Placenta prævia, Flooding Other Accidents of Child Birth								::						
		-			-	-		-	_	7	-			-
10.—Diseases of Bones and Joints.		**		• •		•••	•	•	•					ľ
Caries, Necrosis									٠.	1			1 2	
Arthritis, Ostitis, Periostitis Other Diseases of Bones and Joints											100	::	3	1
Other Discuses of Dones and Control		-	-					_	-	-			6	-
11.—Diseases of Integumentary System	2.		• •	3			• •	1		1	1	•••		
Carbuncle, Phlegmon														
Other Diseases of Integumentary System	y	2											2	
		2	-			-	-		-	-	-	_	2	-
VIIDEATHS FROM VIOLENCE		4			•		•		•					1
1.—Accident or Negligence.														l
Fractures and Contusions			1	1					1				3	
Gunshot Wounds Cut, Stab	***			• • •										ľ.
Burn, Scald		1	1			1							3	
Poison								1	9 0				1	*
Drowning					1					٠.		٠.	1 3	
Suffocation		2		1	3	i		i		i	2		12	
Otherwise		1	1	1	0	1		1	• •	1	-	• •	12	_
			-	0	4	0		2	1	1	0		23	

TABLE VIII.—Continued.

							- 1	AG	ES	5.						ı
2.—H	omicide.			to 1		to	to	10	to	to	to	to	75 to 85	W	Totals	5 1 6
							_		_		_			00		
Manslaugh	ter															١,
Murder		6.0		1											1	
				-	-	-		-	-	-	-	-	-	-		1
3.—Su	icide.			1			• •	***	• •	• •	• •			•••	1	-
Gunshot W	ounds									1					1	
Cut, Stab				0.6				, ,								
Poison			***				1								2	
Drowning																
Hanging			- 11					٠.		1	1				2	
Otherwise										٠.						ŀ
							1			2	1	-			5	ľ
4-Exe	ecution.						-			-						ľ
Hanging							1								1	
							1								1	
VIII —DI DEFINED																
					100					1					1	
Debility, A	trophy,	Inanition		27	1		-								28	,
Mortificatio	n												1		1	
Tumour									٠.	1			1		2	
				1						200					1	ŀ
Hæmorrhag			4	***												
		e not ascerta					٠.									
Causes not	specine	d or Ill-defi	ned													
					_	-	-	-	-	-	-	-	_	-	-	100

Sanitary Inspector's Report.

GENTLEMEN,

I have again the honour of submitting for your consideration a Report on the work done by the Sanitary Inspectors for the year 1909.

The work during the past year has again been of a most varied character, and during the time that the epidemic of Typhoid Fever (due to Milk) was on, the work of the whole staff was directed to controlling this outbreak. The number of cases of Infectious Disease notified to the Medical Officer was considerably more than that of last year, and a large amount of time was taken up in investigating these cases, and the conditions of the premises in which they occurred.

HEALTH VISITOR.

The amount of good work done by Miss Weaver during the past year has, in my opinion, materially assisted in bringing down the Infantile Mortality from an average of 141.6 per 1,000 Births for the past 8 years to 101.3 per 1,000 Births for the past year, and the fact that her services are often requisitioned indicates that her work is appreciated.

Her work during the 3 years she has been with us, and the tactful manner in which she carries out her duties, confirms the opinion previously formed that a Lady Health Visitor is essential on the staff of a well organised Health Department.

During the past year she has paid 2,381 visits with regard to the care of Infants, 62 visits to cases of Phthisis, 18 visits to cases of Measles, 6 to School Children showing symptons of Infection, and 145 sundry visits.

PUBLIC ABATTOIR AND PRIVATE SLAUGHTER HOUSES.

The 9 (registered) Private Slaughter Houses have been kept under close supervision, and I am pleased to report that there has been no difficulty in keeping them in accordance with the Bye-Laws. The occupiers of these Slaughter Houses make a practice of at once sending notice to the Office whenever there is the slightest abnormal sign in the carcase or internal organs, and during the past year 2 carcases of Steers, and 3 carcases of Cows have been surrendered.

Mr. Tucker, the Caretaker at the Public Abattoir, has again been most attentive to his duties, and has kept me well informed of all doubtful cases that required special inspection.

The number of carcases seized or surrendered at the Public Abattoir on account of Generalised Tuberculosis, and condemned, has greatly increased in the past year, and particularly since the Insurance Scheme was started.

