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REPORT

BY THE

COUNTY MEDICAL OFFICER OF HEALTH

ON THE

VITAL STATISTICS AND SANITARY CONDITION OF SHROPSHIRE

DURING THE YEAR 1900,

INCLUDING A

SUMMARY OF THE ANNUAL REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH.

CHARLES PORTER, M.D.,
B.Ch., M.R.C.S., D.P.H. Camb., Barrister-at-Law, and a Vice-President of the Society of Medical Officers of Health.

SHREWSBURY,
July, 1901.

TO THE CHAIRMAN AND MEMBERS OF THE SANITARY COMMITTEE,
SHROPSHIRE COUNTY COUNCIL.

GENTLEMEN,

I have the honour to present my First Annual Report on the Vital Statistics and Sanitary Condition of your County (Part I.), together with an Abstract of the Reports of the District Medical Officers of Health (Part II.)

The recent **Census returns** show the **population** to be 239,297, equal to an increase of 1 per cent. during 1891-1901, against a decrease of 4·2 per cent. in 1881-1891.

The **Marriage-rate** was 14·4 against 16·03 for England. The number of "illiterates" (*i.e.* who sign the register by mark) is comparatively high, especially amongst men.

The **Birth-rate** of the County, like that of England and Wales, was the lowest on record. This matter is referred to at p. 8.

The **General Death-rate** per 1000 was 16·4, which is very satisfactory. Many deaths were at a great age, one in Cleobury Mortimer being at 102.

The **Rate of Infant Mortality** per 1000 births was very low for the County generally (109), but much too high in some individual districts. Maternal ignorance as to the Feeding and Care of Infants has no doubt much to do with this. With a falling national birth-rate the preservation of infant life becomes a matter of serious importance, and it is much to be desired that instruction in infant hygiene should be regularly imparted to the elder girls in elementary schools throughout the Kingdom.

Amongst **Special Causes of Death, Influenza** bulks very largely and, with the exception of Hereford, Shropshire is harder hit by this disease than any other county. The **Supposed Increase of, and Conditions favoring Cancer** are considered at p 12. Particulars of an interesting outbreak of **Waterborne Typhoid** at Ironbridge are given at p. 14.

The existing provision in respect of **hospital accommodation, disinfection, and bacteriological diagnosis** are outlined at p. 16—17.

The **Statistical Tables** follow as far as practicable the new forms suggested by the Local Government Board, and though the labour entailed is considerable, the results will, after a series of years, be very valuable.

The progress made in regard to **Water Supplies** is recorded at p. 18, and the condition of affairs as regards **Sewage Disposal and Rivers Pollution,** which will doubtless before long engage your serious attention, is also summarized (p. 19—20.)

The **Prevention of Tuberculosis in Milch Cows** is treated of at p. 22. If County Councils are to have any useful direct sanitary functions, it is surely time that they were empowered to assist District Councils in this matter, to bring about concerted action, and to act executively themselves, as in regard to Rivers Pollution.

At p. 24 is set out the result of correspondence with the Local Government Board as to what constitutes a '**special report**' **by a Medical Officer of Health**.

I have the honour to be,

GENTLEMEN,

Your obedient servant,

CHARLES PORTER

COUNTY HEALTH OFFICE,
Talbot Chambers,
SHREWSBURY

6th July, 1901.

INDEX.

To Part I.

To Part II. (District Reports).

PART 1.

THE ADMINISTRATIVE COUNTY.

AREA AND POPULATION.

The Administrative County has an area of 859,516, and includes 6 municipal boroughs, 8 urban, and 17 rural sanitary districts. During the year the Wem urban district was formed, and is practically the urban part of the former rural district.

Table 1.

	Area in Acres.	Estimated Population, 1900.	Census Population, 1901.	Persons per Acre.	Acres per Person.
Municipal Boroughs ..	33,108	65,069	65,820	1·98	0·50
Other Urban Districts ...	15,269	37,633	38,010	2·48	0·40
Rural Districts	811,139	137,974	135,467	0·16	5·91
Administrative County ...	859,516	240,676	239,297	3·59	0·27

CENSUS RETURNS, 1901.

The following Tables have been prepared from the recently issued Preliminary Census Report, 1901 :—

Table 2.

SHROPSHIRE.	Acreage.	Inhabited Houses.		Population.		Percentage Increase. 1891-1901	Corresponding Percentage Decrease 1881-1891.
		1891.	1901.	1891.	1901		
*Ancient or Geographical County ...	859,516	49,681	**51,484**	236,339	**239,321**	1·3	—
†Administrative County ...	859,516	49,801	**51,487**	236,827	**239,297**	1·0	4·2
‡Registration or Union County...	958,667	53,886	**55,790**	256,044	**259,093**	1·1	—

* 'Ancient or geographical County' means the old historical area which is ordinarily designated by the word 'County.'

† 'Administrative County' differs from 'geographical' in that certain urban areas, which lie partly in one ancient County and partly in another, are, for administrative purposes, included in that County which contains the larger portion. In the case of Shropshire the Administrative County is co-extensive with the Geographical County.

‡ 'Registration or Union County' is an aggregate of registration districts or Poor-law Unions.

The population of Shropshire in 1901 is therefore slightly greater than that in 1891, and though this increase is only 1 per cent., it is more satisfactory than the decrease of 4.2 per cent. experienced in the decennium 1881-1891.

Table 3.

CENSUS RETURNS FOR URBAN DISTRICTS.

URBAN DISTRICT.	Inhabited Houses.		Population enumerated.		Increase or decrease of population between 1891 and 1901.	
	1891.	1901.	1891.	1901.	Increase.	Decrease.
Bishop's Castle	361	353	1586	1378	—	208
Bridgnorth	1215	1299	5865	6049	184	—
Church Stretton	131	147	770	816	46	—
Dawley	1523	1633	6996	7522	526	—
Ellesmere	392	426	1830	1945	115	—
Ludlow	959	987	4460	4552	92	—
Newport	714	720	3403	3241	—	162
Oakengates	2117	2177	10680	10837	157	—
Oswestry	1778	2084	8496	9579	1083	—
Shrewsbury	5600	6092	26967	28396	1429	—
Wellington	1284	1326	5909	6273	364	—
Wem	406	455	1878	2157	279	—
Wenlock	3447	3568	15703	15866	163	—
Whitchurch	1006	1129	4930	5219	289	—
Urban Shropshire	20933	22396	99473	103830	4727	370

From these returns it appears that, notwithstanding a falling-off in Bishop's Castle and Newport, the urban population has increased by 4,357, equal to 4·1 per cent.; this increase being greatest in Oswestry and Dawley. The number of inhabited houses is also greater by 1,463, equal to 6·9 per cent., the number of persons per house in 1901 being 4·6, against 4·7 in 1891.

Table 4.

CENSUS RETURNS FOR THE RURAL DISTRICTS.

RURAL DISTRICT.	Inhabited houses.		Population enumerated.		Increase or decrease of population between 1891 and 1900.	
	1891	1901	1891	1901	Increase.	Decrease.
Atcham	4264	4331	21,144	20899	...	245
Bridgnorth	1934	1886	9185	8573	...	612
Burford	277	263	1361	1233	...	128
Chirbury	899	812	4084	3539	..	545
Church Stretton ...	1019	1005	4631	4477	..	154
Cleobury Mortimer ...	1251	1292	5911	6720	809	..
Clun	1585	1903	7459	6823	...	636
Ellesmere	1649	1658	8119	7906	..	213
Ludlow	2242	2388	10863	11415	552	...
Market Drayton ...	2613	2655	11969	11708	...	261
Newport	1302	1294	6327	6101	...	226
Oswestry	3213	3227	15107	14727	...	380
*Shifnal	1923	1918	9120	8844	...	276
Teme	388	391	1870	1846	...	24
Wellington	2271	2503	10780	11773	993	...
Wem	1801	1834	8241	8265	24	...
Whitchurch	423	424	2031	1924	..	107
Rural Shropshire	29,054	29,384	138,202	136,773	2,378	3,807

This table shows that whilst there has been a marked increase in Cleobury Mortimer, Wellington, and Ludlow, the population of *Rural* Shropshire generally is less by 1429 persons, equal to 1 per cent. decrease on the Census of 1891. There has been a slight increase (330) in the number of inhabited houses, but not sufficient to alter the 1891 rate of 4·7 persons per house.

The increase in Cleobury Mortimer is probably due to the mining operations which have been undertaken at Highley: in Ludlow a considerable number of persons are temporarily employed in connection with the Birmingham Waterworks, and in Wellington Rural large tram-car works have been opened at Hadley.

From a consideration of the Census Returns for the counties generally it is clear that statements as to rural exodus have been exaggerated. The number of counties with declining populations is relatively few, the extent of the decline is comparatively small, and in many of these instances, furthermore, neighbouring county boroughs show great increases. It is thought by many that in the next ten years the rural exodus will probably, to a large extent, have ceased. "Although the number engaged in agriculture cannot be expected to increase, as means of "communication continue to improve, the number of 'gardeners,' as well as of a higher class of "rural residents, will undoubtedly increase."

MARRIAGES.

According to the Registrar General's Quarterly Reports, there were 1,757 marriages in the Registration County in 1900, equal to a rate of 14·4 per 1,000 persons living, as against 16·03 for England.

The only figures available for individual districts are in regard to Ludlow borough and Market Drayton, where the rates were respectively 23·7 and 12·4 per 1,000 persons living,

The following is excerpted from the Registrar General's Report for 1899 :—

	Persons Married in 1,000 Living.		In 1,000 Marriages.								
			Under 21 years.				Signed by Mark.				
			Average of 10 years. 1889-98.		1899.		Average of 10 years. 1889-98.		1899.		
	10 years 1889-98.	1899	Men.	Women.	Men.	Women	Men.	Women.	Men.	Women.	Both.
Shropshire ... ... (Registration County)	13·4	14·6	27	117	23	103	76	58	41	35	11
England and Wales	15·4	16·5	56	182	50	165	51	59	29	34	9

The number of both men and women who marry under age in Shropshire is very much less than in the country generally ; but the number of both male and female illiterates (*i.e.*, who sign the register by mark) is higher. In most of the northern counties, and in Wales, illiterate females out-number illiterate males, but the reverse is the case in Shropshire, and in nearly all the southern counties.

BIRTHS.

6,502 births were registered in 1900, representing a rate of 27·0 per 1,000 persons living. In the Urban districts of the County the rate was 27·6, and in the Rural 26·5.

	Births to 1000 Living.		Illegitimate Births to 1000 Births.		Males Born to 1000 Females Born.	
	Ten Years 1889-98.	1900	Ten Years 1889-98.	1899	Ten Years 1889-98.	1899
Shropshire	27·6	27·0	73	65	1039	1009
England and Wales ...	30·3	28·9	43	40	1036	1039

* In Registration County.

Amongst the Urban districts, the birth-rate was highest in Dawley (35·0), Oakengates (34·9), and Ludlow (31·3), and lowest in Bridgnorth (23·8), Newport (23·6), and Church Stretton (16·2).

In the Rural districts, Wellington with the very high rate of 49·2 was followed by Teme with 29·9, whilst Chirbury and Whitchurch (22·5) and Church Stretton (20·3) were the lowest.

The high proportion of illegitimate births in Shropshire was ascribed by the late Dr. Thursfield to influences rather of a climatic and industrial than personal nature, the result of which is that an exceptional proportion of the young women of the county are employed in large towns at a distance from home, and altogether away from maternal supervision.

The **persistent fall in the birth-rate** noted in Shropshire obtains throughout the country at large, and it has been shewn that the lowering of the death-rate is not keeping pace with that of the birth-rate, and hence the balance of increase of the population is likely to become less. In reference to this matter the British Medical Journal of June 29th, 1901, remarks that . . . the chief means by "which the great lowering of the birth-rate in most civilized countries has been brought about has "been brought about has been by the dissemination of instruction as to the means of artificially "preventing conception. . . . the reduction in the birth-rate has been much greater in Protestant "than in Roman Catholic countries, though France appears to be an exception to this rule. The "reason . . is that among the former the production of abortion and the prevention of conception "are alike regarded as deadly sins, the continuance of which prevents absolution from being obtained. "That there is no essential physical reason for the decline of the birth-rate in France is shewn by the "enormous birth-rate of the French Canadians, who remain orthodox as well as prolific."

DEATHS.

During the year, 3963 deaths were registered, against 4103 in 1899, being 1818 in the Urban against 1793 : and 2145 in the Rural Districts against 2310.

The General Death-rate for the whole County was 16·4 ; in the Urban Districts 17·7, and for the Rural Districts 15·5. These rates bear satisfactory comparison in the following Table with corresponding rates for England and Wales.

PERIOD.	Whole of		Small Urban Districts.		Rural Districts.	
	Shropshire.	England and Wales.	Shropshire.	England and Wales.	Shropshire.	England and Wales.
1900.	16·4	18·3*	17·7	18·1*	15·5	17·5*
Average of 10 years, 1890 to 1899.	17·09	18·3**	—	—	—	16·7**

* R.G.'s Rept for 4th Quarter, 1900.
** R.G.'s An. Rpt. 1899. Table 29.

Table 5.

RURAL. STATISTICS FOR 1900 OF SHROPSHIRE RURAL DISTRICTS.

Rural District of	† Estimated Population 1900.	Number of Births.	Birth-rate.	Deaths of Infants under 1 year, per 1000 births.	Death rates per 1000 persons living from							
					All causes.	‡ Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberer. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Diseases.	Cancer.
Atcham	20893	489	24·3	118	15·8	0·69	1·4	1·1	0·1	1·9	2·0	1·1
Bridgnorth	9185	223	24·7	112	12·7	0·32	0·6	0·3	0·4	2·5	1.1	0·6
Burford	1350	32	23·7	31	13·3	..	..	0·7	0·7	2·2	3·7	..
Chirbury	4080	92	22·5	184	15·4	..	0·7	0·7	..	3·9	0·9	1·2
Church Stretton ..	4621	95	20·3	94	17·8	0·64	2·3	1·5	0·4	2·3	1·5	0·8
Cleobury Mortimer ..	5940	164	27·6	103	17·3	0·5	0·6	0·5	0·1	3·7	1·5	0·6
Clun	7330	168	22·8	137	18·2	0·54	1·0	0·8	0·5	3·0	1·5	1·5
Ellesmere	8150	212	26·0	146	15·7	0·7	0·9	1·2	..	2·3	1·4	0·7
Ludlow	10818	243	22·4	82	15·0	0·6	0·8	0·8	0.27	2·6	1·8	0·9
Market Drayton ..	11465	281	24·5	170	18·6	1·04	..	1·5	0·6	3·7	2·6	0·7
Newport	6506	164	25·1	122	17·6	0·3	0·9	1·2	0·6	3·2	1·3	1·6
Oswestry	15400	402	26·1	84	15·0	0·18	0·8	0 7	0.06	2·6	1·3	0·7
Shifnal	8950	231	25·8	112	16·6	0·5	1·7	0·7	0·5	2·2	1·3	0·6
Teme	1870	56	29·9	143	14·9	1·0	2·6	1·0	..	2·1	2·6	0·5
Wellington	11185	551	49·2	40	13·4	0·3	0·8	1·1	0·6	2·5	1·7	0·6
Wem	8119	214	26·3	51	14·7	0·2	1.3	0·8	0·2	1·7	1·8	0·7
Whitchurch .. .	2112	48	22·5	146	12·6	1·87	0·9	..	..	1·4	2·8	..
Rural Shropshire ..	137,974	3665	26·5	102	15·5	0·53	1·02	0·9	0·3	2·6	1·7	0·8
*England and Wales, Rural Districts ..	10,004,575	..	..	..	16·9	..	..	..	..	..	..	..
Whole of Shropshire ..	240,676	6502	27·0	109	16·4	0·8	0·8	0·9	0·4	2·7	1·7	0·8

† The populations are given as estimated by the District Health Officers.
‡ These are:—Smallpox, Scarlet Fever, Whooping Cough, Measles, Diphtheria, and Membranous Croup, "Fever" (typhus, enteric, and continued) and Diarrhœa.
* Registrar General's Report for 4th Quarter, 1900 Table iii., p. xiii.

Table 6.

URBAN. STATISTICS FOR 1900 OF SHROPSHIRE URBAN DISTRICTS.

URBAN DISTRICT OF	† Estimated Population 1900.	Number of Births.	Birth-rate.	Deaths of Infants under 1 year, per 1000 births.	DEATH-RATES PER 1000 PERSONS LIVING FROM							
					All Causes.	‡ Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuber. Diseases	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Diseases.	Cancer.
Bishop's Castle	1586	44	28·1	23	19·1	..	0·6	1·2	..	4·4	1·8	0·6
Bridgnorth	6000	143	23·8	119	18·5	0·66	0·8	0·1	0·8	1·1	2·3	0·6
Church Stretton ..	800	12	16·2	83	16.2	..	..	..	..	5·0	3·7	..
Dawley	7170	252	35·0	107	15·7	0·13	0·5	0·8	..	3·4	1·8	0·4
Ellesmere	1850	51	27·5	58	14·0	1·08	..	2·1	..	2·1	0 5	0·5
Ludlow	4460	140	31·39	107	21·3	2·9	0·5	0·7	0·5	2·0	1·3	1·5
Newport	3409	79	23·6	88	16·1	0·30	0·8	1·7	0·2	1·4	0·2	2·2
Oakengates .. .	10800	377	34·9	135	15·7	1·7	0·2	0·2	0·6	2·5	0·9	0·5
Oswestry	9750	253	25·9	106	16 5	0·7	0 4	0·7	0·6	2·1	1·3	0·5
Shrewsbury .. .	27473	682	24·5	157	19·5	1·29	0·8	1·4	0·5	3·8	2·4	0·8
Wellington	6400	180	28·1	88	17·8	1·56	0·3	1·7	0·1	1·8	1·2	0·7
Wem	2200	62	28·1	112	10·4	2·27	0·9	0·4	..	0·4	..	..
Wenlock	15800	437	27·7	105	19·7	2·45	0·9	1·3	0·2	3·1	1·7	0·9
Whitchurch	5004	125	25·2	96	17·7	1·41	0·8	1·3	0·6	2·5	2·4	1·6
Urban Shropshire .	102702	2837	27·6	118	17·7	1·37	0·6	1·1	0·4	2·8	1·8	0·8
*England and Wales Urban Districts .	22,087,332	..	..	..	19 0	..	..	..	..	..	..	..
Whole of Shropshire ..	240,676	6502	27·0	109	16·4	0·8	0·8	0·9	0·4	2·7	1·7	0·8

† The populations are given as estimated by the District Health Officers.
‡ These are:—Small Pox, Scarlet fever, Whooping Cough, Measles, Diphtheria and Membranous Croup, 'Fever' (typhus, enteric and continued), and Diarrhœa.
* R. G.'s Report for 4th Quarter, 1900. Table iii., p. xiii.

Ages at Death.

Ages at Death. 714 infants died during the first year of life, and 1547 deaths occurred amongst persons of 65 years and upwards. Many of the latter attained a great age; for example, in the Cleobury Mortimer District, out of a total of 103 deaths, 12 were at the age of 80, and 1 at 102. In Ellesmere (R) 25 out of 129 were at ages over 80. The following is the percentage of deaths in each of the official age-periods as compared with the total number of deaths.

	Under 1.	1 and under 5	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
Whole County.	18%	6·9°/₀	2·7°/₀	4·0°/₀	29·2°/₀	39·0°/₀
Urban Districts.	18·5%	8·9°/₀	2·5°/₀	4·0°/₀	29·8°/₀	36·0°/₀
Rural Districts.	17.5°/₀	5·3°/₀	2·8°/₀	3·9°/₀	28·7°/₀	41·5°/₀

It is thus seen that in the Rural as compared with the Urban Districts, fewer infants and more aged people die, as is to be expected.

Amongst the Rural Districts, the death-rate was highest in Market Drayton (18·6) and Clun (18·2, and lowest in Bridgnorth (12·7) and Whitchurch (12·6). Of the Urban Districts, Ludlow had the highest death-rate (21·3) and Wem the lowest (10·4).

INFANTILE MORTALITY.

The proportion of deaths of infants under 1 year of age to registered births was 109 per 1,000 for the whole County, and 118 and 102 for the Urban and Rural Districts respectively, as compared with 138 for Rural England and Wales. These figures are of course very satisfactory, but there are certain Rural Districts in which the mortality from this cause is still strangely too high. Chirbury heads the list with a rate of 184, followed by Market Drayton with 170, Ellesmere and Whitchurch with 146, and Teme with 143. Amongst the Urban Districts, Shrewsbury with 157 and Oakengates with 135 are the highest, none of the others exceeding 119.

On this subject Dr. Hatfield, M.O.H., Chirbury, writes:—"I have gone into this matter "thoroughly, and excluding the deaths of those infants who died within 7 days of births, three fourths "of the remainder were those of children who had been artificially fed, and I am convinced that "improper feeding has contributed in no small degree to the very much increased death-rate"

Dr. Macqueen (Market Drayton) states that the infant mortality is the highest for many years, and is partly accounted for by 11 premature births. But if these be excluded, the rate is still 131, which is much above the average for the County.

Dr. Whitaker (Oakengates) observes that the infant mortality rate leaves much to be desired. "Ten infants succumbed to Diarrhœa, and several others died from faulty nutrition. Put in other "words, a good many children die each year from want of proper care, owing, I believe in most cases, to ignorance of the common rules for the proper feeding and management of infants."

Your medical officer of health whilst at Stockport devoted particular attention to the question of infant mortality, which there reached the very high average figure of 214 per 1,000 births, and constituted over 30 °/₀ of the total mortality, against 18·0 °/₀ in Shropshire. Simple directions for the Feeding and Management of Infants were drawn up by him and widely circulated throughout the Borough; and with the co-operation of the education authorities and school teachers, arrangements were made for the practical instruction in these matters of the elder girls in the Elementary Schools. The Corporation offered a grant of 7s. 6d. for prizes to each school taking the subject up, and also appointed a female health visitor who imparts verbal instruction in the homes of the poor, and occasionally visits each school to supplement the teachers' efforts by a practical demonstration in food-preparation, &c. The whole scheme is working smoothly and successfully in Stockport, and there is little doubt will eventually bring about a lowering of the infant mortality, if anything can do so.

Your medical officer of health has ventured to bring this matter verbally to your notice during the past year and to suggest the adoption, if possible, of similar measures, but the difficulties in the way are considerable, as, amongst the scattered teachers of a large county, it is not easy to arouse interest in the question, and at present the County Council have no direct concern with, or power to spend money on elementary education, though possibly the next Session of Parliament may see this disability removed. With the falling birthrate already alluded to, the unnecessary loss of infant life becomes a matter of national moment, and for this reason it is very desirable that the Education Department should be induced if possible to include the subject of Infant Feeding and Management in the regular course of instruction for elder girl pupils.

CAUSES OF DEATH.

Zymotic or Specific Febrile Diseases.

The deaths ascribed to this class of disease, including 211 from Influenza, numbered 437, corresponding to a rate of 1·8 per 1000, against 2·6 for England and Wales during 1889-98. From the "Seven Chief Zymotics" (smallpox, measles, scarlet fever, whooping cough, diphtheria, fever, and diarrhœa) there were 141 deaths, the rates being as set out in the following Table :—

SHROPSHIRE.	Seven Chief Zymotics.	Measles.	Scarlet Fever.	Diphtheria	Fever.	Whooping Cough.	Diarrhœa.
Urban	1·37	0·51	0·009	0·11	0·09	0·18	0·44
Rural	0·53	0·08	0·05	0·07	0·08	0·07	0·15
Whole County ...	0·89	0·27	0·03	0·09	0·09	0·12	0·28
England and Wales less 100 Towns.	1·57	0·32	0·10	0·16	0·24	0·2	0·48

Amongst the individual Urban Districts, the highest rates were in Ludlow (2·9), Wenlock (2·45), and Wem (2·27), and the lowest in Oswestry (0·7), and Bridgnorth (0·6). In the Rural Districts, the highest rate was in Whitchurch (1·87), whilst in Burford and Chirbury there were no deaths under this heading.

Diarrhœal Diseases.

68 deaths from Diarrhœa occurred during the year, of which 46 were in Urban and 22 in Rural Districts.

RURAL.

Table 7.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1900 IN THE RURAL DISTRICTS OF SHROPSHIRE.

CAUSE OF DEATH.	Deaths in whole Rural District at Subjoined Ages.							Deaths in Rural Localities (At all Ages).																	Deaths in Public Institutions.
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Atcham.	Bridgnorth.	Burford.	Church Stretton.	Chirbury.	Clun.	Cleobury Mortimer.	Ellesmere.	Ludlow.	Market Drayton.	Newport.	Oswestry.	Shifnal.	Tenbe.	Wellington.	Wem.	Whitchurch.	
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	12	4	6	2	..	..	..	..	2	..	..	..	..	..	..	2	1	..	2	..	..	..	2	3	..
Scarlet Fever	8	..	3	2	1	2	..	3	..	..	..	..	..	..	..	1	2	..	..	1	..	..	..	1	..
Whooping Cough	10	8	2	..	..	..	..	4	..	..	..	..	1	..	..	..	2	..	..	2	..	1	..	..	..
Diphtheria and Membrougs Croup	10	..	5	4	..	1	..	3	1	..	..	..	1	..	3	..	1	..	1	..	..	..	..	..	..
Croup	2	..	2	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Fever (Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever (Enteric	12	..	1	2	5	4	..	2	..	..	1	..	2	..	1	3	1	1	..	..	1	..	..	..	1
Fever (Other continued	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	142	5	3	3	4	59	77	30	6	..	11	3	8	4	8	9	..	6	13	16	5	10	11	2	6
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	22	12	..	2	..	2	6	2	..	..	2	..	..	3	2	1	5	1	..	2	1	3	..	..	4
Enteritis	17	10	2	..	..	3	2	..	..	..	..	..	3	1	..	2	4	2	4	..	..	1	..	..	..
Puerperal Fever	2	..	..	..	..	2	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	3	..	..	..	..	1	2	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..
Other Septic Diseases	11	1	1	1	..	7	1	3	..	..	1	..	1	..	..	..	1	2	..	..	..	3	..	..	..
Phthisis	125	..	2	2	29	82	10	22	3	1	7	3	6	3	10	9	12	8	11	7	2	13	7	..	10
Other Tubercular Diseases	46	17	10	7	6	6	..	4	4	1	2	..	4	1	..	3	8	4	1	5	..	7	2	..	2
Cancer, Maglignant Disease	122	..	..	..	1	67	54	25	6	..	4	5	11	4	6	10	9	11	11	6	1	7	6	..	6
Bronchitis	203	45	20	1	1	37	99	23	13	2	7	9	10	15	9	12	24	12	21	16	4	16	8	2	10
Pneumonia	137	23	21	6	2	46	39	16	9	1	6	1	12	7	9	14	15	8	18	4	..	13	3	1	13
Pleurisy	2	..	..	..	..	1	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Other Diseases of Respiratory Organs	20	10	2	..	..	3	5	..	1	..	..	6	..	..	..	3	4	1	2	..	..	..	3	..	1
Alcoholism, Cirrhosis of Liver	30	..	..	..	..	18	12	4	1	..	..	1	1	3	3	3	2	1	5	1	..	3	1	1	4
Venereal Diseases	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Premature Birth	83	83	..	..	..	..	..	4	7	..	..	1	3	9	9	7	11	4	8	2	4	12	2	..	1
Diseases and Accidents of Parturition	15	4	..	..	..	11	..	1	..	..	1	1	..	1	2	1	1	..	1	3	..	1	2	..	..
Heart Diseases	239	..	1	5	9	90	134	42	11	5	7	4	11	9	12	20	30	9	21	12	5	20	15	6	25
Accidents	67	4	8	10	9	27	9	10	8	1	1	1	3	7	3	3	3	5	11	3	..	5	3	..	4
Suicides	10	..	..	..	..	7	3	1	1	..	1	..	1	1	1	..	1	..	1	..	..	1	1	..	..
All other Causes	794	151	25	14	18	148	438	116	42	6	31	28	55	35	49	61	76	39	100	53	5	33	54	11	55
All Causes	2145	377	114	61	85	616	892	318	115	17	83	63	134	103	129	164	214	115	231	134	28	150	120	27	142

35 deaths were registered from 'Enteritis,' and of these, 20 were amongst infants under 1 year of age.

The Registrar General remarks that "a large share of the infant deaths rererred to enteritis, should undoubtedly be considered as 'Epidemic Diarrhœa,' and the fact that the age-incidence closely corresponds with that of Diarrhœa supports this view." In recent years much confusion has arisen from the growing use of unauthorized terms, such as 'gastro-enteritis,' "muco-enteritis,' and 'gastric catarrh,' as synonyms for 'Epidemic Diarrhœa' The College of Physicians has accordingly considered the matter, and has authorized the use of 'epidemic enteritis,' or 'zymotic enteritis' as a synonym for Epidemic Diarrhœa, and has urged upon practitioners the disuse of the terms above referred to.

A circular to this effect was sent during the year by your Medical Officer to each practitioner in the County.

'Tuberculosis' caused 338 deaths, or about 8·5 per cent of the deaths from all causes, as compared with 10·4 per cent for England and Wales in 1889-98.

'Pulmonary Phthisis' or 'Consumption' was responsible for 238 deaths, equal to a rate 0·9 per 1000, as compared with 1·4 for England and Wales in the 10 years, 1889-98. In Ellesmere Urban the rate was 2·1; in Newport Urban and Wellington Urban 1·7, and in Market Drayton and Church Stretton 1·5.

In Market Drayton Rural District a system of Voluntary Notification of Phthisis has, on the advice of the Medical Officer of Health, been adopted.

Without, on the present occasion, discussing the causes and prevention of Tuberculosis, it may be stated that recent investigation has been made for the Corporation of Manchester by Dr. Harold Coates as to "**The Infective Power of the Dust in Houses inhabited by Consumptive persons.**" He points out that many of these patients spit about on the floor of the room they occupy, or spit into pocket handkerchiefs. In either case the sputum quickly dries, and either by being trodden under foot, or by the friction produced when the handkerchief is used, the dried sputum is ground into a fine dust, which becomes suspended in the atmospoere by currents of air. Dr. Coates chose for examination dust from (a) 10 clean house, and (b) 21 dirty houses, in all 31 of which was a consumptive who was known to spit on the floor. He also examined dust from (c) 10 very dirty houses in which no case of tuberculosis had occurred for 3 years or more. In Class (a) the dust from 14 houses was found to contain tubercle bacilli; in Class (b) the bacillus was present in the dust from 5 houses, and in Class (c) no infective dust was found. It is evident, therefore, that the tubercle bacillus is only to be found in dwelling houses when there is a consumptive inmate who infects his surroundings by his expectorations. If his expectorations are disposed of in such a manner that infection of the atmosphere is prevented, there will be no accumulation of infected dust in the house.

'Other Tubercular Diseases' were responsible for 100 deaths. The returns furnished do not specify the exact form of the disease, but it is significant that 51 per cent. occurred 'under 5 years of age,' *i.e.*, during the milk-drinking period, whereas only 1·6 per cent. of the deaths from Phthisis took place during this age period.

Diseases of the Respiratory System.

Exclusive of 7 deaths from croup, the various forms of respiratory disease, including bronchitis, pneumonia, and pleurisy, were responsible for 654 deaths, or 16·2 per cent. of the mortality from all causes, and equal a rate of 2·7 per 1,000 persons living, against 3·1 for England and Wales in 1899.

HEART DISEASES accounted for 424 deaths, equal to a rate of 1·7 per 1,000 living, which is exactly the same as that for the country at large in 1899. In Market Drayton the rate was 2·6, and in Shrewsbury 2·4.

CANCER OR MAGLIGNANT DISEASES.

The deaths referred to this cause numbered 208, and were equal to a rate of 0·8 for the whole of the country, and for the Urban and Rural Districts. This rate is the same as that for England and Wales in 1899, which is the highest on record, the mail rate exceeding the decennial average by 18·7 per cent., and the female rate by 11·8 per cent. As regards the Administrative County, no figures for former years, or as to sex-incedence, seem to be readily available, but from the Registrar General's last Report, it appears that in 1899 there were in the Registration County 102 deaths of males, and 107 deaths of females. The Registrar General says:—"The statistics of 1899 confirm those of previous years in showing that maglignant disease is much more prevalent among women than men; but, as in previous years, the excess is due to the unequal tendency of the disease to attack the mammary and generative organs." When deaths from cancerous affections of these organs is subtracted, "the remainder give a rate of mortality for females considerably below the male rate." Cancer of the face, lips, jaws, tongue, gullet, stomach, bladder, and limbs, are far more common in the male than in the female.

The alleged increase of cancer continues to receive considerable attention from the medical and actuarial professions. In a recent discussion before the Institute of Actuaries, it was agreed that a portion of the registered increase of cancer mortality was the result of more accurate diagnosis, and the only point in dispute was whether this accounted for the entire increase. Dr. Payne was of opinion that there was the strongest evidence that the registered increase of cancer was real, especially of the tongue and other digestive organs.

Statistics upon this difficult subject, unless correctly collated and employed, may easily lead to erroneous conclusions, and the proper attitude at present is one of suspended judgment.

The Birmingham Branch of the British Medical Association has recently investigated 5,000 cases in regard to "The Influence of Locality on the Prevalence of Maglignant Disease." The conclusions arrived at were as follows *(vide Brit. Med. Jl., May 18th*/1901—*p.* 1200*)*:—

1.—Certain more or less well-defined areas exist in which cancer-mortality is markedly above, and others in which it is markedly below, the average for England and Wales.

2.—Age and sex incidence only account for a small proportion of this variation.

3.—That owing to the great difficulty of diagnosis in many cases of internal cancer, the death-rate from cancer is probably at present underestimated.

4.—Contamination of the soil or sub-soil for long periods with decomposing organic matter is very probably a factor in the production of a high death-rate from cancer.

5.—A damp, ill-drained, water-logged soil, of whatever geological formation, is more frequently associated with a high cancer death-rate than is a well-drained soil.

6.—There is abundant evidence of the existence of groups of houses in which cancer is found with marked frequency, and some evidence which tends to show that second and third cases occur in the same house with greater frequency than can be accounted for by mere coincidence.

7.—Cancer occurs more frequently in old than in new houses and districts.

8.—There is some evidence suggesting that cancer may possibly be transmitted from one person to another in constant close association.

TO PREMATURE BIRTH 122 deaths were attributed, a number equal to 18·7 per 1,000 children born, against 19·9 for the country generally in 1889-98. In the Rural Districts of Shropshire the rate was 22·6, but in the Urban Districts only 13·7. The reason for this is not clear.

Table 8.

URBAN.

CAUSES OF, AND AGES AT DEATH DURING YEAR 1900 IN THE URBAN DISTRICTS OF SHROPSHIRE.

CAUSES OF DEATH	Deaths in whole Urban District at subjoined Ages.							Deaths in Urban Localities (at all Ages).													Deaths in Public Institutions.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Bridgnorth.	Bishop's Castle.	Church Stretton.	Dawley.	Ellesmere.	Ludlow.	Newport.	Oakengates.	Oswestry.	Shrewsbury.	Wellington.	Wenlock.	Wem.	Whitchurch.	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	53	15	35	3	..	..	..	..	..	..	..	..	10	..	..	3	2	5	28	..	5	..
Scarlet Fever	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Whooping Cough	19	10	8	..	1	..	..	..	..	..	..	..	..	..	1	..	13	3	2	..	..	1
Diphtheria and Membranous Croup	12	1	8	2	..	1	..	..	..	..	..	1	1	..	2	..	5	1	2	..	..	1
Croup	5	..	4	1	..	..	..	..	1	..	1	..	..	..	..	..	1	..	2	..	..	..
Fever (Typhus)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fever (Enteric)	10	..	..	1	3	5	1	1	..	..	..	..	..	..	2	1	4	..	2	..	..	2
Fever (Other continued)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Epidemic Influenza	69	4	1	2	3	20	39	5	1	..	4	..	2	3	3	4	24	2	15	2	4	5
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diarrhœa	46	35	1	..	..	3	7	3	..	..	1	1	2	1	10	3	12	1	5	5	2	3
Enteritis	18	10	2	..	1	2	3	..	..	..	2	..	..	..	..	1	4	..	8	..	3	..
Puerperal Fever	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..	3	..	1	..	..	..
Erysipelas	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Other Septic Diseases	11	..	..	1	..	6	4	..	..	..	1	..	..	1	1	1	4	..	3	..	..	1
Phthisis	113	..	2	7	23	69	12	1	2	..	6	4	3	6	3	7	41	10	22	1	7	7
Other Tubercular Diseases	44	8	16	6	5	9	..	5	..	..	..	..	2	1	7	6	15	1	4	..	3	4
Cancer, Malignant Disease	86	1	..	..	3	54	28	4	1	..	3	1	6	9	6	5	23	5	15	..	8	5
Bronchitis	156	28	9	2	1	45	71	3	3	2	17	4	4	2	22	11	46	4	30	..	8	9
Pneumonia	126	25	29	8	3	34	27	6	2	2	8	..	3	3	5	10	56	8	17	1	5	2
Pleurisy	3	1	..	..	1	..	1	..	..	..	..	..	..	..	..	..	2	..	1	..	..	..
Other Diseases of Respiratory Organs	7	1	1	..	1	3	1	1	2	..	..	..	1	..	..	..	2	..	1	..	..	2
Alcoholism	33	..	..	..	2	25	6	3	2	1	..	..	1	1	7	5	3	6	2	2	..	2
Cirrhosis of Liver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Venereal Diseases	2	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Premature Birth	39	39	..	..	..	..	..	1	1	..	1	..	3	3	6	3	11	2	7	1	..	1
Diseases and Accidents of Parturition	12	7	..	..	3	2	..	..	1	..	2	1	..	..	6	1	1	..	..	..	..	..
Heart Diseases	185	4	2	4	3	68	104	14	3	3	13	1	6	1	10	18	68	8	28	..	12	16
Accidents	54	7	9	2	3	22	11	6	1	..	4	..	6	3	4	3	16	3	5	1	2	7
Suicides	9	..	..	..	1	5	3	..	1	..	..	..	1	..	1	..	1	1	4	..	..	1
All other causes	699	139	55	8	17	163	337	57	9	4	50	12	11	20	66	76	184	48	107	7	28	78
All Causes	1818	337	163	47	74	542	655	111	30	12	113	25	92	54	163	158	543	108	311	30	88	148

RURAL.

Table 9.

CASES OF INFECTIOUS DISEASE, NOTIFIED DURING THE YEAR 1900, IN THE SHROPSHIRE RURAL DISTRICTS.

Notifiable Disease.	Cases Notified in whole District.							Total Cases notified in each Locality.															
	At all Ages.	Age Periods.						1 Alcham.	2 Bridgnorth.	3 Burford.	4 Church Stretton.	5 Chirbury.	6 Clun.	7 Cleobury Mortimer.	8 Ellesmere.	9 Ludlow.	10 Market Drayton.	11 Newport.	12 Oswestry.	13 Shifnal.	14 Teme.	15 Wellington.	16 Wem.	17 Whitchurch.
		Under 1	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.																	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	65	..	22	25	9	9	..	13	..	..	1	..	1	2	8	..	11	1	24	..	..	2	1	1
Membranous croup	5	..	3	..	2	..	..	1	1	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..
Erysipelas	47	..	..	2	8	28	9	10	4	2	1	3	2	5	1	2	4	2	..	1	3	4	3	..
Scarlet fever	332	6	86	194	27	19	..	110	19	2	5	..	14	18	6	17	36	15	17	8	5	51	6	3
Typhus fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever	36	..	1	10	12	13	..	7	1	..	1	..	14	..	2	3	2	1	..	3	1	1	..	..
Relapsing fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever	2	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	9	..	2	5	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..
Totals	495	6	114	236	59	71	9	141	25	4	8	3	31	26	17	23	53	19	41	12	9	69	10	4

VIOLENCE: 121 deaths resulted from 'negligence or accident,' and 19 persons committed suicide, equal to rates per 1,000 living of 0·5 and 0·08 respectively.

UNCLASSIFIED DEATHS: 1,493 deaths or 37·6 per cent of the whole number are included under the heading 'All other causes.'

PREVALENCE OF INFECTIOUS DISEASE.

On 1st January, 1900, the notification of infectious disease became compulsory in every district, under the Notificatication Act of 1899.

SMALLPOX.—In May, a commercial traveller, suffering from unrecognized smallpox, stayed a night at a hotel in Whitchurch. Two other strangers occupied the same bedroom a day or two after his departure. These facts were not known for three weeks, and disinfection was then carefully carried out. No subsequent case occurred.

VACCINATION: statistics are furnished for a few Districts only, *e.g.*, Shrewsbury, Wellington Urban, Ellesmere Urban, Oakengates, Ludlow Urban, Shifnal, and Market Drayton, and these figures are fairly satisfactory. It is, however, very desirable that the records for all the districts in the County should be obtained and collated.

Dr. Cranstoun notes that the "conscientious objector" is in evidence in Ludlow, and refers to the recent Royal Commissioners' finding that the evidence is overwhelming that in syphilis, scrofula, skin disease, blood poisoning, diarrhœa and bronchitis, vaccination has no tincreased the mortality to a substantial or even an appreciable extent.

He also quotes from the German Report, 1898:—"Out of 2,630,176 vaccinations, no death "is reported as directly due to its performance, and only 7 or 8 deaths from erysipelas from "contamination of the vaccine sore, and the fact that most of these cases occurred after the "insertion of the lymph, at which date normally the vesicles have healed, points to the extreme "want of attention to the arms." He cites the following interesting statistics from the same source:—

In	282	German	towns	with a	population	of	15	millions	there were 5 deaths from Smallpox.
,,	33	English	,,	,,	,,		11	millions	,, 13 ,, ,,
,,	12	Dutch	,,	,,	,,		1½	millions	,, 2 ,, ,,
,,	116	French	,,	,,	,,		9	millions	,, 57 ,, ,,

In 1898 the percentages of vaccinations to births were in Germany 85, and in England 54. In England, however, the percentage rose to 72 in 1899.

MEASLES.—65 deaths were certified from this cause, corresponding to a rate of 0·27 per 1000 living, against 0·31 for England and Wales. 53 of these deaths were in the Urban Districts, including 10 in Ludlow and 28 in Wenlock. The Wenlock outbreak affected Ironbridge, Madeley, and Broseley chiefly, and was specially reported upon by Dr. Gepp on October 5th, 1900. Schools were closed because of this disease in many parishes throughout the County, but the number of cases in which such closures were reported to the County Council was comparatively small.