Taking the number of cattle (cows, heifers, steers, and bulls), slaughtered in the Private Slaughter Houses and at the Public Abattoir, and those condemned on account of Generalised Tuberculosis, I find that it works out about 5.3 per 1,000.

In several cases the animals, which were of prime quality and apparently in the best of condition, were found on being slaughtered to be suffering from well marked Generalised Tuberculosis, and in nearly every case there was nothing in the condition of the animal to lead one to suspect that the disease was so far advanced.

In my opinion the present system of making the butcher bear the loss of carcases that are seized or surrendered on account of this disease is most unfair and unjust, and I should like to see it made compulsory that all animals intended for human food should be insured. I contend that with every animal that is offered for sale for human food, and with all food, there should be an implied warranty that the same is fit food.

The present method of the disposal of the carcases is in my opinion most wasteful, and trust that the time will soon come when a system similar to that carried out in Germany will be adopted in England.

TABLE
Showing Particulars of Carcases Seized or Surrendered on account of Generalised Tuberculosis for 1909.

Ref. No.	Sex.	Age About	. EXTENT OF THE DISEASE.
1	Cow	10 years	Tubercle in Lungs, Liver, Spleen, Kidneys and Glands; very little on Pleura or Peritoneum
10	Steer	3 years	Tubercle in Lungs, Liver and Glands
14	Steer	2 years	Tubercle in Lungs, Liver and Glands. Carcase emaciated
20	Cow	5 years .	Tubercle in Lungs, Liver, Spleen and Glands, Pleura and slightly on the Peritoneum
22	Cow		Tubercle in Lungs, Liver, Spleen, Glands and Udder
24	Cow		Tubercle in Lungs, Liver, Kidneys, Glands and Pleura
30	Steer		Tubercle in Liver. Spleen, Lungs, Mesenteric Glands, and Sub-Maxillary Glands
32	Cow		Tubercle in Lungs, Liver, Spleen, Kidneys, Pleura Peritoneum, Prescapular and Lumbar Glands
33	Cow		Tubercle in Lungs, Liver, Glands and Pleura
35	Cow		Tubercle in Lungs, Liver, Spleen and Glands
36	Cow		Tubercle in Lungs, Liver, Spleen, Udder and Glands
38	Cow		Tubercle in Lungs, Liver, Spleen, Glands, Pleura and Peritoneum
40	Maiden Heifer		Tubercle in Lungs, Liver, Kidneys, Glauds and on Pleura
43	Cow	10 years	Tubercle in Lungs, Liver and Glands
49	Steer		Tubercle in Lungs, Liver, Spleen and Glands
52	Heifer	20 months	Tubercle in Lungs, Liver, Spleen and Glands
57	Cow		Tubercle in Lungs, Liver, Spleen, Kidueys and Glands
62	Cow	10 years	Tubercle in Lungs, Liver, Udder and Glands
63	Cow	5 years	Tubercle in Liver, Udder and Glands

The following figures show the number of animals slaughtered at the Public Abattoir, and the Fees earned during the year 1909.

	Numbers aughtered	l.		ees med	
Cattle	 2,121	*	£106	1	0
Calves	 828		13	16	0
Sheep	 8,544		71	4	0
Pigs	 1,846		46	3	0
Total,	 13,339		£237	4	0

The charges for the use of the premises are:—Cattle, 1s.; Pigs, 6d.; Calf, 4d.; Sheep, 2d.

UNSOUND MEAT, VEGETABLES, &c.

Particular attention has been given to the inspection of all kinds of food, and to the premises where such is prepared.

During the year special inquiries were made as to the use of Preservatives in the manufacture of Sausages, and the conditions under which they were made. From these inquiries, and the results of the analysis of various samples, I find that Preservatives are scarcely ever used by the local butchers in making Sausages, and analysis showed that it was only in the Sausages imported into the City that Preservatives were found. The conditions of the majority of the premises were found satisfactory.

SUMMARY OF UNSOUND FOOD.