SCARLET FEVER.—This disease was widely prevalent, Ludlow Urban, Whitchurch Urban, and Chirbury being the only districts which escaped. 627 cases came to light, including 110 in Atcham, 73 in Wenlock, 57 in Oakengates, 56 in Wellington Urban, 51 in Wellington Rural, 44 in Shrewsbury, and 36 in Market Drayton. Except in respect of an outbreak at Buildwas (Atcham District) where 12 cases, with 3 deaths, occurred in 4 houses, the disease was of a very mild type and was largely spread by slight and unrecognized cases. 8 deaths occurred in the Rural Districts and 1 in Oakengates, the case-mortality therefore being only 1·4 per cent.; the deathrate per 1000 living was 0·03 against 0·1 for Rural England and Wales.

ENTERIC OR TYPHOID.

126 cases of this disease arose, and of these 22 ended fatally, equal to a case-mortality of 17.5, and a death-rate per 1000 persons living in the County of 0·09 as against 0·16 for England and Wales, less the 100 Large Towns 34 cases and 4 deaths were reported in Shrewsbury; 24 cases and 2 deaths in Oakengates; 19 cases and 2 deaths in Wenlock, and 7 non-fatal cases in Ludlow, the case-mortality for the Urban districts being 11·1 per cent. Amongst the Rural districts, there were 14 cases and 2 deaths in Clun, 7 cases and 2 deaths in Atcham, 3 fatal cases in Ludlow, and 1 fatal case in each of 4 other Districts, the Rural case-mortality working out at 33·3 per cent. This may in part, perhaps, be due to greater difficulty in obtaining medical attendance and suitable nursing in County districts.

The outbreaks at Ironbridge, Oakengates, and Clun merit special mention :—

Ironbridge.—Dr. Gepp writes :—Twelve cases in seven houses in one yard "formed a "definite connected outbreak due to the drinking of polluted water, analysis showing that the "water was liable to sewage pollution, and investigation in connection with the outbreak giving a "very clear and probable history of specific contamination of the water with sewage matter, from "a house where one or more cases of mild enteric fever had occurred in an obscure and "unrecognized form. The yard in question is situated close by the Severn at the upper end of "Ironbridge, and comprises eleven houses with a small court-yard in common. A pump over a "shallow well in the yard supplied water which was commonly drunk, though good spring water "is to be had from a public stand pipe within 100 yards. In May a case of Enteric Fever "occurred in a river-side house below Ironbridge, and about a mile from the yard in question. "The cause here appeared to be the drinking of Severn water, polluted with the sewage of Iron-"bridge and other places above. A family of relatives, living in the yard in question, frequently "visited this infected house and had food there. Two members of this second family were ill "with Diarrhœa about the beginning of June, and were laid up at their home in the yard. "These were no doubt cases of mild unrecognized Enteric. The slop water from the house and, "as appears probable, the excremental matter from these patients, were thrown down a gulley close "to the pump. The gulley and the drain from it were defective, and soakage or leakage into the "well no doubt took place. Cases, at first obscure and afterwards definite Enteric, then followed "rapidly in the yard from the middle of June to the end of the first week in July. Then owing "to the cases being notified and preventive precautions taken, the outbreak was rapidily controlled.

"Of eleven houses in the yard, seven were infected, and of some 38 occupauts twelve were "taken with the disease, and two died."

In Oakengates, 18 out of the 24 cases reported were closely associated with specifically infected privies, middens, or ground adjacent thereto.

URBAN.

Table 10.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1900, IN THE SHROPSHIRE URBAN DISTRICTS.

Notifiable Disease.	Cases notified in whole District.							Total Cases notified in each Locality.														No. of Cases Removed to Hospital.	
	At all Ages.	Age Periods.						1 Bridgnorth.	2 Bishop's Castle.	3 Church Stretton.	4 Dawley.	5 Ellesmere.	6 Ludlow.	7 Newport.	8 Oakengates.	9 Oswestry.	10 Shrewsbury.	11 Wellington.	12 Wenlock.	13 Wem.	14 Whitchurch.	Bridgnorth.	Newport.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.																
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	64	2	20	26	3	13	..	..	..	..	1	4	2	1	5	3	35	2	10	..	1	..	..
Membranous Croup	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	63	4	2	..	11	40	6	2	1	..	3	2	1	3	9	5	21	1	7	1	..	..	..
Scarlet Fever	295	2	90	158	30	15	..	13	3	1	23	10	..	1	57	9	44	56	73	5	..	9	1
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	90	..	4	23	26	37	..	2	..	..	..	..	7	..	24	3	34	..	19	..	1	..	..
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	9	..	..	..	..	9	..	..	..	..	..	..	..	..	1	..	5	..	3	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	522	8	117	207	70	114	6	34	5	1	27	16	10	5	96	20	139	59	112	6	2	9	1

At Chapel Lawn in the Clun Rural District, 7 cases and 2 deaths occurred in a f family of 11 persons. The source of infection was not traced, but brook water liable to was used for dairy and other purposes. One of the two cases which occurred in Clu was in a house in which there have been previous outbreaks on three occasions in the years. The drainage of the house was entirely and satisfactorily remodeled. No s attached to the milk or water supplies, and "the recurrence of outbreaks suggests a per of infection either in, under, or around the house." Both the Clun cases were treated Cottage hospital, the sewage of which passes into a brook on which, about a mile lower d is Hurst Mill, and in an isolated house here where the brook-water is used for dairy and purposes, a single case of typhoid occurred in August.

The **importance of systematic disinfection of the urine in all cases of typhoid is very great**, as the typhoid bacilli are excreted in large numbers in the urine in the later stages of the disease, and often after weeks of apparent convalescence.

Diphtheritic Disease.

129 cases of diphtheria with 22 deaths and 9 of membranous croup with 7 deaths were rec orded, the death-rate per 1,000 living being 0·09, against 0·24 for England and Wales less the 100 Towns. Thirty-five cases occurred in Shrewsbury, 24 in Oswestry Rural, 11 in Market Drayton, and 10 in Wenlock.

Dr. Gepp considered that one of the Wenlock cases was due to a revival of infection in a use where the disease had occurred in previous years, and the persistence or renewal of the infecti was attributed to the dwelling being "a typically damp house, owing to its situation and construc of "porous limestone."

Puerperal Fever.

11 cases with 6 deaths occurred during the year, and "other diseases and accidents of chil h" were responsible for 27 deaths. Taken together these deaths were in the proportion of 5·0 per ,000 births, against 4·7 during 1895—99 in England and Wales.

During the year, the County Medical Officer sent to each practitioner in Shropshire a statement of the views of the College of Physicians and of the Obstetrical Society, as to what conditions should be notified as Puerperal Fever. (See Appendix A.)

Influenza.

In preparing the County statistics your Medical Officer of Health has been impressed by the number of deaths from this cause, viz. 211, which is only 4 short of the combined deaths due to measles, scarlet fever, whooping cough, diphtheria, enteric and diarrhœa. The County death rate was 0·8 per 1000 living, against 0 39 for England and Wales during the 10 years, 18 0-99. From the Registrar General's Report it appears that in 1899, amongst the counties of E land, Shropshire with 0·7 per 1000 was only second to Hereford with 0·85. It is hard to ssign any reason for this unfortunate pre-eminence.

The excess is distinctly in the Rural Districts, the rate for which is 1·02, Teme b , Church Stretton 2·3, Atcham 1·4, and Wem 1·3.

In the Urban Districts the rate is 0·6, Wem and Wenlock with 0·9 being the highest.

emarked by Dr. Hatfield it is very improbable that the deaths registered as due to influenza repre the true extent of the disabling and fatal mischief wrought by it, as it undoubtedly aggravates and plicates many other diseases, and leaves many sufferers in a more or less permanently debili ed condition.

A Appendix B., is included a cautionary notice for use in times of influenza prevalence, which is based upon an official memorandum of the Local Government Board.

BACTERIAL DIAGNOSIS OF INFECTIOUS DISEASE.

Under your arrangement with Mason College, Birmingham, 116 examinations of disease-products were made during the year. Details are appended :—

Quarter of 1900	Supposed Phthisis.		Supposed Diphtheria.	
	Positive Result.	Negative Result.	Positive Result.	Negative Result.
First	8	7	3	3
Second ...	1	11	6	8
Third	3	6	8	8
Fourth	2	10	15	17
Year 1900 ...	14	34	32	36
	48		68	

n 7th July, 1900, I reported to you that your arrangements were not entirely satisfactory and aske ou to revise them. No provision was made for the examination of the blood from infected cases f typhoid (Widal's reaction) and the method of distributing outfits was ineffective and troublesome, s they were filtered from Birmingham through the County Health Officer to the District Health Office s and then, by post or through the sanitary inspectors or druggists, to the medical practitioners, who often had not outfits by them when they most wanted them. A fresh agreement was accordingly entere into with Birmingham University for the examination of the products of suspected Diphtheria, Typhoid, Tuberculosis, Plague, Cholera, and Anthrax ; the estimation and identification of bacteria in water, examination of milk for Tubercle and Typhoid bacilli and of the brain of animals for evidence of Rabies. The terms are as follows :—

1st.—The County pays the University a minimum annual fee of Fifty Guineas.

2nd.—All examinations made for the County are charged against them at *two-thirds* of the prices shewn in the published list of the College.

3d.—Should the cost of examinations for any twelve months, charged on the above reduced scale, amount to more than Fifty Guineas, such excess to be charged to the County.

4th.—The College to provide the requisite apparatus for the transmission of specimens other than those of milk and water.

[P.T.O.

This, in practice, has been modified, as it was found advisable for the County Council to supply each of the practitioners in the County (some 128) with a set of three outfits, viz., 1 for diphtheria, 1 for typhoid, and 1 for phthisis ; and Professor Leith has very kindly agreed that on receipt of each outfit containing material for examination, a "replacing outfit" shall be sent by return of post from the Laboratory to the practitioner concerned, to be followed, as hitherto, by a wire if the result of the examination be positive, and by a postal report if negative. A duplicate postal report in all cases is sent to the County Medical Officer, postages, wires and stationery being paid for by the County Council. The cost of supplying "outfits" to the medical men has been between £8 and £9 in all, and the University is responsible for their future 'upkeep.'

Considerable delay was experienced in carrying out these arrangements, but the system came into force in May, 1901, has given much satisfaction to the medical men, and is working excellently, the number of examinations having largely increased. In one or two instances specimens from patients in contiguous portions of surrounding Counties were sent for examination in the Shropshire County Council's "outfits," and a circular has accordingly been issued notifying that such examinations will be charged to the private account of the sender.

It is probable that, before long, the aid of bacteriology will be available in the diagnosis of Scarlet Fever. In the diagnosis and during the treatment of Puerperal Fever it has recently been of service, but its use in this connection is hardly likely to become general.

Hospital Accommodation.

Shropshire is very ill-equipped in this respect, and so long as the County town, in spite of the repeated indications of its highly competent adviser, fails to rectify its sanitary shortcomings in this and other respects, *e.g.*, water supply and disinfecting, it is not surprising that many of the rural and urban districts do likewise.

In Shrewsbury there is a small "emergency" hospital of 6 beds, but the patients' friends have to pay the whole heavy cost of maintenance and nursing, and it is therefore practically useless. In Bridgnorth (U.) is a hospital (wooden) containing 12 beds, and Newport (U.) has one of 6 beds. Both of these have proved very useful. Wenlock has an "isolation-cottage" for one of its wards ; and in Wellington (R.) the hospital has "been put into a good state of repair during the year." Wellington (U.) and Oakengates have decided to provide a joint hospital and disinfector, and Dr. Whitaker is to be congratulated on the success of his efforts in this connection. The urban and rural districts of Ludlow are both urged to build a joint hospital, and Whitchurch (U.) and some other Councils are advised to make the minimum provision of an "isolation cottage."

Excellent work in regard to hospital provision has been done in recent years by the County Councils of Lancashire, Derbyshire, and Stafford under the Isolation Hospitals Act, and increased facilities will be provided when the Bill now before Parliament becomes law.

Disinfection.

The Borough of Bridgnorth possesses a steam disinfector of local manufacture which appears to answer its purpose. There is no other apparatus of the kind in the County, though the Borough of Shrewsbury is giving the matter "favourable consideration."

In Shrewsbury, Wellington (U.) and Bridgnorth (U.) appliances for disinfecting with formic aldelyde have been obtained, and Shrewsbury and Wellington also possess apparatus for spraying with disinfectants.

In many districts the practically useless method of sulphur fumigation is relied upon as answering all requirements. There is undoubtedly much need for the provision of proper appliances and approved methods.

House Accommodation.

There is much room for improvement in many Districts, but the obstacle to energetic action under The Housing of the Working Classes Acts is the difficulty of housing displaced families, as there is very little building going on.

Two insanitary dwellings were closed in each of the following :—Chirbury, Oswestry (R), Church Stretton (U), and Church Stretton (R). Four were condemned in Shrewsbury, 17 in Ludlow (U), 7 in Whitchurch (U), and several at Wenlock. At Highley (Cleobury Mortimer) and at Hadley (Wellington Rural) a considerable amount of building is going on in connection with recently started industrial undertakings. In the Newport (R) district are many dwellings of the objectionable type known locally as "barracks." In Shrewsbury there is a "real want of new houses in good situations at 5s. per week;" and a similar need exists in Wellington for dwellings at 3s. to 3s. 6d., and for a better class at 4s. 6d. to 5s.

The Housing of the Working Classes Act, 1900, became law on 8th August last, and its provisions were recited in the County Medical Officer's Quarterly Report dated 13th October, 1900.

Water Supplies.

During the latter half of the year the Water-Survey of the County, commenced by Drs. Thursfield and Reynolds, was resumed by your medical officer of health, and the District of Shifnal was carefully reported on. A detailed inspection of the parish of Lilleshall was commenced.

Important action was also taken by the County Council in respect of a Bill promoted by a syndicate known as the proposed E. Shropshire Water Co., which sought powers to supply water to "the Urban Districts of Oakengates and Dawley, and the parishes of Shifnal, Stirchley, Wombridge, Wrockwardine Wood, Lilleshall, Sheriffhales, and Wellington Rural (including the township of Lawley)."

The Council, however, considered that the supply of a prime necessity of life ought not to be the monopoly of a commercial company, and with a view of helping these Districts to preserve their birthrights, instructed Messrs. Taylor, Sons, and Santo Crimp to prepare a scheme for a water undertaking which should be their joint property, and in addition successfully opposed the Syndicate's Bill in Parliament. Messrs Taylor's proposal included the sinking of wells within a circular area of 1 mile radius, having its centre near Hincks Plantation in Lilleshall parish, and the estimated cost of supplying the Districts named was £81,000. Several of the Authorities, however, raised objection to these proposals on the ground of expense; and Shifnal and Stirchley having in the meantime decided to obtain a supply elsewhere, Messrs. Taylor, in pursuance of instructions, submitted a second scheme in October, 1900. In the latter, the proposed source of supply is as before, but by the exclusion of Shifnal and Stirchley and certain other modifications, the estimated cost is reduced to £50,000. This scheme is still under consideration.

The requirements and intentions of individual Districts are fully referred to in Part II. of this Report, but the following summary will show that much is being done, and that much more is required :—In Atcham improvements have been effected at Harley, Pontesbury Hill and Meole Brace. In Chirbury, Brocton is without a supply, and the prevalence of goître at Bromlow is attributed to the drinking water. In Church Stretton (R) filtration is recommended for the All Stretton and Little Stretton waters, and attention is again directed to the dangerous supply of the houses on The Marsh at Wistanston. In Cleobury Mortimer a good town service has been provided, but a proper supply is urgently required for Highley, and is also necessary at Stottesden. In Clun, the Chapel Lawn supply has been inspected and condemned by the M.O.H. In Ellesmere (R) the provision of a well and wind engine at Baschurch is recommended. In Ludlow (R) diarrhœa in the Clee Hills is ascribed to polluted water. In Newport (R) improvements at Edgmond, Chetwynd Aston and Church

ston are recorded, and the supplies of Tibberton and Lilleshall have been investigated and condemned. Oswestry (R) are new schemes for Naptmaur and Treflach. Shifnal is providing for Shifnal wn, Kemberton and probably Stirchley, and improvements for Tong and Tong Norton are con-mplated. In Wellington (R), Hadley, Lawley, Ketley and Rodington are very badly off. In HITCHURCH (R), Tillstock is obtaining a satisfactory supply. More pumping power in case of accident necessary at Bridgnorth (U). A greatly augmented provision is being made for Church TRETTON U. In Dawley trial borings for a better supply are in progress. In Shrewsbury the river ater is no longer polluted by the Asylum sewage.

The inhabitants of Shrewsbury with unfiltered and dangerous river-water laid on to their houses, ave to carry their supply of drinking water from public standpipes: they possess no isolation ospital worthy the name, and there is no steam-disinfector. It is true that the purification of the ver is proceeding, and that a disinfector is being thought of; but that the present unsatisfactory nd mediaeval system of water supply should persist and other ordinary and very essential equirements of sanitary equipment and modern civilization be still wanting, in face of the repeated dications of its able health officers past and present, is, the County Medical Officer ventures to ink, very discreditable to the sanitary authority of an important residential town of nearly ,000 inhabitants, and an exceedingly bad example to the other districts in the County of which is the capital.

EWAGE DISPOSAL AND RIVERS POLLUTION.

This matter is dealt with in detail in Part II., but it may here be briefly stated that in HREWSBURY the intercepting sewers and sewage farm are practically completed. In Bridgnorth (U) e Septic Tank system has been adopted and installed, but improper deposits on the river bank require gorous prevention. In Oswestry (U) the bacterial beds are a great success New Sewerage chemes are in actual progress in Shifnal town and Ludlow (U); Newport (U). Church TRETTON (U) and Hadley (Wellington R.) have adopted schemes. Oakengates has obtained xpert advice and estimates, and improvements are in contemplation at Bishop's Castle. Whit-HURCH (U) is stated to be exceptionally well provided for. The effluent from Wellington (U) ewage farm is again stongly complained of by the Rural District. The town of Clun and the llages of Albrighton (Shifnal) and Hadnall (Ellesmere R.) require proper sewering, and in Cleobury ORTIMER the village of Highley is said to be in a dangerously disgraceful condition in this respect. uisance from open sewers or collections of sewage is noted in Dawley (U), Bridgnorth R, and RESSAGE in the Atcham District, and some improvements at Edgmond (Newport Rural) are recorded.

[OVER]

From the information contained in the District Health Officers' Reports for 1900, the following table has been prepared :—

Table 11.—Conditions in regard to Sewage Purification

Works in Operation.	Works in course of construction.	Scheme Adopted.	No provision.
Bishop's Castle (*Land irrigation.*)	Ludlow (U.)	Church Stretton (U.)	Dawley.
Bridgnorth (U.) (*Septic tank.*)	Shifnal town.	Newport (U.)	Ellesmere (U.)
Oswestry (U.) (*Bacterial.*)	Little Drayton (*Ducat filter.*)		*Oakengates.
Shrewsbury (*Precipitation and land.*)			Much Wenlock.
Wem (U.) (*Only a screening tank.*)			Ironbridge.
Whitchurch (U.) (*Efficient land irrigation.*)			Madeley.
Wellington (R.) (*Sewage Farm.*)			Broseley.
Tong (Shifnal).			Albrighton (*Shifnal.*)
Atcham (R) :—Meole Brace, Dorrington, Pontesbury, Minsterley (*Land irrigation.*)			*Cressage.
			*Hadley (*Wellington R.*)
			Cleobury town.
			Highley (*Cleobury.*)
			Clun town.
			* Scheme prepared.

This list is not to be considered in any way complete, and the subject is one upon which comprehensive inquiry for the information of the County Council might with great advantage be made in the near future, antecedent to any action under The Rivers Pollution Acts.

Excrement Disposal and Scavenging.

Shrewsbury is a watercarriage town, and this system exists to a considerable extent in other urban districts and in large country houses. Elsewhere the sanitary conveniences are privy vaults. Numerous privies in Ludlow (U) and Wellington (U) require conversion to water-closets.

The medical officers of health for Shrewsbury and Ludlow Urban have recommended the provision of Destructors, the public tip at Ludlow being a cause of serious nuisances.

The *sanitary authority* undertakes the scavenging operations in the following districts :—Shrewsbury, Madeley, Wem (U.), Oakengates, Ludlow (U.), Newport, and Shifnal town.

The *householders* are responsible for scavenging in the rural districts generally, and in the lowing urban communities:—Ellesmere, Dawley, Church Stretton, Bishop's Castle, Broseley, Much enlock, Clun, Cleobury, and Market Drayton. In most of the latter the sanitary authority is advised undertake or assist in this work.

In the village of Highley (Cleobury) the present condition of affairs in this respect is disgraceful d very dangerous, and requires the immediate attention of the District Council.

OOD SUPPLY.

SALE OF FOOD AND DRUGS ACTS: the number and nature of samples taken under these Acts e shewn in .

Table 12.

SALE OF FOOD AND DRUGS ACTS.

The County Chief Constable has kindly furnished the following particulars as to samples taken r analysis during the year 1900 by the County Police. These do not include samples taken in the orough of Shrewsbury, for which see abstract of annual report of the Health Officer for that Borough.

Nature of Article.	Number of Samples taken for Analysis.	Results.		Remarks.
		Genuine.	Adulterated.	
offee	6	6	0	
nger	4	4	0	
im	5	3	2	2 Convicted.
n	1	1	0	
randy	9	6	3	2 Convicted and 1 Cautioned.
Whiskey	12	6	6	3 Convicted, 1 Dismissed. 2 Dismissed on Payment of Costs.
epper	3	3	0	
ilk	32	28	4	1 Convicted, 2 Dismissed, and 1 Cautioned.
olden Syrup	4	4	0	
eer and Stout	83	62	21	4 Convicted, 7 Dismissed, 3 Withdrawn, and 7 Not Proceeded Against.
atmeal	1	1	0	
m	2	2	0	
Total	162	126	36	

ARSENIC IN BEER.

This matter is referred to by many of the District Health Officers, and a special report on e subject was submitted to you by the County Medical Officer in January, 1901.

Flesh Foods. Slaughter-houses.

At Bridgnorth a dealer was fined for exposing unsound rabbits. In Newport (U.) an eye is kept on the carcases from surrounding district *en route*, per rail, to Midland towns. In Oakengates and Wellington the Medical Officer from time to time inspected the meat exposed for sale. Many of the slaughter-houses in Shrewsbury and throughout the County are old and unfit for their purpose, but are fairly well kept. The provision of a public abattoir is recommended at Shrewsbury, Wellington, Ludlow, and Whitchurch.

Milk Supply.

Dr. Cranstoun (Ludlow U.) calls attention to the "disgracefully low milk standard of this country," and compares as follows the official milk standards of this and other countries :—

	Percentage by Weight of Solids.		
	Fat.	Non-fatty.	Total Solids.
Paris	4·0 ...	9·0 ...	13 0
Treasury Department, U.S.A. ...	3·5 ...	9·5 ...	13·0
Berne	3·5 ...	9·0 ...	12·5
Canada	3·5 ...	8·5 ...	12·0
New York	3·0 ...	9·0 ..	12·0
British Inland Revenue Department ...	2·75 ...	8 5 ...	11·25

"This (English) standard is evidently founded on the poorest quality of milks that have been known to be yielded by single cows. But . . . . . almost all the milk in the market is the mixed product of 3 or more animals and should be above the meagre standard in question," for the consumer is entitled to expect at least the average quality.

Tuberculosis in Milch Cows.

In Bridgnorth (U.) Dr. Bethel has had samples of milk tested for Tuberculosis, and in one case in which purulent matter was found in the milk, veterinary examination showed that the cow "had some temporary disease of the udder."

In Ludlow Urban, Dr. Cranstoun presented a special report on August 1st on this subject. Sixteen samples of milk from 17 dairies was submitted for bacteriological examination to Messrs. Moore and Priest of 4 Danes Inn, Strand, who discovered Tubercle bacilli in the milk of 4 different dairies. Apparently the microscopic examination of the milk was the test employed, inoculation, which is more reliable, not being resorted to.

The cows in all the dairies except two in the Borough were also tested with Tuberculin, out of a total of 142 so tested, 113 are returned as sound, 26 as tuberculous and 1 doubtful, whilst in 2 cases the test was incomplete. The percentage (18·4) of tuberculous cows is below the usual average, as the reaction is not confined to those with Tuberculosis of the udder.

In Shrewsbury, after repeated recommendations by Dr. Gepp, the Corporation arranged for a veterinary inspection of milch cows in the Borough by Mr. Litt, M.R.C.V.S., who carefully examined 239 cows, and found that 31 of this number (or 13 per cent. of the whole) presented indications of tuberculous udders, as he pointed out "a very high average indeed." No certificate was issued under the Order, but the Inspector considered most of the cases highly suspicious, and recommended that they should be kept under observation by a regular quarterly inspection.

Table 13.

ADOPTIVE ACTS, BYE-LAWS & REGULATIONS IN FORCE IN EACH DISTRICT.

Name of District.		Public Health Acts (Amendment) Act, 1890.	Infectious Diseases Prevention Act, 1890.	Bye-laws in regard to					Regulations under Dairies, Cowsheds, and Milkshops Order.	Are Dairies, Cowsheds, and Milkshops Registered?
				Cleansing of Footways and Private Scavenging.	Slaughter Houses.	Common Lodging Houses.	New Streets and Buildings.	Prevention of Nuisances.		
Atcham	R ..	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Bridgnorth	U ..	No	No	Yes	Yes	Yes	—	Yes	Yes	Yes
Bridgnorth	R ..	No	No	No	No	No	No	No	Yes	Yes
Bishop's Castle	U ..	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Burford	R	—	Yes	No	No	No	No	No	No	—
Chirbury	R ..	No	sect. 1-20, 21, 24	No	No	No	No	No	Yes	—
Church Stretton	U ..	No*	No*	No*	No*	No*	No*	No*	No*	No*
Church Stretton	R ..	No	No	No	No	No.	No	No	Yes	Yes
Cleobury Mortimer	R ..	Part iii.	Yes	Yes	Yes	Yes	—	Yes	Yes	Yes
Clun	R ..	No	No	No	No	Yes	No	No	No.	Yes
Dawley	R ..	No	No	No*	No*	Yes	No*	No*	Yes	Yes
Ellesmere	U ..	No	No	Yes	Yes	Yes	Yes	No	No	Yes
Ellesmere	R ..	No	No	No	No	No	No	No	No	Yes
Ludlow	U ..	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Ludlow	R ..	No	Clauses 1, 4, 9, 10, 12, 16, 18, 21, and 24	Yes†	Yes†	Yes	Yes	Yes	Yes	Yes
Market Drayton	R ..	Yes†, Part iii., and sect. 24, 26, 27, 29, 30, 31	Yes	Yes†	Yes†	Yes	—	Yes	No	Yes
Newport	U .	No	No	*re* Snow removal	Yes	Yes	—	Yes	Yes	Yes
Newport	R ..	Yes	Yes	No	No	No	No	No	No	Yes
Oswestry	U ..	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Oswestry	R ..	Yes, sect. 23, 25, and 33	Yes	Yes	Yes	No	Yes	—	No	Yes
Shifnal	R ..	Part iii.	Yes, sect. 1-14, and 16-24.	No*	No*	No	No	No*	Yes	Yes
Teme	R ..	No	No	No	No	No	No	No	No	No
Wellington	U ..	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Wellington	R ..	—	Yes	—	—	—	—	—	—	—
Wem	U ..	No*	No*	No*	No*	Yes	No*	No*	No*	Yes
Wem	R .	No	Yes	No	No	No	No	No	No	No
Wenlock	U ..	Yes, except Part iv.	Yes	No	No	Yes (two codes)	No	No	No	Yes
Whitchurch	R ..	No	Yes, except sect. 5, 6, 15, and 17	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Whitchurch	U ..	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Shrewsbury	U ..	No	No	No**	Yes	Yes	Yes	Yes	Yes	Yes
Oakengates	U ..	Part iii.	No	No	Yes	No	Yes	No	Yes	Yes

† Apply only to certain parts of the District
* Bye-laws under present consideration.
** Provided for by local Act.

NOTE.—The above information is tabulated from replies to queries kindly issued by the County Clerk, and partly also from reports of health officers.

As many cows are kept outside the Borough whose milk is sold and consumed in the Borough, s felt that these cows should also be inspected, but the Town Council have not been yet able to nge for this with the adjoining Rural District.

Drs. Cranstoun, Bethel, and Gepp have asked whether **the County Council cannot help in this sade against tuberculous milk ?** This matter was carefully considered by you, but difficulty lay in fact that your veterinary inspectors, who are now paid by fee, are appointed under the ntagious Diseases (Animals) Acts, which unfortunately do not refer to tuberculosis, and that sequently you have no direct power to pay or assist in paying for veterinary inspection for bovine erculosis. Your medical officer ventured to suggest that by paying a *general retainer* to each of the erinary surgeons in addition to their present *fees*, the difficulty might be got over; but this of course ld involve a technical evasion of the letter of the law, which the Committee did not see their way pprove. In Cheshire, work in connection with this subject has been carried out by the Technical truction Committee of the County Council, who set aside £250 for applying the tuberculin test to herds of the Committees of the Agricultural and Horticultural School and the Worleston Dairy titute and Farm, and for experimental work generally. Very valuable information was obtained, your medical officer is convinced that much good would result from similar work in a preventive ction, if some means could be devised to meet the expenditure involved.

RELIABILITY OF THE TUBERCULIN TEST.—During 1900, a committee of the Royal Agricultural iety, consisting of Lord Brougham, Sir Nigel Kingscote, Sir George Brown, and Professor cFadyean, after much personal investigation, reported that the results of their own and other eriments justify the following statements :—

1.—With few exceptions, manifest tuberculous disease is discoverable at the p.m. examinations of animals, in which there is a decided rise of temperature after the injection of tuberculin.

2.—As a rule no such lesions are to be found in those animals in which there is no decided rise of temperature after the injection of tuberculin ; but the exceptions to this rule are more numerous than in the preceding case.

Practically speaking, the exceptions under each of these heads may be regarded as failures or errors in the test, but close examination of the circumstances suggests that some of the exceptions may be explained otherwise than by assuming an inconstancy of action on the part of tuberculin.

Tuberculin falls short of infallibility, inasmuch as there is in every case a period after infection during which it provokes no reaction, and some of the experiments described in the report indicate that this period may be longer than has hitherto been supposed.

Even when full account is taken of these possibilities of error, the Sub-committee are of opinion that Tuberculin is an agent of great value, far surpassing all other methods of diagnosis, and that, if properly employed, it is calculated to render immense service in dealing with Tuberculosis.

RIES, COWSHEDS, AND MILKSHOPS are referred to in Table 13, and in the Abstracts of Reports.

MON LODGING HOUSES exist in the Urban Districts of Shrewsbury (where they are under rol of the Police), Shifnal, Bridgnorth, Dawley, Newport, Wem, Whitchurch, Wenlock, and Shifnal n. *(See individual Reports and Table 13.)*

-LAWS AND ADOPTIVE ACTS.

These are referred to in Table 13.

laws.

The Public Health Act, 1875, sec. 80, makes it *compulsory* for *every* Sanitary Authority to es bye-laws in regard to *Common Lodging Houses*, and for *every Urban* Authority to make laws in regard to *Slaughter-houses*. The making of all other oye-laws is optional.

Bye-laws (continued)

Urban Sanitary Authorities may make bye-laws for—

1.—Private Scavenging.
2.—Houses to let in Lodgings.
3.—Hop and Fruit Pickers.
4.—Tents and Vans.
5.—Mortuaries and Cemeteries.
6.—Under Housing of the Working Classes' Act.
7.—Prevention of Nuisances.
8.—New Streets and Buildings.
9.—Offensive Trades.
10.—Markets and Fairs.
11.—Open Space.
12.—For flushing of W.C's., structure of floors, staircases, height of rooms, and paving of yards *(Public Health Amendment Act, 1890 sec. 23.)*

Rural Sanitaries Authorities may make bye-laws for—

1.—Private Scavenging.
2.—Houses let in Lodgings.
3.—Hop and Fruit Pickers.
4.—Tents and Vans.
5.—Mortuaries and Cemeteries.
6.—Under Housing of the Working Classes' Act.
7 to 11 With consent of the L.G.B, for any purpose that an Urban Authority can make bye-laws for.
12.—For flushing of W.C's., and structure of floors and staircases.

Under Public Health Acts (Amendment) Act, 1890, sec 23, bye-laws relating to new buildings may be made applicable to buildings already in existence.

Under sec 16 of the Local Government Act, 1888, and sec. 23, of the Municipal Corporations Act, 1882, the County Council has power in regard to any district in the County, except Boroughs, to make such bye-laws as to them seem meet for the good rule and government of the district, and for the prevention and suppression of nuisances not already punishable in a summary manner.

GENERAL INSPECTION.

In Table 14 is a summary of the work done by the sanitary inspectors. A new inspector has been appointed in Oswestry (R), and is doing very well. Dr. Gepp has obtained an assistant inspector in Shrewsbury. Similar additional help is required in Oakengates and Wellington. The Inspector in Cleobury Mortimer does not always receive the necessary support from the District Council.

SPECIAL REPORTS. The Local Government Act, 1888, sect. 19, and the General Order of the Local Government Board, dated March 23rd, 1891, require each district medical officer of health to send a copy of every periodical and special report to the Local Government Board and to the County Council. But considerable uncertainty and opportunity for misunderstanding undoubtedly exist amongst health officers as to what reports are to be treated as "periodical" and "special." Accordingly, upon the suggestion of the County Medical Officer, a request was addressed by the County Clerk to the Local Government Board for an official explanation of these terms. On 27th February, 1901, the Board replied as follows:—

"Reports that are made for any special purpose, such for instance as (1) reports giving an account of "the sanitary state of a district, or of any section of it, and intended to form a basis of systematic work by "the medical officer of health in the future; (2) reports on the need for adoption or revision of regulations "or of bye-laws, or on their enforcement; (3) reports on schemes dealing with areas under the Housing of "the Working Classes Acts, or dealing with the condition of groups of dwellings of any particular class or in "any special locality; and (4) reports on the occasion of outbreaks of disease, and reports advising the "closure of public elementary schools, should, in the Board's view, be considered 'special,' and copies of "such reports should be forwarded by a medical officer of health to this Board and to the County Council."

Table 14.

Record of Sanitary Work done during the Year 1900.

Table shows the work done by the various Sanitary Inspectors; the returns are now made on a uniform plan as far as possible.

SANITARY AUTHORITY.	Number of Houses which have been Inspected during the year, either in connection with outbreaks of Infectious Disease, or in consequence of complaints, or in course of a systematic Sanitary Survey.	Total Number of Notices of all kinds served, including both formal and informal Notices.	Approximate Number of such Notices complied with.	Particulars of Sanitary Matters referred to in the above Notice.								Number of cases in which proceedings before Magistrates have been taken for failure to comply with any of the above Notices.	Proceedings taken before Magistrates with reference to			
				Houses to be Disinfected after Infectious Disease.	Deficient or Objectionable Water Supply.	New Drains to be constructed or old Drains to be amended.	New Closets to be provided or old ones to be amended in construction.	Houses damp, dirty, or admitting rain or weather, or otherwise in a bad Sanitary condition.	Offensive accumulations of all kinds.	Animals so kept as to be a Nuisance.	Houses Overcrowded.		Exposure of Bad Meat for Sale.	Public Exposure of Infected Persons or things.	Offences against By-Laws and Regulations relating either to Lodging Houses, Slaughter Houses, Dairies and Milkshops, &c.	
RURAL DISTRICTS.																
Atcham	990	70	38	53	34	73	16	3	1	2	3	..	..	..	..	..
Bridgnorth	381	133	112	7	38	79	45	15	37	..	3	..	..	..	..	..
Burford	25	5	5	4	1	..	..	..	..	..	..	..	..	..	..	..
Chirbury	240	37	31	3	4	11	6	2	2	..	3	..	..	..	..	..
Church Stretton	654	87	62	4	8	7	15	3	..	..	..	..	..	..	..	..
Clun	273	83	74	14	12	16	9	4	20	..	1	..	..	..	..	..
Cleobury Mortimer	290	20	6*	9	4	2	3	5	1	1	1	2	..	..	..	..
Ellesmere	153	64	62	14	15	17	16	..	2	..	..	..	..	..	..	..
Ludlow	90	24	24	10	?	10	2	2	10	..	6	..	..	..	..	..
Market Drayton	482	331	293	44	57	44	40	1	135	8	2	..	..	..	..	..
Newport	250	45	35	15	1	10	14	4	4	..	..	..	..	..	..	..
Oswestry	146	102	68	35	41	20	17	28	21	17	6	..	..	..	..	..
Shifnal	872	267	266	8	16	14	10	4	209	5	1	..	..	..	..	..
Teme	800	17	17	1	2	4	7	4	1	..	..	..	..	..	..	..
Wellington	156	48	30	..	7	18	39	9	..	..	3	..	..	..	..	..
Wem	60	9	..	9	3	..	..	..	..	..	..	..	..	..	..	..
Whitchurch	132	36	28	2	2	10	13	4	13	..	..	..	..	..	..	..
URBAN DISTRICTS.																
Bridgnorth	500	20	16	6	2	6	6	2	4	3	1	..	1	..	..	..
Bishop's Castle	178	17	17	..	..	..	5	..	12	..	..	..	..	..	..	..
Church Stretton	235	18	18	1	..	1	12	3	8	2	..	..	..	..	..	..
Dawley	572	205	193	11	..	14	23	9	117	1	5	..	..	..	..	..
Ellesmere	276	70	70	15	..	39	19	..	..	..	..	..	..	..	..	..
Ludlow	500	106	45	4	..	18	35	17	4	..	3	..	1	..	7	..
Newport	480	469	465	..	1	..	7	..	456	..	..	..	..	..	..	..
Oakengates	305	95	86	62	..	12	7	..	11	3	..	..	..	..	..	..
Oswestry	1800	160	140	15	..	81	70	3	18	..	..	..	..	..	..	..
Shrewsbury	1108	618	607	101	28	162	38	93	171	9	5	..	..	..	..	..
Wellington	424	112	101	16	2	84	37	76	25	19	3	1	..	..	..	..
Wenlock	229	167	150	4	2	58	63	10	28	..	2	..	..	..	..	..
Wem	402	18	14	4	..	10	11	12	26	2	..	..	..	..	..	..
Whitchurch	62	50	47	..	..	3	2	3	36	2	1	..	..	..	..	..

* The remainder to be complied with in connection with Highley Sewerage Scheme.

Table 15.

The following table gives particulars of the Rainfall during 1900, based on reliable observations in three localities, one in the North, one in the Centre, and one in the South of the County.

WOOLSTASTON RECTORY, SALOP.						THE CORPORATION GUAGE, SHREWSBURY.					THE CLIVE VICARAGE.				
Rain Gauge. Diameter of Funnel, 5 inches. Height of Top. Above Ground, 1 ft. Above Sea Level, 800 ft.						Rain Guage. Diameter of Funnel, 8 inches. Height of Top. Above Ground, 1ft. 3 in. Above Sea Level, 173·64 ft.					Rain Gauge. Diameter of Funnel, 5 inches. Height of Top. Above Ground, 1 ft. Above Sea Level, 299 ft.				
Month.	Total Depth.	Greatest Fall in 24 Hours.		Number of days on which ·01 or more Rain fell.	Corresponding Total Depth, 1899.	Total Depth.	Greatest Fall in 24 Hours.		Number of days on which ·01 or more Rain fell.	Corresponding Total Depth, 1899.	Total Depth.	Greatest Fall in 24 Hours.		Number of days on which ·01 or more Rain fell.	Corresponding Total Depth, 1899.
	Inches.	Depth.	Date.			Inches.	Depth.	Date.			Inches.	Depth.	Date.		
January ..	3·11	·59	1	24	4·27	2·17	·58	6	17	3·35	2·27	·45	6	31	3·08
February ..	3·69	·53	26	23	3·54	3·21	1·48	16	8	1·89	3·42	·62	26	20	1·52
March ..	1·00	·30	19	11	1·38	·80	·35	19	4	·98	·93	·37	19	11	1·13
April ..	1·69	·31	3	15	2·96	·83	·16	3	8	2·36	·89	·25	3	22	2·24
May ..	2·74	·61	6	12	2·01	2·05	·56	6	8	2·21	1·79	·51	6	12	2·5
June ..	2·69	·57	24	17	2·32	1·95	·61	19	9	1·77	2·09	·41	19	23	2·14
July ..	2·38	1·14	27	11	1·29	2·49	·94	12	6	4·16	2·36	·87	29	13	1·58
August ..	4·28	·71	3	18	1·26	3·90	·66	9	12	1·01	4·41	·75	6 & 9	17	1.08
September ..	·72	·22	30	11	2·55	29	·12	18	3	2·58	·79	·35	30	15	2·74
October ..	3·93	·62	4	23	3·30	3·23	·57	4	13	2·61	3·26	·57	4	24	2·76
November ..	3·24	·56	6 & 28	25	1·67	2·97	·55	28	14	1·44	2·86	·54	28	27	1·6
December ..	3·89	1·07	30	18	2·10	3·41	1·23	30	9	2·07	3·6	1·04	30	25	2·01
Total ..	33·36	..	..	208	28·65	27·30	..	..	111	26·43	28·67	..	..	240	24·38

In reply to further inquiry "whether in the Board's opinion the report of a district health icer on the water supply of a village or any material number of houses in his district would nstitute a special report?"; the Board stated that "if the village were of any considerable size, d the question of water supply involved consideration of the need for a comprehensive scheme," e description "special" would apply to the report, but that a report "need not be so regarded it dealt only with improvements in detail needed with respect to the water supply of individual uses or small groups of houses."

Apart from absence of proper definition, the personal labour or expense involved in making copy of a lengthy document has very naturally not increased the readiness of district health icers to regard any report as "special" when they could avoid doing so.

ETEOROLOGY OF THE YEAR, 1900.