Summary of Unsound Food Seized and Proceedings taken during the Year 1909.

	uu	iring the rear tot	7.7.	
No.	NATURE OF SEIZURE.	Cause of Seizure.	RESULT.	PROCEEDINGS TAKEN AND RESULT.
1	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
2	Carcases of 3 Pigs	Generalised Tuberculosis	Condemned	Destroyed
3	Four Pieces of Beef and a	Diseased	Condemned	Destroyed. Summoned.
4	Carcase of a Pig	Generalised Tuberculosis	Condemned	14 days' hard labour Destroyed
5	Carcase of a Steer	Acute Inflammation	Condemned	Destroyed. Summoned.
6	Carcase of a Pig	Generalised Tuberculosis	Condemned	Fined £2 and costs. Destroyed
7	Carcase of a Cow	Dropsy	Condemned	Destroyed.
8	Lungs and Heart of a Cow	Tuberculosis	Surrendered	Destroyed.
9	Carcase of a Pig	Tuberculosis	Condemned	Destroyed
10	Carcase of a Steer	Generalised Tuberculosis	Surrendered	Destroyed
11	Carcase of a Sheep	Unwholesome	Condemned	Destroyed
12	Carcase of a Steer	Septic Inflammation	Condemned	Destroyed
13	Carcase of a Steer	Diseased (Septic)	Condemned	Destroyed
14	Carcase of a Steer	Generalised Tuberculosis	Condemned	Destroyed
15	Carcase of a Pig	Generalised Tuberculosis	Surrendered	Destroyed
16	Carcase of a Pig	Tubercular Peritonitis	Condemned	Destroyed.
17	Seven Livers and Lungs of Pigs	Hydatid Disease	Surrendered	Destroyed
18	Lungs of a Cow	Tuberculosis	Surrendered	Destroyed
19	Carcase of a Pig	Generalised Tuberculosis	Surrendered	Destroyed
20	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
21	Carcase of a Sow Pig	Malignant Tomour	Condemned	Destroyed
22	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
28	Lungs of a Heifer	Tuberculosis	Surrendered	Destroyed
24	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
25	Carcase of a Calf	Generalised Tuberculosis	Condemned	Destroyed
26	Carcase of a Pig	Tuberculosis	Condemned	Destroyed
27	Four Sheep's Livers	Cirrhosis	Surrendered	Destroyed
28	One Fowl	Tuberculosis	Surrendered	Destroyed
29	Head and Liver of a Cow	Tuberculosis	Surrendered	Destroyed
30	Carcase of a Steer	Generalised Tuberculosis	Surrendered	Destroyed
31	Lungs and Liver of a Cow	Abscesses	Surrendered	Destroyed

SUMMARY OF UNSOUND FOOD-Continued.

No.	NATURE OF SEIZURE.	Cause of Seizuee.	RESULT.	PROCEEDINGS TAKEN AND RESULT.
83	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
33	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
34	Lungs of a Cow	Tuberculosis	Surrendered	Destroyed
35	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
36	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
37	Carcase of a Calf	Septic Peritonitis	Surrendered	Destroyed
38	Carcase of a Cow	Generalised Tuberculosis	Condemned	Destroyed
39	Lungs of a Cow	Tuberculosis	Surrendered	Destroyed
40	Carcase of a Maiden Heifer	Generalised Tuberculosis	Condemned	Destroyed
41	Tongue, Lungs and Mesenteric	Tuberculosis	Surrendered	Destroyed
42	Fat of a Steer Tongue and Lungs of a Cow	Tuberculosis	Surrendered	Destroyed
43	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
44	Left Hind Quarter of Carcase	Tuberculosis	Surrendered	Destroyed
45	of a Cow	Tuberculosis	Surrendered	Destroyed
46	Carcase of a Sbeep	Lung Disease	Surrendered	Destroyed
47	Carcases of 3 Pigs	Tuberculosis	Surrendered	Destroyed
48	Carcase of a Sheep	Diseased	Surrendered	Destroyed
49	Carcase of a Steer	Generalised Tuberculosis	Surrendered	Destroyed
50	Liver and Heart of a Calf	Diseased	Surrendered	Destroyed
51	Carcase of a Ram	Diseased (Emaciated)	Surrendered	Destroyed
52	Carcase of a Heifer,	Generalised Tuberculosis	Condemned	Destroyed
53	Carcase of a Calf	Pysemia .	Surrendered	Destroyed
54	Carcase of a Sheep	Lung Disease	Surrendered	Destroyed
55	Carcase of a Sheep .,	Inflammation of Lungs and Intestines	Surrendered	Destroyed
56	Liver of a Cow	Abcesses and Intestines	Surrendered	Destroyed
57	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
58	Lungs of a Cow	Tuberculosis	Surrendered	Destroyed
59	Portions of Carcase of a Sheep	Abscess in Lungs	Surrendered	Destroyed
60	Head, Liver, Lungs and Mes- enteric Fat of a Steer	Tuberculosis	Surrendered	Destroyed
61	Liver of a Pig	Diseased (Hydatid)	Surrendered	Destroyed
62	Carcase of a Cow ,.	Generalised Tuberculosis	Surrendered	Destroyed
63	Carcase of a Cow	Generalised Tuberculosis	Surrendered	Destroyed
64	Carcases of 9 Pigs	Generalised Tuberculosis	Condemned	Destroyed
65	Carcase of a Sheep	Septicaemia	Surrendered	Destroyed

DRAIN TESTING AND IMPROVEMENT IN HOUSE DRAINAGE.