"A rather cold and protracted Winter was followed by a later Spring than usual, the month of ay being particularly cold. The sudden outbursts of abnormal heat in April, July, September, d October, were very remarkable, occurring as they did in a season which gave no continued eat heat. The maximum of 75 in both April and October, were almost as notable as the outburst July, and it is also worthy of remark that the heat wave of July came almost exactly midway tween the two short periods of warmth in April and October. While the previous Summer gave three and a half months of almost continuous heat and fineness, the hot weather in the Summer 1900 lasted but three weeks, during which there were warmer days than during all the previous ng and protracted Summer, and the sudden change to cold and wet with the advent of August and t as harvest was commencing was a most unpleasant and unlooked for sequel. The season was y mild to the end of the year with much humidity, no snow, and but little frost. There was great prevalence of thunderstorms during the summer, some of them being unusually severe. hile the rainfall of the year was in close agreement with the average, the number of days on ich rain fell was greater than for many years past."

APPENDIX A.

NOTIFICATION OF PUERPERAL FEVER

In the last "Nomenclature of Diseases" issued by the Royal College of Physicians it is ommended as follows:—

> "The term 'Puerperal fever' should no longer be used. Pyæmia, Septicæmia, or "Sapræmia, occurring in puerperal women should be described as 'Puerperal pyæmia,' "'Septicæmia,' or 'Sapræmia,'—respectively. The other conditions included under the term "'Puerperal fever' should be returned under 'Affections consequent on Parturition,' the word "'Puerperal' being in all cases prefixed to the word denoting the local process."

This has led to the belief that as the different diseases above mentioned are not individually cified in the Infectious Disease Notification Act, 1889, there is no legal obligation to notify them fficulties have in consequence arisen in certain sanitary districts in London and elsewhere, and in gust, 1898, the London County Council sought the advice of the Royal College of Physicians on matter. The question submitted by the County Council was "whether the diseases peritonitis and metritis, puerperal septicæmia, and puerperal sapræmia, all of which the Registrar General includes nder 'puerperal fever,' are covered by that term for the purposes of notification?"

To consider this question the College appointed a committee consisting of Dr. Payne, Sir John lliams, Bart, Drs. Cullingworth, Champneys, and Tatham, and in November, 1898, these experts orted that they had unanimously resolved as follows:—

"That this Committee is of opinion that with a view to the limitation of dangerous "infectious diseases, the London County Council would be acting rightly in adopting the view "that the expression 'Puerperal Fever,' as contained in the Infectious Diseases Notification "Act, should be taken to include Septicæmia, Pyæmia, Septic Peritonitis, Septic Metritis, and "other Acute Septic Inflammations in the Pelvis occurring as the direct result of childbirth."

To a similar question submitted to the Obstetrical Society of London by the Society of Medical Medical Officers of Health, the following answer was given :—

"The Council of the Obstetrical Society is of opinion that most of the diseases mentioned "are intended to be included under the name of 'puerperal fever' in the Infectious Diseases "Notification Act, 1889. It is also of opinion that an inclusive definition should be added "after the words 'puerperal fever' in the following form :—'That is, septicæmia and pyæmia, "'including peritonitis, and all cases of acute pelvic inflammation occurring in connection with "'childbirth.'"

APPENDIX B.

PRECAUTIONS AGAINST INFLUENZA.

Influenza is a highly infectious and very fatal disease, frequently leading to inflammation of the lungs. If neglected, it is often followed by prolonged weakness and depression. The disease is generally marked by its sudden onset, by severe headache with pains in the back or limbs, and by fever.

The following preventive measures are recommended :—

1st.—Separation between the sick and the healthy so far as is practicable.

2nd.—Isolation of infected persons in large and warm but well-ventilated rooms.

3rd.—**Persons who are attacked by influenza should at once seek rest, warmth, and medical treatment.** No reliance should be placed on popular remedies, for the **risk of grave complications** is so great that the best possible treatment is required.

4th.—Those attacked should not on any account join assemblages of people for at least a period of 10 days from the commencement of an attack, as they are likely to convey the disease to others. In severe cases the person attacked should remain away from work for a period of 3 weeks from the onset of the disease.

5th.—Sheets, pocket-handkerchiefs, &c., which have been used in the sick room should be put in a vessel containing an efficient disinfectant (such as a 1 per cent. solution of chlorinated lime), and afterwards soaked in cold water.

6th.—Infected articles and rooms should be cleansed and disinfected.

7th.—The use of warm clothing and the avoidance of unnecessary exposure are advisable.

Part II.

Abstracts of Annual Reports of the District Health Officers.

Several of these Reports were not received till May, and one not till the 1st June, though ere is no reason why any should have been later than the 31st March, the limit of the period ed by the Local Government Board.

Nine Reports were printed, 17 type-written and 5 hand-written (some not too legibly). It is r several reasons very desirable that each District Council should print its Health Officer's nnual Report, for much care and thought has been expended on the preparation of some of em, and it is regretable that the useful information and suggestions they contain should not ve greater publicity, and consequent educational effect.

In regard to quality, some are very able and comprehensive, a special feature being a useful scription of the physical characteristics of the Districts dealt with : others, also, are good, and hers again very incomplete, with little reference to the Local Government Board's specific requirements in regard to such documents.

ATCHAM (Rural).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) 125,207

Census Population 1891 21,144

ysical features and general characters.

"The District is a very large one some 22 miles in length by some 14 in extreme breadth, its area "being 125,207 acres. The River Severn runs through it from North West to South East dividing it "into two parts, of which the Northern and smaller part is continuous with the Shropshire and "Cheshire plain, on the new Red Sandstone. The general elevation of this part is from 200 "to 300 feet. The Southern and larger part is more elevated, rising gradually from the river, South- "wards and Westwards, from 200 to some 600 feet, with considerably greater elevations on the hillsides "forming the Western and Southern borders. The Geological formation of this part is broken and "diverse. The hills are the outliers of the Cambrian and Silurian range of Wales and Shropshire, and "these formations project into the District. There are also detached but considerable exposures of the "Coalmeasures, and of the Permian Red Sandstone. There is in both parts a variable, but generally "considerable, thickness of drift overlying the strata. The drainage is on both sides to the Severn, by "numerous small tributary streams."

"The District is entirely rural in character, for the most part fertile and highly cultivated, and "supporting a comparatively large agricultural population, distributed in numerous important villages, "in smaller hamlets, and largely also in scattered isolated dwelling-houses. The density of population "is equal to about 108 persons to the square mile. A few Coalmines are worked around Hanwood, but "many parts of the small Coalfields are abandoned."

Statistics for 1900.

The estimated population in 1900 was 20,893.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	15·8	0·69	1·4	1·1	0·1	1·9	2 0	1·1	118	24·3
Average of 20 preceding years ..	15·3	0·8	..	..	..	..	..	..	85	23·0

Infectious Disease. *Scarlet Fever* was much more prevalent than usual.—Of the 110 cases noted, four principal outbreaks, viz., in Cound and Harnage, Stapleton, Buildwas and Pontesbury accounted for 85, and the remainder were isolated occurrences. The Buildwas outbreak was made the subject of a special report dated August 10th, which has already been under the County Council's notice. In Stapleton the disease was introduced by a patient discharged from a fever hospital elsewhere, and here, as well as at Cound and Pontesbury school closure became necessary.

Diphtheria. 14 cases arose in 11 houses, and of these, 10 were isolated outbreaks. The remaining four centred round the Roman Catholic School for Acton Burnell, and this institution, as well as the National School were temporarily closed.

Enteric Fever. 1 case occurred at the Asylum ; another was a "casual" at the Workhouse ; 4 cases and 2 deaths occurred at Cressage, the infection being clearly traced to a neighbouring district.

Measles and Whooping Cough were prevalent early in the year and led to the closure of several schools.

Influenza caused 32 deaths.

Hospital Isolation. The Council is advised to consider the provision of a small central isolation hospital, or of 3 or 4 suitably situated isolation cottages.

House Accommodation. A large number of old and worn out houses remain in occupation and some 70 notices were served to remedy sanitary defects. Building bye-laws are in force in certain parts of the District.

Sewerage. Meole Brace, Dorrington, Pontesbury and Minsterley are sewered, and the sewage desposed of by irrigation, though at Pontesbury part goes into a stream. At Acton Burnell, Astley and Condover piped sewers have been recently provided.

At Cressage the sewage disposal question is in a very unsatisfactory condition ; some 9 houses drain nto the mill pool, and these as well as drainage accumulations from some 10 cottages on the Wenlock igh road give rise to considerable Nuisance. The medical officer and surveyor have reported jointly n this matter, and the surveyor has prepared a scheme which has been referred to the Parish Council r their opinion.

Water Supply.

Harley. The Council have recently repaired two useful and well-situated roadside wells in this llage and are recommended to acquire and improve the private gravitation supply from upland rings.

Pontesbury Hill. A well in the quarry yielding good water has been thoroughly protected and nproved, and the Council has arranged to make a trial well or boring, in a selected pasture field, for ie supply of the middle part of the field and The Flat.

Meole Brace. The defective earthenware pipe main from Moat Hall Colliery to Welbatch reservoir is been replaced by a sound iron main, and a 5000 gallon tank is about to be placed at the pit head keep the main full during the night, as during the year the main became air-locked and the supply iled for some days to reach Meole.

The provision of a new supply for Meole and Bayston Hill is still under consideration.

Dairies, Cowsheds and Milkshops are looked after under the Regulations relating thereto.

BISHOP'S CASTLE (Urban).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H

Area in acres (exclusive of area covered by water)	1,867	
Total population at all ages	1,586	*At Census of 1891*
Number of inhabited houses	361	
Average number of persons per house	4·3	

Dr. Gepp furnishes the following interesting description of the Physical Features and General haracter of Bishop's Castle :—

"The Borough comprises 1,867 acres of agricultural land, and forms an area some three miles in length by "a mean breadth of about 1 mile, having the small town of Bishop's Castle about the centre. The elevation "varies from about 500 feet in the valley at the south-east end, to 1,000 feet or more in the hill country, "forming the N.W. end. The town lies on a slope rising out of the valley, the main street rising steeply "from about 600 feet to 700 feet, and the houses are placed upon either side of the street, and about the "crest of the hill above it. The sub-soil is the Wenlock and Ludlow Beds of Upper Silurian age. The "natural drainage is from north and west to south and east by small streams, the district lying upon the "watershed of the Teme. In the town some small streams have been culverted about the foot of the hill, "and are practically sewers. Outside the town proper, the area is very sparsely populated."

Statistics for 1900.

Estimated population in 1900 was 1586.

Period.	Death-rates from								Infant Death Rate per 1000 Births.	Birth Rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	19·1	..	0.6	1·2	..	4·4	1·8	0·6	23	28·1
12 years, 1888—99..	19·1	1·22	..	..	..	..	..	..	140	24·1

No death was registered from any of the Chief Zymotics. The Infantile Mortality rate was based on the death of one infant only. The rate for the last 3 years been very low and much below the average.

Notifiable Infectious Disease.—3 cases of *Scarlet Fever* occurred in 2 houses. There was also 1 case of Membranous Croup.

Influenza caused 1 death.

House Accommodation is adequate, and the medical officer knows of no occupied house unfit for habitation; he again urges a systematic house-to-house sanitary survey to ensure the sanitary up-keep of dwellings.

Sewerage and Drainage.—The natural surface drainage is good, and most of the houses have drains connected to the sewers. The centre of the town, and a considerable part of the main street, is efficiently sewered, but at "the bottom of the main street are three or four old stone sewers, some of which have been formed by culverting small streams. These act as the main sewage carriers to the outfalls, and cannot be regarded as efficient sewers." The sewage is mostly disposed of by irrigation upon almost level meadow land at the bottom of the town, "the channels being arranged with dams for flooding the land. The open channels are sometimes offensive and complained of in the neighbourhood of houses." The question of improving the sewerage system, and of acquiring a suitable site for out-fall works, and for tipping house refuse, is under present consideration.

Excrement Disposal: there are some water closets, but a considerably larger number of old privies which are scavenged by the occupiers. For a satisfactory result from any large increase of water carriage, the improvement of the sewers is necessary.

Water Supply: an excellent gravitation supply from an uninhabited and uncultivated upland surface some 5 or 6 miles to the west, is piped to a service reservoir above the town, sand-filtered, and laid on to the houses, very few of which are still unconnected.

Bye-laws.—The model bye-laws relating to Slaughter Houses, Common Lodging Houses, Prevention of Nuisances, and Cleansing of Privies, are in force, so also are the model regulations relating to Dairies, Cow-sheds, &c.

There are 4 slaughter houses which, considering their old and in some respects defective structure, are fairly well kept.

BRIDGNORTH (Rural).

Medical Officer of Health ... ... ALFRED BETHEL, M.R.C.S.

Area in acres (exclusive of area covered by water)	2,987	
Total population at all ages	9,185	*At Census of 1891.*
Number of inhabited houses	1,595	
Average number of persons per house	1·5	

tistics for 1900.

Estimated population in 1900 was 9185.

Period.	Death-rates from								Infant Death-rate per 1000 Births.	Birth Rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercr. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Diseases.	Cancer.		
1900	12·7	0·32	0·6	0·3	0·4	2·5	1·1	0·6	112	24·7
o years, 898—99..	13.0	..	..	..	..	..	..	..	..	26·3

tifiable Infectious Disease.

The following were notified: 4 cases of erysipelas, 19 of scarlet fever, 1 enteric, 1 puerperal, l 1 membranous croup.

Measles: a widespread epidemic affecting nearly every parish necessitated the closing of ools at Brockton, Astley Abbotts, Morville, Monkhopton, Ditton Priors, and Alveley.

Mumps: Eardington School was closed on account of an outbreak of this disease.

ter Supply: Dr. Bethel pronounces this "good throughout the district," and states that 3 re public wells have been properly protected.

He advocates uncompromising opposition to the late Wolverhampton water scheme as ulated to exert a disastrous effect on the whole of the basin of the Worfe.

d Supply: under The Sale of Food and Drugs Acts, jams and beers were tested for enic with negative results.

ools.—Most of these are in a satisfactory condition, and the remainder, if not soon remedied, be brought to the notice of the sanitary authority.

zinage Nuisance: an open drain in Claverly parish, to which attention has before been cted, "is still in an offensive condition."

BRIDGNORTH (Urban).

Medical Officer of Health ... ... ALFRED BETHEL, M R.C.S

Area in acres (exclusive of area covered by water)	2,987	
Total population at all ages	5,865	*At Census of 1891.*
Number of inhabited houses	1,200	
Average number of persons per house	4·8	

Statistics for 1900.

Estimated population in 1900 was 6,000.

Period.	Death-rates from								Infant Death rate per 1000 Berths.	Birth Rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	18·5	0·66	0·8	0·1	0·8	1·6	2·3	0·6	119	23·9
Ten years, 1890—99..	17·6	..	..	..	..	..	..	..	140	25·5

Notifiable Infectious Disease.

9 cases of erysipelas, 2 of enteric, and 13 of scarlet fever were notified during the year. Dr. Bethel is sure that a large number of cases passed unnoticed, as the disease was of an exceedingly mild type.

Measures adopted to check the spread of Infection.

Nine cases of scarlet fever were treated in hospital, which helped very much to stop the epidemic. The Sanitary inspector under Dr. Bethel's directions also tried to disinfect houses by the Formalin process.

Influenza caused 5 deaths, all at ages above 65 years.

Water Supply was plentiful throughout the year. Much more river water is now used. Dr. Bethel observes that in case of accident to the present large engine the smaller one would not be able to give anything like a satisfactory supply.

Food Supply.

Milk. Samples have been taken under "The Sale of Food and Drugs Acts" and also for testing for Tuberculosis. (See also Part I.)

Beer and Jams.—Samples were taken and examined for arsenic, but none was found.

Exposure of Unsound Food.—A substantial fine was inflicted for exposing unsound rabbits Sale.

mon Lodging Houses "are fairly good, and are kept clean."

se Disposal.

Sewage.—A contract to carry out the Septic Tank System for the disposal of the sewage in tern Brook has been entered into, and it is hoped that the system will be in working order re the summer begins.

The removal of ashes is still in a very unsatisfactory state. Dr. Bethel recommends that the system be made compulsory, and suggests that a large amount of refuse could be destroyed fire, if a steam blower was attached to the waterworks boiler furnace.

Improper deposits on the river bank have been the subject of complaint, and the Sanitary hority is advised to make very stringent rules on the subject.

Throwing slops on the road : the attention of the police is drawn to this objectionable ctice on the part of the inhabitants of Bernard's Hill.

BURFORD (Rural).

Medical Officer of Health E. T. WHITAKER, M.B., B.SC., D.P.H.

Area in acres (exclusive of area covered by water) 7798

Burford is the smallest rural district in the County, and comprises 5 small parishes with thinly ttered houses on the southern slopes of the Clee Hill. It owes its existence as a separate Sanitary ea to the Local Government Act, 1894.

tistics for 1900.

The estimated population in 1900 was 1,350.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Death-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	13·3	..	..	0·7	0·7	2·2	3·7	..	31	25·7
erage of 3 preceding years ..	11·7	..	..	..	..	..	..	..	105	26·5

There were no deaths from infectious disease or from cancer. The infantile mortality rate is sed on one death, and has little significance.

Infectious Disease Incidence.—Disinfector.—There were 2 cases of scarlet fever and 2 of erysipelas. The Council is recommended to join with the Tenbury Council in providing a steam disinfector.

Housing Accommodation is generally good, but there is none to spare.

Drainage and Scavenging.—The sewage from some cottages in Boraston is allowed to overflow the surface of the lane leading to the public well.

Water Supply.—The good spring supply of Buraston could be improved by piping it nearer to some of the houses, and the examination of the water of the public well at Nash is suggested.

There is 1 *Bakehouse* and 1 *Cowshed.* Each is fairly satisfactory.

CHIRBURY (Rural.)

Medical Officer of Health... ... ... J. RAYNOR-HATFIELD, L.R.C.P.

Area in acres (exclusive of area covered by water) ... 26710

Census population, 1891 4084

Statistics for 1900.

The estimated population in 1900 was 4080.

Period.	Death-rates per 1000 population from								Infant Death rate per 1000 Births.	Birth Rate
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Disease.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart	Cancer.		
1900	15·4	..	0·7	0·7	..	3·9	0·9	1·2	184	22·5
Average of 2 preceding years ..	13·2	..	..	..	..	..	..	..	86	22·8

Though Influenza was primarily responsible for 3 deaths, Dr. Hatfield thinks that secondarily it caused more.

Improper feeding of infants is believed to have contributed largely to the high infantile death-rate, and Dr. Hatfield consequently drew up and circulated in his District a leaflet on "The Feeding and Care of Infants."

sing.

Many houses present sanitary defects, and 2 have been condemed as unfit during the year. eral cases of overcrowding have been dealt with.

crement Disposal.

Many of the privy-vaults are in bad repair and too near houses, and the removal of their tents is far too infrequent.

ughterhouses, Milkshops and Workshops were inspected and found generally satisfactory. In instance unsuitable and unlicensed premises were being used for slaughtering.

ter Supply.

Chirbury, Worthen, and Wotherton are satisfactorily supplied, but Brockton is without table provision, and Dr. Hatfield is still moving in the matter. The inhabitants of Snailbeach e a good supply on sufferance from private owners.

Dr. Hatfield draws attention to the large number of sufferers from "goitre" in the District. is convinced that the cause of this is to be found in the watersupply and its impurities, and greater number of cases occur on the hills round Bromlow.

CHURCH STRETTON (Rural).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) 44,485

Census Population 1891 5,401

PHYSICAL FEATURES, &C., OF DISTRICT.

"The district is one of hills and dales, highest across the centre from West to East, and sloping to the "North and South. The northern part lies on the southern watershed of the Severn, the southern part on "the northern watershed of the Teme, the various small streams arising on its uplands and running off "through the valleys to north or south affording good natural drainage. The elevation varies from 1700 feet "at the summit of the Longmynd to some 400 feet at the northern and southern limits of the District. "Three ranges of hills run through it from S.W. to N.E., the Longmynd range along the western side, the "Caradoc in the middle and the escarpment of Wenlock Edge runs through its eastern border. Between "these ranges are fertile valleys with several villages and many isolated farms and cottages. The hillsides are "largely cultivated but are in part uninhabited moorlands. The sub-soil is that of the Primary Geological "formations. Cambrian on the west, Silurian on the east, with a small and unimportant exposure of Coal "Measures at the northern end. These measures are not now worked. The District is naturally very "healthy and is one of those selected by the Registrar General in his computation of the Healthy District "Death-rate."

Statistics for 1900.

Estimated population in 1900 was 4621.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth Rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	17·8	0·64	2·3	1·5	0·4	2·8	1·5	0·8	94	20·3
Average of 16 preceding years ..	15·5	0·43	..	..	..	..	..	..	101	24·2

The death-rate from all causes is somewhat above the average of preceding years. This is accounted for by the number of deaths of persons of 65 years and upwards, amounting to more than 50 per cent. of the total, and to the heavy mortality from Influenza among the aged in the early weeks of the year. Eleven deaths of 13 per cent. of the total number were due to Influenza and of these 9 were those of aged persons.

Housing.—A house-to-house survey is now in progress.

House accommodation is, generally speaking, adequate in amount and in fitness; but a number of old and worn-out houses remain tenanted for want of better accommodation.

Two houses were certified as unfit for habitation. One was closed, the other repaired.

Drainage.—As regards the village of Winstanstow, Dr. Gepp advises "the provision of a public sewer along the main street, and having the houses on both sides properly connected to it."

At *Picklescott*, such a sewer has been recently provided and a great improvement effected.