During the year the Drainage of 246 Houses have been tested with the Water Test, and 276 with the Smoke Test. The work of testing the Drains of Houses for the ingoing tenant, provided he obtains the consent of the owner, has materially increased the work of the department. I find that in the majority of cases the proposed tenant has no difficulty in obtaining the consent of the landlord to the test being made by an Officer of the Health Department.

We require the person asking for the inspection to provide ladders for stopping down the top of the vent pipes, the provision of the ladders is generally arranged from the Health Department, and the cost of same charged to the person requiring the inspection.

This system is in my opinion of great assistance in getting the Drainage and Sanitary Arrangements of Houses brought up to modern ideas.

NEW BUILDINGS.

During the year there have been 277 New Buildings in the course of erection divided as follows:—

Dwelling Houses	 255
Buildings of the Warehouse Class	 10
Alterations and Additions	12

Of these 180 Dwelling Houses, and 7 of the Warehouse Class, and 10 Alterations and Additions were completed, and certified to the City Surveyor as in accordance with the Bye-Laws, and fit for habitation.

FOOD AND DRUGS ACTS.

One hundred and seventy samples have been submitted for analysis. Of this number 16 were certified as adulterated. The samples were obtained as follows:—81 by the Inspector; 74 by Agents; 15 Informal Samples.

BAKEHOUSES.

The 51 Bakehouses within the City have been twice inspected during the year, and the only thing we have to complain of is omitting to limewash and cleanse the walls and ceilings within the time prescribed by the Act.

COWSHEDS, DAIRIES, AND MILKSHOPS.

The 22 Cowsheds, 48 Dairies, 102 Milkshops, and premises of 6 Purveyors of Milk have been regularly inspected, and kept in accordance with the Regulations. During the past year 4 Cowsheds have been re-built, and 3 re-modelled. The standard adopted being 800 cubic feet of space, and 60 feet of floor space for each animal, with one-eighteenth of the floor space for lighting. Several of the older sheds have been objected to, and the owners have preferred to discontinue their use as Cowsheds rather than go to the expense of re-modelling them on modern lines. The majority of the Cowsheds within the City are now in a satisfactory condition.

FACTORIES AND WORKSHOPS.

During the past year 702 visits have been made in the inspection of Factories, Workshops, and Workplaces; and 226 visits to the premises where Home-Work is carried on. In 107 cases defects were found which were remedied upon notice being given.

OFFENSIVE TRADES.

The Offensive Trades have been carried on without any cause of complaint, and the premises are kept in a satisfactory condition.

HOUSING OF THE WORKING CLASSES.

No premises have been closed during the past year, but the policy of insisting upon the improvement of slum property has been carried out. The housing accommodation for the Artizan Class is ample, in fact there has been considerable over-building of this class of house. There is still a want of housing accommodation for the poorest class of the community.

LEGAL PROCEEDINGS.

In no case has it been necessary to take Legal Proceedings for the abatement of nuisances. In one case Legal Proceedings were taken against a person in charge of a case of Scarlet Fever for wilfully exposing wearing apparel, she was fined 10/-inclusive; and in two cases Legal Proceedings were taken for exposing for sale unsound food, and a fine of £2 and costs was imposed in one case, and a sentence of 14 days imprisonment with hard labour in the other.

In 5 cases Legal Proceedings were taken under the Sale of Foods and Drugs Acts, and fines ranging from 5/- to £2 were imposed in 4 cases; the other case being dismissed.

I append a Summary of Work done during the year.

In conclusion, I beg to thank the Chairman and Members of the Sanitary Committee for the interest and support they have given me in carrying out my duties.

My thanks are again due to the Town Clerk, the Medical Officers of Health, the Surveyor, and other Officials for their assistance, and particularly to the Members of my own Staff for the loyal support and hearty co-operation.

I am, Gentlemen,

Your obedient Servant,

W. J. WREFORD.

REPORT

OF THE

SANITARY WORK COMPLETED IN THE YEAR 1909.