Water Supply.—Much improvement has been effected in this important matter in recent years, notably at Brockton, Leebotwood, Hungerford, and Wistanstow. At Longnor permanent warnings that the water is unfit for drinking have been affixed to the standpipes which supply the village with brook water for slopping purposes. and the medical officer again urges "that it would be a very great "advantage if a pump were provided in this village, connected by a draw-pipe to the spring-well from "which most of the houses carry their clean water, if only to save the inconvenience of hand-carriage "of water over distances of from 230 yards to some half a mile, and consequent risk of use of "dangerous water for drinking."

All Stretton and *Little Stretton* are supplied with upland surface water by pipes laid on from the works of a small local Company in each case. Both would benefit by filtration. At All Stretton, attention has been given to the drainage of two or three houses near the stream which feeds the reservoir, to obviate any avoidable risk of contamination.

The houses in the rest of the District are mostly dependent upon individual wells, or upon land drains and running springs.

Wistanstow.—In his Report for 1899, Dr. Gepp pointed out that the occupants of two isolated ›uses on The Marsh "were in the habit of drinking the brook water in the absence of any :tter supply. The brook water is absolutely unsafe, as it receives the greater part of the more or ss untreated sewage of Church Stretton a few miles above." He suggested that the necessity for me action should be pressed upon the owner, and if none resulted, that it might be found within e Council's power to execute the work themselves. He now reports that no action has been ken, either in this case or in regard to a house near Picklescote, where the service of a statutory ›tice under this Act failed to procure action by the owner.

Wistanstow Burial Ground.—By the gift of a principal owner, a much-needed new burial und has been provided.

Arsenic in Glucose.—Samples of jams, syrups, &c., were taken in the District, and were all :rtified free from arsenic.

CHURCH STRETTON (Urban).

Medical Officer of Health ... .. M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) ... . About 1600

Estimated Population in 1900 800

This District was formed into an urban district in 1899 after inquiry by the County Council. Its area of some 1,600 acres was taken from the large parish of Church Stretton, froming part of the Rural District of the same name. The Urban District comprises the small town of Church Stretton, lying in an open valley 600 ft. above sea level, together with the lower slopes of the hill-sides to the N.E. and S.W. of the valley. The situation is one of great natural beauty and healthiness, and in consequence the number of residents and visitors has for some years been increasing rapidly ; and as the result of building operations "and of improvements and extensions of water supply and sewerage becoming urgent," the necessity for the formation of an urban district arose.

Period.	Death-rates per 1000 of population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Disease.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	16·2	..	..	..	..	5·0	3·7	..	83	16·2

In calculating the death-rate, 5 deaths in a large private Asylum of persons non-resident in ›e District, have been substracted from the total.

Dr. Gepp observes: "In so small a section of population the vital statistics for a single year afford little indication as to the sanitary state of the District. From year to year the figures may be expected to vary considerably in the absence of the tendency to balance afforded by larger communities." The truth of this statement is well shown by the Infant Mortality Rate, viz.: 83. During 1900 there was only 1 death under 1 year in proportion to 12 births, but "another infantile death would have raised the rate from 83 to 166, or, as compared with the rate for the country generally, from a satisfactory to a very unsatisfactory appearance."

Zymotic Disease.

The only case was one of scarlet fever, probably imported.

Disinfection. -The Council is recommended to arrange for disinfection by their officers after any infectious ontbreak, and to obtain an apparatus for fumigation with formic aldehyde, and also a spraying apparatus for the walls of rooms, &c.

Hospital Isolation.—The Council is advised to acquire or retain an "isolation-cottage" on the outskirts of the District.

Housing Accommodation.—No overcrowding, but a certain number of very old and radically defective small houses. Two such were closed by notice during the year. Some offensive old privies still remain, and the conversion of these receptacles as well as the prevention of manure accumulations and the keeping of animals in improper surroundings are receiving attention.

Sewerage.—The town was well-sewered on modern lines some 20 years ago, the sewage being disposed of, after passing through settling tanks, on the surface of a small area of pasture land close to the town. The extension of watercarriage in the Town has outgrown the land area available for the treatment of the sewage, and attention has been frequently called to nuisance arising from sewage reaching the brook which runs through the irrigated land. Houses have also been erected in situatious where they could not be served by extension of the existing systems. and the radically objectionable plan of draining these houses into soak-away cesspits has been adopted.

The Urban Council has, therefore, wisely obtained the advise of an eminent engineer and have adopted a complete scheme prepared by him to deal satisfactorily with the problem once for all. It is also proposed to remove the outfall to a distance a mile or so below the town.

The Removal and Disposal of House Refuse is done by the occupiers, a site for tipping being provided by the Council.

Water Supply.

A greatly increased supply is about to be provided in regard to which Dr. Gepp writes as follows:—

> "Hitherto the town itself has been supplied by the works of a Local Company, from "water collected in a small reservoir in an uninhabited and uncultivated upland valley. Ordinarily the "supply has been ample, but in recent dry seasons, owing to the rapidly increasing use of Water Closets and "fixed baths, and to the small size of the reservoir, there has been a shortness of supply at times. The "elevation of the reservoir, though sufficient for the supply of the town, would not allow of an extended "service to the newly laid out sites at a higher level. In consequence a new Company has been formed, and "has obtained Parliamentary powers for extensive new works. The scheme is to place a large reservoir, to "hold nine million gallons, in a valley in the upland moors about a mile from the town, and at an elevation "of 1,000 feet. This will be the main supply of the District. A smaller reservoir to supply compensation "water to the stream fed from these uplands is to be placed in the Light Spout Valley at about the same "level, and from this a main will be laid to the large reservoir to ensure a good supply at all times. As the "main reservoir will entail some time in construction, and in order to furnish an adequate supply without "any delay, the Company is proceeding with the compensation reservoir first, and for the present the water "from this will be taken by a new 6-inch main through the Town to supply the new houses now built or "building on the more elevated sites. Off this 6-inch main a 4-inch branch will be taken to the old town "reservoir in Town brook valley, where by means of a ball cock it will maintain this reservoir full. The "work of laying mains has been pressed forward, and a full supply of water is anticipated to be ready for "the summer.
>
> "The water from all the valleys mentioned is upland surface water, and coming off the hard slate and "shale rocks of the Cambrian formation is admirably soft. The gathering grounds are uninhabited and "uncultivated moorland, grazed by sheep and ponies. There is, therefore, no risk of sewage pollution from "occupied dwellings.

"I pointed out in my report to the Rural Districts for 1898 that the Town brook valley is to some extent "frequented by visitors, and that a footpath runs alongside the stream. This remark applies equally to the "Light Spout Valley. The risk of specific contamination of the water by casual visitors is in any case very "remote, and when the large reservoir is constructed, the fact of storage and exposure of the water to "sunlight will be lagely a safeguard against any risk. It is, however, the duty of a Medical Officer of "Health to take the most stringent view of possibilities of water contamination, and for my own part, "although it may seem unnecessary, I should be glad to see provision made for sand-filtration of the water."

e-laws and Adoptive Acts.

The Council have carefully framed a code of Building Bye-laws, and have submitted them to Local Government Board. The Medical Officer now recommends the adoption of the Model t, 1890, and of the model Bye-laws and Regulations retating to (1) Cleansing of footways, privies, e-laws, the Public Health Acts (Amendment) Act, 1890, the Infectious Diseases (Prevention) apits, &c.; (2) Prevention of Nuisances; (3) Slaughter-houses; (4) Dairies and Milkshops.

CLEOBURY MORTIMER (Rural.)

Medical Officer of Health ... ... E. T. WHITAKER, M.B., B.S.C., D.P.H.

Area in acres (exclusive of area covered by water) ... 44338

Census population, 1891 5911

neral Character of District.

The district is a large and thinly populated one of 15 parishes, with a few small villages, mlets, and isolated farms and cottages, the only parts at all urban in character being the town Cleobury Mortimer, and the village of Highley, where mining operations are going on. The id is chiefly under cultivation, but at the western sides rises up the Clee Hill slopes and is moor- id, while at the eastern border the coal measures crop up.

atistics for 1900.

The estimated population in 1900 was 5940.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubere Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart	Cancer.		
1900	17·3	0·5	6·6	0·5	0·1	3·7	1·5	0·6	103	27·6
vergae of preceding years ..										

Influenza caused 4 deaths and so did cancer.

Twelve deaths were those of persons aged 80 years and one person died at 102.

Infectious Disease Incidence.

There were 2 isolated and untraced cases of diphtheria, 1 of membranous croup, and 5 of erysipelas. In November and December 14 mild cases of scarlatina occurred in 6 houses at the foot and side of Clee Hill, and 3 other cases at Highley were possibly connected with these.

House Accommodation is fairly good but there are some old and unsatisfactory dwellings. A number of new houses have been erected at Highley, and the Building Bye-laws have proved of great service in this connection.

Sewerage and Scavenging.

Efficient sewering and outfall, and a system of public scavenging are necessary both at Cleobury and Highley. At Highley there are no sewerage arrangements and no place for depositing the contents of closet pans and ashpits. Sewage lies in large pools in two places and pan closets are frequently filled above the level of the seat. The present state of affairs is described as dreadful and as a serious menace to the health of the locality. Mr. Stooke has devised a scheme for the sewering, but the estimated expense is heavy, and the local mining company propose to carry out a smaller scheme. The necessity for immediate action is great.

Water Supply.

A scheme for supplying Cleobury by gravitation with water pumped by gas engines from the Town Spring to a service reservoir was carried out during the year by Mr. Stooke.

Both Stottesden and Highley are without an adequate supply.

At Highley proceedings were taken for permitting houses to be occupied prior to being certified as having a proper water supply, but the magistrates did not support the sanitary authority. The local Mining Company are now proposing to pump water from the Severn to a couple of service tanks and to supply it unfiltered to their own houses by gravitation.

The Clee Hill water supplies have been considered by the Sanitary Authority during the year, but great difficulty arises from the cottages being so far apart.

Registered Places.

Bakehouses, common lodging houses, and slaughter-houses were duly inspected and found satisfactory, and a register of milk sellers is kept. There are, however, no Milkshops, &c., Regulations in force.

There are Bye-laws for the Regulation of Slaughter-houses and also for the Prevention of Nuisances.

Sanitary Inspection: The inspector does not always receive the support from the Council which is necessary.

CLUN (Rural).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) 82,206

Census Population 1891 7,459

sical and General Character of District.

The District comprises 82,206 acres of hilly country in the S.W. of the County, and on the borders of Wales, much of it at an elevation of 1,000 feet and upwards, especially on the northern and western parts. The centre and south eastern part consists of open valleys from 400—600 feet in elevation, broken and divided by small groups of hills. Geologically it is mainly of Silurian age with exposures of Cambrian and of Old Red Sandstone measures in parts. The natural drainage is by various streams rising in the hill country to north and west, and forming the small rivers Onny and Clun, which leave the District through the valleys on the east and south-east to join the Teme.

The district is sparsely populated and agricultural in character, much of the hill country being cultivated or grazed.

A small area in the north has, in the past, been worked for lead and other minerals, but these industries have much declined in recent years. The district contains the small town of Clun, and several villages of small size which are principally placed in the valleys, and some smaller hamlets and many isolated houses scattered about the hill country.

istics for 1900.

The estimated population in 1900 was 7,330.

eriod.	Death-rate per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Disease.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	18·2	0·54	1·0	0·8	0·5	3·0	1·5	1·5	137	22·8
age of preceding rs ..	15·4	0·72	..	..	..	..	..	..	88	27·1

ectious Disease.

Scarlet Fever.—Twelve cases arose in 8 houses, and Hopesay and Clungunford schools were porarily closed.

A fatal case of *membranous croup* occurred at Ratlinghope, and a mild *diphtheria* in Clunbury.

Enteric. Seven cases and 2 deaths occurred at Chapel Lawn, 2 at Clun and 1 at Hurst Mill, all of ch are dealt with in Part I. of this Report. Single attacks were reported from Clungunford, vcastle, Lydbury North and Purslow, and in two of these the infection was imported

Influenza caused 1 death.

There is no Isolation Hospital or provision for public disinfection.

se Accommodation, is generally adequate and fit, though there are many worn-out houses in upation. A house-to-house survey is in progress.

Sewerage and Drainage.

The sewering of the town of Clun requires attention and it is suggested that a special drainage area might be formed for the purpose. At Clungunford many houses drain into the stream which runs through the village, and both here and elsewhere instances were met with of privies or closets being placed directly over streams which, lower down, were used for slopping purposes.

Water Supply.

Clun town and *Newcastle* each has a good and sufficient public supply. At *Lydbury North*, 11 houses and the school are supplied by gravitation from upland springs, and 12 other dwellings carry from a public pump over a spring-well by the roadside which require protection from surface washings. At *Chapel Lawn* the Council are about to sink a public well in a selected site in the centre of the village.

Clunbury.—Dr. Gepp, during the year, thoroughly investigated and condemned the shallow well supply of this village and recommends that the water from a spring at Clunbury Hill be collected and piped to standpipes in the village. A similar recommendation is made in regard to Clungunford. At Hopton Heath, the public well needs improvement and protection.

Dairies and Cowsheds are registered.

DAWLEY (Urban).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area of District in acres (exclusive of area covered by water) 2,790

Total population at 1891 Census 6,996

The *Physical Features and General Character* of the District are thus described :—

The District lies at a considerable elevation upon the Shropshire Coalfield and table land, of which it forms one of the higher parts. Its surface falls irregularly from north and north-west to south and south-east, and from 670 feet to some 400 feet roughly, the surface drainage being good owing to the steep fall of this part of the northern Severn watershed. The geological formation is the Carboniferous, the District being for the most part upon the Coal Measures, but with small exposures of the Mill Stone Grit in the south western part.

As regards its general character, it may be said to be that of a worked-out coal and iron-mining and iron-working District. Coal mines long out of work and dismantled iron works are common features. At the present time it is a place of residence for an industrial community, many of whose members work in one or two large modern engineering or pottery works within the District, while large numbers work in mines, iron-works, and brick and tile works outside the District. The population fell off by upwards of 2,000 persons between 1881 and 1891, but appears to have somewhat, but not largely, increased in the last ten years. For an Urban District it is very scattered in character. There is a compact business centre with some continuous lengths of houses radiating for some distance from it along the main roads. The rest of the District is practically rural in character, with numerous scattered groups of dwellings occurring.

tistics.—Estimated population in 1900 was 7170.

Period.	Death-rates per 1000 of population from								Infant Deaths per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Disease.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	15·7	0·14	0·5	0·8	..	3·4	1·8	0·4	107	35·0
rage for preceding rs ..	17·3	0·85	..	..	..	..	..	..	147	29·1

ectious Disease.

There was one mild and obscure case of Diphtheria, and there were 23 cases of mild, non- l scarlet fever affecting 18 houses. Most of the cases occurred in the early part of the year to some extent implicated Langley Field Board School. Later in the year the Brand Lee ional Schools were slightly involved.

The medical officer recommends that disinfection of infected premises be carried out by the ncil's Officer.

sing Accommodation is generally adequate in amount, but the majority of the houses are small, and often unsatisfactory in construction or repair, but no case came under notice of an upied house unfit for habitation. A few instances of overcrowding came to light and were lt with. Objectionable closets with underground vaults are often found, and the importance of ystematic house-to-house sanitary survey is again urged.

erage and Drainage.—The District is not sewered upon any system, but a number of piped, erted or open sewers, as well as road water drains to which houses have been connected run n the central and higher parts of the District. In other parts, the slop drains discharge into hes, pools, or on gardens. The sewers on reaching the open become open unmade channels the untreated sewage finally finds its way through natural watercourses to the Severn. erence is made to serious nuisance from such open sewers in Chapel Street and near Brand Lee ools, and the Council is recommended to have an investigation made and plans prepared of their sewers.

rement Disposal: mainly by privy closets with underground vaults emptied by the upiers. On June 6th, 1900, the medical officer presented a special report in which he states the whole question of scavenging requires careful consideration, and suggests that the ncil should procure a special cart for the removal of nightsoil and provide a tip for the disposal refuse. Arrangements should also be made for the services of a horse and man throughout year, so that any householder should, on payment of a fixed charge, be entitled to have his mises scavenged. This would meet the objection that closets must go unscavenged because no can be found to undertake the work, and after due notice to the occupier, in event of default him, the inspector could call in the scavenger's services and recover the cost summarily. It rther suggested that the attention of negligent householders be drawn to the penalty which they r under the Public Health Act, 1875, sec. 47 (3) by allowing the contents of any privy or pool to overflow or soak therefrom.

Water Supply.

Briefly, the existing supply is (*a*) from private pumps and wells, often dangerously situated; (*b*) by hand-carriage, often lengthy, from a dozen or more pubic wells or springs, many of which are organically very pure, though in some cases hard. Suggestions for a supply from Madeley or from the proposed E. Shropshire Water Co. having fallen through, the Council, upon engineering advice, propose to develop the most promising local sources, and have obtained tenders for experimental borings in the neighbourhood of a spring in the Millstone Grit, known as "The Bath," and of another spring at a much higher elevation in the Coal Measure known as the "Spout." If the result be satisfactory, the water will be pumped to service reservoirs and distributed by mains and standpipes.

Registered Places.—Common Lodging Houses are registered and supervised by the inspector. Daries, Cowsheds and Milkshops are registered, and the adoption of the Model Regulations is again recommended.

Nuisance unabated.—Improvements of drainage and closet accommodation at *Dark Lane Row* are needed.

ELLESMERE (Urban).

Medical Officer of Health ... ... E. T. WHITAKER, M.B., B SC., D.P.H

Area in acres (exclusive of area covered by water) 1,204

Census population, 1891 1,830

Statistics for 1900.

The estimated population in 1900 was 1,850.

Period.	Death-rates from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	14·0	1·0	..	2·1	..	2·1	0·5	0·5	58	27·5
1899	18·4	..	..	..	..	..	..	..	137	27·7

Infectious Disease Incidence.

Scarlet Fever.—Ten cases were notified. 3 occurred in one house, and were attributed to imperfectly disinfected clothing worn by a boy attending the same school. The 7 other cases were pupils attending a certain private school.

theria.

Three cases with one death occurred in one house in March, and in November a solitary case cred elsewhere.

tion and Disinfection.

The necessity for an isolation-cottage and better methods of disinfection is emphasized by Medical Officer.

ination.

The returns for year ending December 31st, 1899, show that only about 3½ per cent. of ren born escaped vaccination.

House Accommodation.—This is good, the houses generally being brick-built and substantial, there is no slum property or overcrowding. In some cottages there are minor defects such as best remedied by a house-to-house inspection. Many water-closets are flushed by hand.

Drainage.—The town was drained by Earl Brownlow 30 years ago, and the sewage conveyed of the District to a stream some distance away.

Scavenage.—At present each householder removes his house-refuse to a public tip, and Dr. aker recommends that householders should be required to provide ashboxes, and that the ncil should contract for their frequent emptying.

Water Supply.—This is pure and ample from the Liverpool mains. The average daily mption was 12 gallons.

Trades.—Slaughter-houses and bakehouses have been duly inspected. There are no common ng houses and no offensive trades. A register of Milksellers and Cow-Keepers will in future ept.

ELLESMERE (Rural).

Medical Officer of Health ... ... E T. WHITAKER, M.B., B.SC., D.P.H.

Area in acres (exclusive of area covered by water)	52,000
Census population, 1891	8,119

General Character of the District.—Is a purely agricultural district of 10 parishes and consists rms with cottages, a number of country residences and some small villages, of which hurch with about 50 houses is the largest, whilst Cockshutt, Hadnall, Welshampton and hill are the only others containing 30 houses. The surface of the land is mostly a succession oderate gradients, but some parts are very flat. The subsoil is largely gravel and clay with

Several of the farms supply milk wholesale to places outside the District.

Statistics for 1900.

The estimated population in 1900 was 8,150.

Period.	Death-rate per 1000 population from								Infant Death-rate per 1000 births.	Birth rate
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthises.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	16·7	0·7	0·9	1·2	..	2·3	1·4	0·7	146	26·
1899	16·6	1·1	..	..	..	..	..	..	132	27·

Deaths.

A very large proportion of the deaths were those of old people, the cause in many cases be given as "old age," and no fewer than 25 exceeded 80 years of age.

Infectious Disease.

Scarlet Fever.—Six cases were notified, 5 of which were a continuance of the small outbre at the end of last year. There were 8 cases of Diphtheria and 2 of Typhoid, one of the lat being imported.

Measles.—Tetchill schools were closed on account of this disease.

Disinfection.—The Council are advised to obtain a spraying apparatus for housewalls, an steam disinfector for clothing bedding, &c.

House Accommodation.—This is, on the whole satisfactory, but in some cases water is much need

Drainage.—Dr. Whitaker says: "Hadnall would be improved by draining the horsewash th "and the ditch into which it drains."

Water Supply.—Baschurch is supplied by shallow wells in the gravel. Many of these contaminated and the advisability is suggested of "providing a well of the North end of the villa pumping by a wind engine into a service reservoir, and distrbuting the water by gravitation to sta pipes through the village." As regards Cockshutt it is recommended that the public supply wh is piped to a tank at the north end of the village should be carried through the village to south end. At Hadnall the supply is unsatisfactory, and as the houses are scattered, the prob is a difficult one to deal with.

Registered Places.

Slaughter-houses and Bakehouses are few in number and satisfactorily kept. There are common lodging houses nor offensive trades.

Dairies and Cowsheds.—The register needs revision from time to time, and the rece adopted regulations should be enforced.

Sanitary Inspection.

There is one sanitary inspector (Mr. Green) who serves two other districts, one rural and urban. As the District is a large one requiring constant attention the appointment of an assis inspector is advised, as it is not possible for one to do all the work that should be done.

LUDLOW (Rural).

Medical Officer of Health ... ... G. A. SHACKLE, L.R.C.P.

Area in acres (exclusive of area covered by water) 66595

Census population, 1891 10818

tics for 1901.

The estimated population in 1900 was 10,818.

od.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Cancer.	Heart.		
00	15·0	0.6	0·8	0·8	0·27	2·6	0·9	1·8	82·3	22·4
e for years, 7-1899	15·6	1·0							106	27·8

tious Disease.

Scarlet Fever: 17 persons living in 9 houses were attacked and 1 death resulted. Eight of cases occurred in Bromfield parish, the infection being spread by some mild cases which mistaken for measles. Three cases occurred in Stokesay and 3 in East Hamlet, and in both s the infection was imported.

Membranous Croup: there was one case in the Cainham district. *Typhoid*.—There were 3 ns attacked in 3 houses and 1 death resulted. *Diarrhœa*: see under "Water Supply."

Influenza caused 9 deaths.

ital Accommodation.

Dr. Shackel recommends the Council to approach the Borough with a view to a conjoint e.

School Closure.—East Hamlet, Bromfield, Bitterley, Stanton Lacy and Hayton schools were on account of Measles, and Cainham school on account of Whooping Cough.

Water Supply.—In Ludford parish, town water has been laid on.

On the Clee Hill during January, 1900, there were a great many cases of diarrhœa, which e was not prevalent elsewhere. Dr. Shackel ascribes this "to the snow and the heavy rains ollowed washing many impurties into the drinking water supplies, which are largely derived surface water. Good water has been laid on to Farden, but the scattered cottages at bury and elsewhere are still without a good supply."

LUDLOW (Urban).

Medical Officer of Health ... ... C. B. CRANSTOUN, M.B.

Area in acres (exclusive of area covered by water) 180

Total population at all ages	4,460	At Census of 1891.
Number of inhabited houses	959	
Average number of persons per house	4·6	

Physical Features.

"Ludlow is a small agricultural town on the southern border of Shropshire, about 360 feet above sea "level. It is situated on a large spur of limestone rock which rises at the lower end of the Corve valley. "On the north-west and south side it is separated from the surrounding hills by the rivers Corve and Teme. "On the east side the ground gradually rises till it becomes continuous with the Clee Hill Range.

"The geological formations with their overhanging deposits within the boundary of the Borough of "Ludlow, may be briefly described thus:—

"Taking a line from the Castle through the Bull Ring to the Sandpits, the following strata will be "passed through: –the Castle itself stands upon a mass of Upper Ludlow Rock. Before reaching the Town "Hall the "Downton Sandstone" crops up. This is overlain by gravel, increasing in thickness as we "proceed through High Street towards the Bull Ring, where is found a deep bed of coarse gravel and clay "with large boulder stones. This is followed in Upper Galdeford by a thick bed of red marl overlying olive "shales and old red sandstone. Taking a second line at right angles to the first, that is to say, from the "bottom of Old Street through the Bull Ring, to the bottom of Corve Street, we find for some distance up "Old Street gravel upon blue clay overlying the old red sandstone, but that at about one-third up the street "the Downton Sandstone comes to the surface and continues to within a short distance of the top where a "mass of hard "Blue rock" extends to the Bull Ring."

Statistics for 1900.

The estimated population in 1900 was 4,001.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthises.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	21·3	2·9	0·5	0·7	0·5	2·0	1·3	1·5	107	31·3
Average of 10 years, 1890 —1899 ..	18·8	0·88	..	..	..	..	..	..	131	23·7

The *Marriage-rate* was 23·7 per 1,000 persons living, against 22·4 for the preceding 10 years.

The *Birth-rate* was notably above the average. Of the total number registered 7·8 per cent. were illegitimate, against an average of 9·2 per cent. during the previous 10 years.

Infectious Disease—The borough was free from Scarlet Fever, but a severe outbreak of *Measles* from May to October necessitated much school closure and caused 10 deaths. With regard to the value of disinfection after measles the experience of Paris in 1895-99 clearly shows "that as the ratio of disinfections diminished the number of deaths from measles increased."

Typhoid.—Of 7 cases noted, 2 were imported, and a third was in a house in which typhoid rred in 1899, the patient's discharges being thrown into the privy, the contents of which had e removed through the house in 1899.

Diphtheria.—2 cases occurred. There were associated insanitary conditions in both.

Vaccination: statistics are furnished for the past 10 years, which show that the number of ccinated children is low.

Isolation Hospital.—The Council is advised to make this provision either separately or in bination with the Rural Council.

rculosis.—Dr. Cranstoun's special report is quoted in Part I.

er.—The findings of the Midland Medical Association's Committee are quoted. *(See PartI.)*

er Supply.—Good both in quantity and quality.

erage System.

A new scheme is being carried out which will be capable of draining the areas which it is osed to embrace in the extended Borough. "It is highly necessary that the work should be e with as little delay as possible, for there are houses from which the drains have beeen cut off, no permission yet given to connect with the new sewer."

nage.—The importance of water-tight house drains is emphasized, and the disconnection of pipes from drains by gully-trap at foot is recommended. Large 'cesspool' street gullies should bolished.

sing Accommodation.—17 dwellings were condemned during the year. The provisions of the Act are briefly summarized.

rement and Refuse Disposal.

The ever-increasing accumulation at Smithfield tip is a public nuisance and a menace to the th of the town. The provision of a Destructor is recommended.

ghter-houses were specially reported on, and improvements have resulted.

ehouses, and *Dairies and Cowsheds*, were regularly inspected, the latter are capable of much ovement. Dr. Cranstoun's good work in regard to prevention of Tuberculosis in Milch Cows escribed in Part I.

One dairy voluntarily ceased to supply milk because of Scarlet Fever occurring on the premises.

mary of Recommendations.

1.—Abolition of Smithfield Tip, and provision of Destructor.

2.—Extension of water-carriage system.

3.—Improvement of housing of poor.

4.—Examination of existing sewers and preparation of correct sewerage map.

5—Provision of Isolation Hospital.

MARKET DRAYTON (Rural).

Medical Officer of Health ... ... A. MACQUEEN, M.D.

Area in acres (exclusive of area covered by water)	51,383	
Total population at all ages	11,969	*At Census of 18 '1.*
Number of inhabited houses	2,613	
Average number of persons per house	4·58	

Physical Features.—The Rural Sanitary District of Drayton comprises an area of upwards of 51,000 acres situated in the great central plain of England, at an elevation of about 300 feet. The land in general contour is level, well watered and highly cultivated, and the greater portion is drained by the River Tern in its winding course to the Severn. Near the centre of the District is the town of Market Drayton. The formation throughout is the New Red Sandstone, which attains its greatest elevation in England in the Hawkstone Hills near the western limit of the District.

Statistics for 1900.

The estimated population in 1900 was 11,465.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	18·6	1·04	..	1·5	0·6	3·7	2·6	0·7	170	24·5
Average of 5 preceding years.	16·6	..	..	..	..	..	..	..	122	26·3

Marriages.—The marriage-rate was 12·4 per 1,000 population, against an average of 13·1 for the preceding 10 years.

Infectious Disease.—There were 53 cases of notifiable disease, viz., 36 of scarlet fever, 11 of diphtheria, 4 of erysipelas, and 2 of enteric, both of which were imported. Whooping cough, measles and mumps were prevalent in certain parishes Schools were temporarily closed on account of infectious disease in Woodseaves, Little Drayton, Hinstock, and Child's Ercall.

Voluntary Notification of Phthisis.—Acting upon Dr. Macqueen's advice, the Council have adopted this measure

Hospital Isolation and Steam Disinfection.—No provision of either kind has yet been made.

Arsenical Neuritis.—Some 30 cases came to light in December, which were caused by drinking beer containing small quantities of arsenic. A warning circular was sent to all beer sellers, and one brewery company withdrew contaminated beer from sale, and ordered their stock to be destroyed.

House Accommodation is generally adequate in quantity, but in some parts there is great room for ›vement as to fitness. Building Bye-laws are about to be drawn up.

Sewerage.—A system of sewerage for Little Drayton has been commenced. Market Drayton will require attention. The sewers are now regularly flushed in dry seasons.

Excrement and Refuse Disposal.—The number of W.C.'s is gradually increasing in Market on. There is no public system of scavenging.

Water Supply.—The town of Market Drayton has an excellent service of upland surface water the reservoirs at Blore Heath. The supply of the surrounding villages is unsatisfactory, and no al action has yet been taken.

Registered Places.—Lodging houses, bakehouses, and slaughter houses are regularly inspected. es, &c., are registered, but are not inspected.

NEWPORT (Rural).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) 22,945

Census population 1891 6,563

cal and General Characteristics.

The District comprises 22,945 acres lying upon the Eastern border of the County. The Northern and larger part is on the Shropshire plain, varying in elevation from 150 to 300 feet, and lying in the Bunter Beds of the New Red Sandstone. This part is entirely agricultural and contains the villages of Edgmond and Tibberton with some smaller ones. The Southern and much smaller part rises rather rapidly, reaching some 500 feet elevation at the extreme border on the South, and comprising the apex of the extensive triangular Coalfield which has its base some miles to the South. This part lies upon the Coal Measures, with a small isolated outcrop of much broken and older strata forming Lilleshall Hill, on and around which is the village of Lilleshall. The natural drainage is by various small streams from the South and East flowing towards the West, and falling into the Tern river outside the District. There are several collieries and some engineering ironworks in the Southern part, and the population is relatively denser, but much scattered in groups of dwellings, and for the most part industrial.

tics for 1900.

Estimated population, 6506.

od.	Death-rates per 1000 population from									Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.			
0	17·6	0·30	0·9	1·2	0·6	3·2	1·3	1·6		122	25·1
of 21 eding s ..	16·2	1·04								122	25·4

Infectious Disease.

Scarlet Fever. Fifteen mild cases affecting 13 houses occurred in the parish of Lilleshall i October and the School becoming implicated was closed for a few weeks.

There were also one case of diptheria and one of typhoid, but in both the source of infection wa obscure.

Influenza caused 6 deaths.

Isolation and Disinfection. There is no hospital or provision for public disinfection.

House Accommodation

In the agricultural area the houses are generally adequate in number and fitness, but in th industrial portion are less satisfactory, many houses of the "Barrack" order remaining, often one storey, poorly built and unceiled, damp and ill-ventilated. The owners have closed some 3 of the very worst, and has effected certain improvements to others, but many are incapable being made really habitable Systematic house inspection and subsequent action by the Counc when necessary are recommended.

Sewerage.

Improvements, forming part of a scheme for the thorough drainage of the village of Edgmond have been effected, two offensive outfalls into ditches having been cut off, and an efficient sewe laid. Some 300 or 400 yards of piped sewer has also been laid in School lane, for the Schoo and several houses. The disposal of sewage at present is by 4 separate outfalls upon land.

Excrement Disposal: with few exceptions, by outside privies with underground vaults.

Water Supply.

Church Aston and Chetwynd Aston have had supplies laid on from the town of Newport during the past year or two.

At Edgmond a principal resident has made a deep boring on his property, by which water i raised by a wind-engine to a 10,000 gall. reservoir, whence it is laid on to 8 dwellings and als supplies a public fountain.

Tibberton. The supply of this village is in an unsatisfactory state. The medical officer mad a series of analyses of representative well waters, and a copy of his report was sent to the Loca Government Board, but was not supplied to the County Council.

Lilleshall. The supply of this village was also specially reported on, but a copy of th report was not sent to the County Council. Its main points are set out in the Medical Officer' annual report, and as they largely accord with the statements in the County Medical Officer' recent report, it is unnecessary to reproduce them.

Canal Boats, Dairies and Cowsheds, Bakehouses, &c., are looked after under the Acts and Order regulating them.

NEWPORT (Urban).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water 759

Census population, 1891 3,404

cal and General Character.

The District comprises 759 acres lying on the eastern border of the County, very level in contour, the general elevation being some 250 ft. The natural drainage is to the West, but there is no stream of any importance. The subsoil is the Bunter beds of the New Red Sandstone. The district includes the market and residential town of Newport, consisting chiefly of one wide street about a mile in length, with several passages, narrow lanes and courts running at right angles from it. About the centre there is some crowding of houses upon area. To east and west is open country, with extensions of more modern building along the roads converging to the town, and some outlying collections of houses.

tics for 1900.

Estimated population, 3,409.

iod.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
900	16·1	0·3	0·8	1·7	0·2	1·4	0·2	2·2	88	23·6
rage of eceding ..	17·2	0·72	..	1·2*	..	..	..	..	115	24·7

* Average for 3 years.

ence of Infectious Disease.

One case of scarlet fever which was removed to the Isolation Hospital, 1 of diphtheria and erysipelas were the only cases notified.

tion Hospital and Disinfection.

There is an isolation hospital consisting of caretaker's cottage and two wards built on to it, le of isolating three cases of each sex suffering from the same disease.

There is no provision for public disinfection, and the Council were not disposed to go to the se of providing a small steam-disinfecting apparatus.

Accommodation.

Adequate in amount and for the most part also in fitness, though there are a good many old s in a poor and worn out condition, mainly in the lanes and passages about the centre of own. A good deal of improvement in respect of defective conditions of paving, drainage, -disposal, &c., is being gradually effected, and the institution of a systematic house-to-house ry survey is recommended

Housing of the Working Classes, 1890. Two houses reported last year have been mad thoroughly habitable. The *Erection of New Buildings* is controlled by Bye-laws.

Sewerage and Drainage.

Plans have been apopted and negotiations completed for re-sewering parts of the town needin it, and for providing a proper outfall and system of treatment. It is recommended that when th new sewers are laid, the Council should require every drain to be tested and if necessary relai before allowing it to be concreted.

Excrement Disposal. There are from 150 to 200 water closets and some 600 privies. "Th "provision of new sewers will enable the Council to call for the substitution of waterclosets fo "defective privies in many places."

Removal &c. of House Refuse: There is a system of public scavenging by a contractor to th Council, but undue delay occurs at times, and the Council is giving close attention to the matte

Water Supply: an excellent and unfailing supply from 3 borings in the New Red Sandston is laid on to the houses and to public standpipes.

Common Lodging House, Slaughterhouses, Bakehouses, Dairies, &c., are regularly inspected an kept in accordance with the bye-laws and regulations governing them.

Inspection of Meat. With the co-operation of the railway officials, attention is being directe to the quality of carcases from the surrounding country which pass through Newport *en route* towns in the Midlands.

OAKENGATES (Urban.)

Medical Officer of Health ... ... E. T. WHITAKER, M.B., B.S.C., D.P.H.

Area in acres (exclusive of area covered by water) 3607

Formation and General Character of the District.

The area covered by the present District of Oakengates, is the centre of an important coal an iron producing locality, and formed, previous to 1898, a part of each of the *rural* districts o Wellington, Newport and Shifnal. The population and sanitary conditions are, however, such th energetic and comprehensive action under urban powers was called for, and the urban district w therefore constituted in 1898. It includes several thickly populated areas, and a good deal o open country with scattered cottages, built with little attention to sanitary requirements. T Rateable Value is relatively much less than that of the other urban districts in the County.

istics for 1900.

The estimated population in 1900 was 10,800, and the average number of occupants per house believed to be 5.

riod.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-Rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Cancer.	Heart.		
900	15·7	1·4	0·2	0·2	0·6	2·5	0·5	0·9	135	34·9
ge of ceding rs ..	18·4								181	31·8

The Infant Mortality Rate, though a great improvement on 1899, leaves much to be desired. of these infants succumbed to diarrhœa, and several others died from faulty nutrition. *also Part I.)*

tious Disease.

Typhoid.—Twenty-four cases occured in 14 houses, and were spread over the first nine months e year. 18 cases were closely associated with specifically infected privies, middens or adjacent nds, 2 cases were imported and 4 were untraced.

Scarlet Fever.—Fifty-seven cases occurred in 34 houses, and no fewer than 23 were either d, third, or fourth cases in one house.—"This, is of course, due to the fact that in most nces there is no isolation of the sufferer from the other children in the house, nor can there The mild type of the disease and its consequent non-recognition contributed to its spread.

Diphtheria.—5 cases occurred, but in none was an obvious source of infection ascertained.

tion Hospital and Steam Disinfection.—During the year a special report was submitted r. Whitaker on this question, recommending the joint provision by the Urban Councils of ington and Oakengates of a properly constructed sanitorium. Both Councils approved of the iple, and invited Wellington Rural to join, but that Council declined.

ination.—The last complete years returns show an unvaccinated percentage of 22. There were no conscientious objection certificates.

e Accommodation.—Consists mostly of small cottages occupied by colliers and ironworkers are built in definite streets, but many are scattered about very irregularly, giving rise to derable difficulty in serving them by any regular system of sewers and watermains. Many ges are defective in respect to eaves spouting, paving, drainage, and excrement disposal, and the cal officer again urges a systematic house-to-house sanitary survey, and the employment of a e-time inspector, or of an assistant to the present inspector who is also surveyor. Twenty-one dwellings were built during the year, and Dr. Whitaker calls attention to the necessity for ing a suitable code of Building Bye-laws.

Sewerage.

During the year the Council instructed Mr. Berrington, C.E., to prepare a complete scheme an estimate for sewering the district. The scheme provided for a single outfall at the north end, fo land treatment, and for discharge of effluent into the brook, the estimated cost being £29,700.

Scavenging.– This is done by the Council. A more frequent collection of house refuse is desirabl

Water Supply.—A scheme was devised by Mr. Stooke in 1899, but is in abeyance in consequenc of the East Shropshire Syndicate's and the County Council proposals.

Registered Places.

Slaughter-house bye-laws and *Dairies, Cowsheds* and *Milkshops* regulations have been adopte but with the present staff it is not possible to give these districts the attention they requir *Bakehouses* are generally properly kept. There are no *common lodging houses.*

OSWESTRY (Rural),

Medical Officer of Health ... ... W. DE LA P. BERESFORD, B.A., M.D.

Area in acres (exclusive of area covered by water) 72,407

Census population 1891... 4,030

Estimated population in 1900—15,400.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthises	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Cancer.	Heart.		
1900	15·06	0·18	0·8	0·7	0·06	2·6	0·7	1·3	84·5	26·1

Infectious Disease.

Twenty-four cases of *diphtheria*, and 17 of scarlet fever, were notified. Ten of these were continuance of the outbreak which commenced in Ruyton-xi-Towns in December, 1899. A systemat inspection of the district was made, and many dangerous nuisances removed. All the infected premis were thoroughly disinfected, and every precaution taken. The cases of *scarlet fever* were isolate manifestations.

A severe epidemic of *Influenza* occurred at the Workhouse at Morda. There were 13 deaths in t District from this cause.

sing Accommodation.

In the report of Mr. Richards, the sanitary inspector, which is appended to Dr Beresford's, the ctor states that he found many houses damp and in an unsatisfactory condition in respect of rain- r troughing, closet accommodation, drainage, &c. A committee of the Council visited 4 cottages at er Chirk Bank, and ordered important alterations, which are in progress. Two houses were closed r. Beresford as unfit for human habitation.

The District Council has recently adopted building bye-laws, which "have had a most wonderful on the new erections."

er Supply.

The Pant water supply had to be cut off for two months to permit of the reservoirs being cleansed repaired. The District Council are endeavouring to acquire these works from the Earl of Powis. water-schemes are proposed for Nantmawr and Treflach. The necessity for examination of the ly at Gobowen is mentioned.

OSWESTRY (Urban).

Medical Officer of Health ... ... W. DE LA P. BERESFORD, B.A., M.D.

Area in acres (exclusive of area covered by water) ...	1888	
Total population at all ages	8946	At Census of 1891.
Number of inhabited houses	1778	
Average number of persons per house	5·0	

Estimated population in 1900, 9750.

riod.	Deaths per 1000 population from								Infant Death-rate per 1000 Births.	Birth Rate.
	All Causes.	Seven Chief Zymotics.	Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
900	16·5	0·7	0·4	0·7	0·6	2·1	1·3	0·5	106	25·9
ge for 0—99..	17·4	..	..	..	..	..	..	..	137	27·2

The increase of the death-rate from 15·6 in 1899 to 17·4 in 1900 is ascribed to an epidemic of enza which caused, directly or indirectly, no less than 24 deaths in the House of Industry which chargeable to the Borough.

tious Disease.

Three cases of enteric, 3 of diphtheria, 9 of scarlet fever, and 5 of erysipelas were reported. One of enteric and one of diphtheria were imported. Two cases of enteric were associated with obviously drainage conditions.

Influenza caused 4 deaths.

Housing Accommodation.

There are very few unhealthy or overcrowded houses, and the sanitary condition of the Borough i at present good. "The new streets, however, in course of construction are very much cut up, and i consequence damp and not very healthy. . . . . The anxiety of the public to be the first inhab tants of new houses is not easily explainable, ... at any rate, a new house built in wet weathe without concrete basement or subsoil drainage must of necessity take a considerable time to dry an warm up to a healthy standard."

Removal of House Refuse is now effected daily by the Council.

Sewage Disposal.

The bacteriological filter beds "have done all and more than was expected of them, and have turne out a great success. The purification of the stream along its course is wonderful."