Complaints Received during the Year		• •••	258
Houses, Rooms, and Works Inspected			9570
Re-Inspection of Houses and Rooms			4180
Houses, Premises, &c., Cleansed, Repaired	and Lin	newashed	44
Notices requiring Registration of Houses	Let in L	odgings	1
Drains Repaired, Trapped and Ventilated			35
Drains Re-laid with Socketted Pipes, prope	erly Trap	ped	
and Ventilated			33
Notices to Re-construct Single Private Dra	ains		3

Drains Tested with Smoke Test			276
Drains Tested with Water Test (including	those of	New	
Houses)			246
Water Closets Repaired and Limewashed			5 8
Flushing of Water Closets Improved			56
New Water Closets provided			4
Windows provided to Water Closets	•••		3
New Scullery Sinks provided			8
Removal of accumulation of Dung, Stagnar	t Water,		
Animals and Refuse			21
Dung Pits Re-modelled			5
Court Yards and Floors Repaired and Re-pa	aved in C	Cement	
Concrete			66
Soil Pipes Repaired and Ventilated		•••	13
Defective Bell and D Traps replaced by Sto	neware (Hullies	51
Waste Pipes discharged into Stoneware Gul	lies and '	Гrapped	39
Slaughter Houses Cleansed and Limewashed	Twice		9
Notices for Abatement of Overcrowding			2
Visits to Slaughter Houses	•••		469
Notices served for Drains to be Opened Up			24

Notices served for Defective Eaves, Gutters, and Rain	_	
Water Pipes		6
Notices requiring Water Closets to be Cleaned		21
Drains Unchoked		63
Rooms Disinfected after Illness of an Infectious Char	racter	370
Articles of Clothing Disinfected		6685
Samples taken for Analysis		170
Inspection of Cowsheds		44
Inspection of Dairies and Milkshops		174
Dairies and Milkshops Cleaned and Re-decorated		21
Ventilation to Milkshops Improved		4
Water Supply Improved		1
Milk Pails Covered to Protect Milk from Flies		4
Notices of Infectious Sickness to Managers of Sc	hools;	
existing in Houses from which Scholars		
attending		231
Notices to Education Authority		138
Notices to Librarian of Exeter Free Library		161
Orders for Destruction of Unsound Meat, Fish, Fruit,	&c.	24
Unsound Meat Surrendered		41
Carcases Destroyed as Unfit for Food		57
Meat, Fish, Fruit, &c., Destroyed (in lots)		20

FACTORY AND WORKSHOPS ACTS:-

Inspection of Workshops		573
Inspection of Factories		110
Inspection of Homeworkers' Premises		226
Inspection of Workplaces		19
Inspection of Bakehouses, included in above		115
Notices to Limewash Bakehouses		30
Bakehouses Limewashed (twice)		51
Water Closets Repaired		1
Flushing of Water Closets Improved		10
Notices requiring Water Closets to be Cleansed		10
Floors Repaired		3
Notices to Abate Overcrowding		3
Notices to Limewash (other than Bakehouses)		50
Notices requiring List of Outworkers to be sent	t in	127
Cases of Infectious Disease Notified in Hor	me-	
workers' Premises		2
Notices sent to Employers of Infectious Disease	e at	
Home of Employees		2



CHART 1 SHEWING WEEKLY NOTIFICATIONS OF SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER.

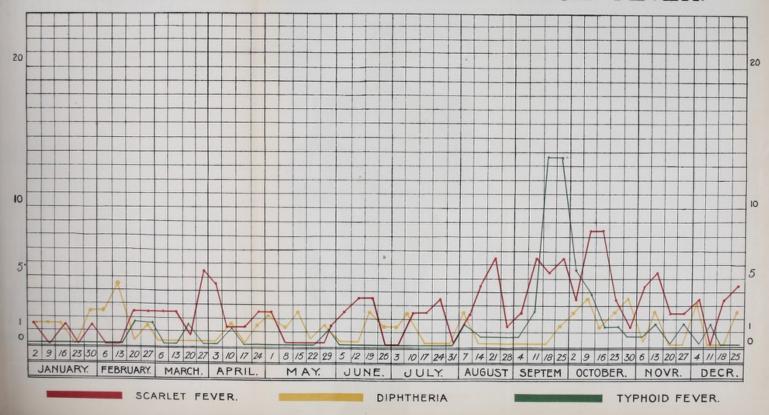




CHART 2 SHEWING WEEKLY MORTALITY SCARLET FEVER, DIPHTHERIA AND TYPHOID FEVER.