Water Supply is ample and good.

SHIFNAL (Rural.)

Medical Officer of Health ... ... E. T. WHITAKER, M.B., B.SC., D.P.H.

Area in acres (exclusive of area covered by water) 43651

General Characters of District.

It is mostly of an undulating character, though in parts very flat, and overlies a successi of the New Red Sandstone series (Keuper, Bunter, and Permian), the Coal Measures croppi out at the extreme west border of the District. In addition to a few country mansions and so small villages and hamlets, there are the more urban communities of Shifnal and Albright Shifnal is the more populous, and constitutes a 'contributory area.'

Statistics for 1900.

The estimated population in 1900 was 8950.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth rate
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart	Cancer.		
1900	16·6	0·5	1·7	0·7	0·5	2·2	1·3	0·6	112	25·
Average of 2 preceding years ..	14·4	..	..	..	..	..	..	..	101	23·

ctious Disease.

There were 8 cases of scarlet fever, 3 of typhoid, and 1 of erysipelas. One of the typhoids imported.

Influenza caused 16 deaths.

ation and Disinfection.

The provision of a cottage with caretaker for the reception of infectious cases, and the chase of a steam disinfector and a sprayer are recommended.

Vaccination Returns are very satisfactory, as only about 9 per cent. excepted up to the of the year.

sing Accommodation generally satisfactory, but some dwellings are very old and almost repair. Bye-laws relating to new streets and buildings are about to be adopted for Shifnal n and Albrighton.

erage and Scavenging.

A scheme for the sewering of Shifnal town by Mr. Berrington, C.E., at a cost of about 5,000, is approaching completion, and the Council have contracted for frequent and regular enging of house refuse and privy pits.

At Albrighton, there is need for similar improvement in the same direction.

At Tong, sewage disposal appears to be satisfactory.

ter Supply.

Shifnal town, Kemberton, and possibly Stirchley, are about to be supplied with Harrington er by agreement with Wenlock, and a better supply for Tong and Tong Norton is contemplated.

istered Places.

Common Lodging Houses are regulated by a Code of Bye-laws under the 1851 Act. In regard *Dairies and Cowsheds*, the Model Regulations are in force, and bye-laws are about to be pted for the management of slaughter-houses.

sances: bye-laws for the Prevention of Nuisances, and the cleansing of footways, closets, have been adopted.

SHREWSBURY (Urban.)

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.,

Area in acres (exclusive of area covered by water) 3525.

Total population at all ages	26967	At Census of 1891.
Number of inhabited houses	5600	
Average number of persons per house	4·8	

Physical Features of the District.

"The Borough comprises 3,525 acres, forming an area nearly equal in length and breadth, and roughly "quadrangular. This area lies in the Valley of the Severn, which is here wide and open, having a gradual "fall to the river and varying in elevation from 150 feet to 260 feet above sea level. The geological "formation is varied, the Permian Red Sandstone across the centre, with the Bunter beds of the New Red "Sandstone to the North, and the Coal measures on the South. The actual subsoil is, however, mainly "river drift of varying and generally considerable thickness, in places stiff clay, but generally sandy and "dry in the upper part, with clay underlying at greater or less depth. The contour offers good natural "drainage to the Severn, which owing to its devious course flows over a length of some eight miles either "through, or along the borders of, the District. The actual length of its flow through the District is about "three miles.

"The old town of Shrewsbury stands on two hills, of generally moderate ascent, but steep in parts, and "nearly surrounded by the river, which here forms a horseshoe curve some two miles in length with a width "across the neck of some 400 yards. This enclosed part is for the most part densely built upon. Of the "various suburbs across the river, Frankwell forms an old settlement on the North West with modern "extensions along the main roads radiating from it. Kingsland is a modern residential suburb to the South "West, Coleham an old settlement to the South East with Belle Vue, a modern extension, adjoining; and "Abbey Foregate, old near the river and modern and residential further out, lies to the East. To the North "East, on the low lying ground outside the neck of the peninsula, is the considerable district of Castle "Fields, built over for the most part some forty to fifty years ago and forming an artisan residential "quarter."

Statistics for 1900.

The estimated population in 1900 was **27,473.**

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Birth.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart	Cancer.		
1900	19·5	1·29	0·8	1·49	0·5	3·8	2·4	0·8	157	24·5
Average of 10 preceding years ..	18·7	1·3	..	..	..	..	..	..	145	27·2

Phthisis caused 41 deaths, other forms of tubercular diseases 15, influenza 24, cancer 23, diphtheria 5, and enteric fever 4.

The Zymotic Death-rate (1·29), compares favourable with figures for the country generally 2·00, and also with those (1·57) for England and Wales less the 100 largest towns, the only disease in which the mortality was higher in Shrewsbury during 1900 having been whooping cough.

Dr. Gepp suggests that the Corporation obtain abstracts from the recent Census returns as to the proportional area and population of the various parts of the Borough, as there are no such figures at present available.

idence of Infectious Disease.

Scarlet Fever.

Forty-four scattered and non-fatal cases arose in 35 houses, but there was no epidemic prevalence.

Diphtheria.

Thirty-five cases occurred in 31 houses. In two or three instances there was a grouping of 3 4 cases in one locality, with evidence of spread by association at school or play, and a prevalence suspicious sore throat in the neighbourhood.

Enteric or Typhoid.

34 cases came to light. Including 1898 and 1899 there have only been 3 years with a lower nber, and Dr. Gepp says "there is therefore reason for the belief that this disease, the epidemic valence of which has constituted the 'black-spot' of the borough, is being sensibly reduced." 3 consecutive years the mortality from enteric has been below that of the country generally, as l as below the average rate for the Borough. The essential preventive measures recommended (1) a wholesome water-supply laid on to the houses, and (2) the removal of defective conditions drains and sewers which give rise to soil-pollution.

The provision of special "typhoid-pails" for the reception of infected excreta is again urged.

Summer Diarrhœa.—The prevalence of this disease is an important indication of the existence filth laden atmosphere. In Shrewsbury the death-rate per 10,000 population during the summer ter, as against 19 for England and Wales, and 11 for England excluding the large towns.

Phisis and Tuberculosis.—The adoption of a system of voluntary notification is recommended. fall in the phthisis death-rate in the country generally during the last 20 years, has occurred Shrewsbury only during the last 5 years.

pital Isolation.

There is a small emergency hospital of six beds for cases of small-pox or cholera. It is ient in several essentials of equipment, and its use for the reception of scarlet fever has been ved, but at the entire cost of the patients' friends for nursing and maintenance, and hence it been but little used. During the year the Sanitary Committee considered Dr. Gepp's report on isolation requirements of the Borough, but were indisposed to recommend the necessary outlay for scheme.

lic Disinfection.—Apparatus for spraying walls and for fumigation by formic aldebyde have obtained, and it is hoped that a public steam disinfecting station will be very shortly provided.

se Accommodation.—Is generally adequate in amount, and though many very old houses do afford wholesome conditions of habitation, it is exceptional to find one susceptible of direct n for closure. There are no tenement houses and very little overcrowding. There is generally space about houses, but in limited areas of the old town, and in Frankwell and Coleham also, buildings are, in places, densely packed upon area, and there are numerous 'shuts' or passages ng off the older streets, often opening into courts surrounded by houses, but as a rule forming y open spaces.

Dr. Gepp considers that there is a real want of new houses in good situations to let at about 5/ per week including rates. In addition there is a large population earning 18/- to 21/ per week who cannot afford to pay this rental, and who consequently live in old, small and often otherwise unsatisfactory houses at rents varying from 2/- to 4/. per week. He therefore suggests careful examination of the matter by the Corporation, and if desirable, purchase of land and erection of cottages under part III. of the Housing of the Working Classes Act, 1890. Also the purchase and repair of existing dwellings in confined areas, and their subsequent occupation under supervision as to overcrowding.

A number of courts or passages are mentioned as requiring paving.

Sewerage and Drainage.

There are still many old brick culverts, and the suggestion is made that a sum of money be devoted each year to the replacement or improvement of old sewers.

The sewage works and farm are practically complete. There is still much room for improvement in the condition of house-drainage.

Refuse Disposal.

The water-carriage system is universal in the Borough. House refuse is collected once and sometimes twice weekly, and it is reccommended that covered carts be used for the purpose. The provision of a refuse-destructor is under consideration.

Water Supply

(*a*) *River Water.*—This has been greatly improved by the interception of the Bicton Asylum sewage. The impending removal of the sewage from Bagley Brook, and the interception from some cottages on the river bank at Coton Hill, will constitute important improvements.

(*b*) Conduit-water is derived from springs out-cropping from the gravel in a basin some 2 miles south-west of the town at all times, and during was of high organic purity. There are now 150 standpipes, and also eight pumps fixed in those parts of the Borough where the water will not gravitate. The wells and tanks are thoroughly protected against contamination, and Dr. Gepp suggests that the enclosed area surrounding the wells should be provided with sufarce water drains.

Registered Places

Slaughter-houses.—Twenty-four are registered, of which 17 are in Roushill. They are periodically inspected, and very fairly kept. The provision of a public abattoir is again suggested.

Bakehouses.—Forty-three in number, or which 2 are undergroud. They are generally clean and well kept.

Dairies, Cowsheds, and Milkshops

There are 36 milch-cowkeepers within the Borough, and 44 retailers living outside the Borough, but selling milk within it are 23 cowkeepers. They are registered, and their premises periodically inspected.

ilk and Tuberculosis.

Upon Dr. Gepp's advice, the Borough veterinary inspector was instructed to make a special spection of all milch-cows in the Borough. He carefully examined 239 cows and found that 31 this number (or 13 per cent of the whole) presented indications of tuberculous udders. Dr. Gepp dorses his recommendation that the suspected cows be kept under observation by means of a arterly inspection, and refers to the necessity for, and failure, so far, to secure inspection of cows pt outside the Borough whose milk is sold within.

e of Food and Drugs Act.

In all 69 samples were taken, of which 62 were genuine, including all of the 11 milk samples. 32 samples of beer, 1 was found to contain a very slight amount of arsenic; two others were nd appreciably contaminated, and prosecutions followed.

OTE.—See references to Shrewsbury under "Hospital Accommodation" and "Water Supplies" in rt I.

TEME (Rural).

Medical Officer of Health ... ... ARTHUR H. HOFFMAN, M.D.

Area in acres (exclusive of area covered by water) ...	23007	
Total population at all ages	1870	At Census of 1891.
Number of inhabited houses	388	
Average number of persons per house	4·8	

atistics for 1900.

The estimated population in 1900 was 1870.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	14·9	1·0	2·6	1·0	..	2·1	2·6	0·5	143·8	29·9
..	..	..	..	..	..	..	..	..	..	..

fectious Disease.

There were 5 cases of scarlet fever in 3 houses, 3 of erysipelas, and 1 of enteric. Influenza caused eaths.

House Accommodation: Owing to the number of strangers engaged in the construction of the Birmingham Waterworks, house accommodation is temporarily rather insufficient. There are also a good number of old and defective thatch cottages in the District, which are hardly fit for occupation.

Water Supply: The district depends mainly on wells and small watercourses, and "is not badly served with the exception of Kinsley which is still in the unsatisfactory condition in this respect reported last year."

NOTE.—The Teme Water Supplies are now being reported upon by the County Medical Officer.

WELLINGTON (Rural.)

Medical Officer of Health ... ... W. T. HAWTHORN, M.R.C.S.

Area in acres (exclusive of area covered by water) 26521

Census population, 1891 11185

Statistics for 1900.

The estimated population in 1900 was 11185.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart	Cancer.		
1900	13·4	0·3	0·8	1·1	0·6	2·5	1·7	0·6	40	49·2
Average of 6 preceding years ..	16·2	2·9*	0·5*	1·3*	..	3·6*	2·3*	..	112·3	38·3

* Average for 4 years.

These figures with the exception of the Influenza mortality must be considered very favourable. The extremely high birth-rate and low infant death-rate are noteworthy. The Zymotic rate is based upon 1 death from Whooping Cough and 3 from diarrhœa.

Infectious Diseases.

69 cases were notified against an average of 71 for the preceding 4 years. 51 cases were scarlet fever, and necessitated the closure of the Crudgington Board School. 8 were measles, 3 diphtheria, 2 puerperal, 1 enteric, and 4 erysipelas, one of which was fatal

The Isolation Hospital has been put in a good state of repair during the year.

House Accommodation.

More house accommodation is required at Hadley, in consequence of the opening of the Electric Car Works, but steps are being taken to meet these requirements, and it is, therefore, a matter for regret that no building bye-laws are in force.

Abatement orders were made in respect of 3 bad cases of overcrowding.

Sewerage.

For the purpose of draining new dwellings at Hadley, the main sewer has been extended as far as Haybridge, and a scheme is being prepared for dealing with the sewage of this village.

Water Supply.

Hadley, Ketley, Lawley Bank and Rodington are still without a much-needed supply of water, and in Hadley there are a considerable number of new houses which are, for this reason, without certificates of fitness for occupation. The other parts of the district are fairly well off in this respect.

Sewage Farm Nuisance.

Offensive smells from the Urban Districts sewage farm are again complained off, and the Eyton Brook is still being seriously polluted. It is now proposed to discharge the effluent into the stream beyond the public road, but Dr. Hawthorn doubts that this will remove the nuisance

WELLINGTON (Urban).

Medical Officer of Health ... ... E. T. WHITAKER, M.B., B.SC., D.P.H.

Area in acres (exclusive of area covered by water) ...	360	
Total population at all ages	5,831	At Census of 1891.
Number of inhabited houses	1,422	
Average number of persons per house	4·1	

General Character of District.—Wellington is a small market town, serving a large area of country, chiefly agricultural, but partly mining and manufacturing. It lies on the lower layers of the New Red Sandstone, a spur of the Caradoc cropping up at the S.E. corner. The subsoil is clay and gravel drift. The surface level of the ground varies a good deal, and drainage gradients are generally sufficient.

Statistics for 1900.

The estimated population in 1900 was 6,400.

Period.	Death-rates per 1000 population from All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.	Infant Death-rate per 1000 Births.	Birth-rate.
1900	17·8	1·5	0·3	1·7	0.1	1·8	1·2	0.7	88	28·1
Average of 2 preceding years ..	16·7								142	26·3

Incidence of Infectious Disease.—2 cases of diphtheria occurred in 2 houses, in both of which there were serious sanitary defects.

Scarlet Fever.—48 cases were notified or discovered, but the outbreak was of an extremely mild type, and no death resulted.

Measles was somewhat prevalent, and necessitated the temporary closure of the Infant Department of one school.

Hospital Isolation and Steam Disinfector.—A joint Committee of the Wellington and Oakengates Urban Councils are considering this matter.

Vaccination.—The figures for the year show that 33 per cent. escaped vaccination, and that 5 conscientious objectors' certificates were granted.

House Accommodation.—There is a large amount of old cottage property, much of which is beyond decent repair. Two kinds of houses are required, viz. (1) dwellings for the poorer class of labourers at weekly rents of 3/- to 3/6, and (2) better class houses to let at 4/6 to 5/-. The Council is taking steps to provide the latter, but it is probably not possible to build houses at the lower rental named. Dr. Whitaker thinks, however, that when better class dwellings are provided, many old but habitable houses now let at rentals less than 4/6 to 5/- will be available for the poorer people, as their present tenants would willingly take the new houses.

Sewerage.—The town has been recently drained by a comprehensive scheme, the outfall, with precipitation works and land for filtration, being 2 miles from the town.

Scavenging.—There are many old privy-pits for which water closets should be substituted. House refuse is collected weekly.

Water Supply.—The water from good and adequate gathering grounds round the Wrekin is impounded and supplied by gravitation to the town, but more storage provision is necessary, and a proper system of filtration is desirable.

The daily consumption was 21·4 gallons per head.

Slaughterhouses, Lodging Houses, Dairies, and Bakehouses are supervised and inspected from time to time. The provision of a public abattoir is suggested.

General Sanitary Work.—The present sanitary inspector is also the surveyor, building inspector, and waterworks manager; and Dr. Whitaker states that his present duties are quite beyond the capacity of one man, and recommends the appointment of an assistant or of an independent sanitary inspector.

WEM (Rural).

Medical Officer of Health ... ... JOHN DALLEWY, M.R.C.S., L.R.C.P.

Area in acres (exclusive of area covered by water) ..	52,451	
Total population at all ages	10,119	At Census of 1891.
Number of inhabited houses	2,207	
Average number of persons per house	4	

Statistics for 1900.

The estimated population in 1900 was 8,119, as, during the year, a portion of the Parish of Wem known as the "Special Drainage Area" was formed into a new Urban District with an estimated population of 2,000.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart.	Cancer.		
1900	14·7	0·2	1·3	0·8	0·2	1·7	1·8	0·7	51	26·3
Average for 10 preceding years ..	14·0	..	..	..	..	..	..	..	93	27

Infectious Disease.

Six cases of *Scarlet Fever*, one of diphtheria and three of erysipelas came to light.

On account of the prevalence of, Whixall Board and National Schools and the Edstaston Schools were closed for some weeks.

The prevalence of *Mumps* necessitated the closure of Prees Schools for 1 month.

Water Supply: cases of defective supply are dealt with as they become known to the authority and the water supply of new houses has been examined before granting certificates.

Dairies, Cowsheds, and Milkshops are not registered and there are no regulations in force.

WEM (Urban).

Medical Officer of Health ... ... E. T. WHITAKER, M B., B.SC., D.P.H.

Area in acres (exclusive of area covered by water) ... ... 453.

Statistics for 1900.

The estimated population in 1900 was 2,200.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	10·4	2·2	0·9	0·4	..	0·4	..	..	112	28·1

Wem Urban District was constituted in 1900, comprises an area of 453 acres of flat land with a population of about 2,000, and is practically the urban part of the former rural district. The town itself is a well-built market town in the centre of an agricultural district. The only manufactories it possesses are a tannery and a brewery.

The death-rate from all causes is very low, but the zymotic mortality rate of 2·2 is not so satisfactory and is based upon 4 deaths from diarrhœa. There were 2 deaths from influenza and 1 each from phthisis and pneumonia.

Infectious Disease Incidence.

Five cases of scarlet fever occurred of which 1 was imported and 2 others were from known contact with previous sufferers. There was one case of erysipelas.

There is no provision for isolation and the Council are recommended to either join with the Rural District in providing a small hospital, or to arrange for an isolation cottage and caretaker.

House Accommodation. In general this is distinctly good, but a number of houses have minor defects and a few are in a bad state. There may be some slight amount of overcrowding in a few instances.

Sewerage and Scavenage.

Many of the sewers appear to be old stone culverts at a very little depth. There are two outfalls, and at one there is a tank to screen the sewage, which eventually goes into the Ro len Brook. There have been no complaints of any nuisance.

There are a large number of pan closets which have taken the place of privies. Their contents as well as house refuse and ashes are removed weekly by the Sanitary Authority.

Water Supply: From a well in the Bunter some 3 miles S.E. of Wem a good supply of water is pumped to a reservoir on Palm's Hill and laid on from thence to standpipes and to many houses. During the year under notice the daily consumption averaged 16 gallons per head for all purposes and 13 gallons for purely domestic purposes.

The *Rainfall* during the year amounted to 29.19 inches.

Registered Places.

Bye-laws are being adopted in respect of *Slaughter-houses, Common Lodging Houses, Dairies, Cowsheds,* &c., are being registered. The *Bakehouses* are suitable.

Nuisances.

Bye-laws for the Prevention of Nuisances are about to come in force.

WENLOCK (Urban).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) ...

Total population at all ages	15,703	At Census of 1891.
Number of inhabited houses	3,447	
Average number of persons per house	4·5	

Physical Features and General Character of the District.

The District comprises 22,657 acres, being the largest Borough in area in the country. This area is of very irregular outline, but is, roughly, some ten miles long in greatest length, from North to South West, and has a mean breadth of some four miles, being narrowest where the Severn, traversing the District from West to East, makes a natural division, the part lying to the South of the river having three or four times the area of the northern part.

The District is for the most part a tableland lying at an elevation of from 400 to 600 feet or more; the Severn forming a deep cutting through this elevated land, its banks rising very steeply on either side from about 150 feet at the water level to the general height of about 500 feet. The central and Eastern part, nearly half the area, lies upon the coal measures. To the West the formation is the Wenlock and Ludlow beds of Silurian age, forming a considerable part of the Southern division, and extending also to a limited extent across the river into the Northern division. Much of this ground lies at a height of from 600 to 800 feet. At the Southern extremity the Old Red Sandstone occurs. The natural drainage is to the Severn, by small streams falling as a rule into the river within the District, but the Southern part of the Southern area drains to the South by small streams which meet the Severn some distance outside the District.

For purposes of local administration the Borough is divided into four wards, each having a separate Sanitary Committee acting as the Sanitary Authority. These wards with their area, population, and general character are as follows:—

Ward.	Area in Acres.	Population Estimated.	Situation.	General Character.
Madeley	3025	8280	North of Severn ..	Urban, and Industrial Coal and Iron.
Broseley	2006	4040	South of Severn ..	Urban and Industrial, Brick and Tile.
Much Wenlock	9737	2190	South of Severn ..	Agricultural.
Barrow	8900	1320	Both sides of Severn ..	Agricultural.

Statistics for 1900.

The estimated population in 1900 was 15,800.

Period.	Death-rates per 1000 population from								Infant Death-rate per 1000 Births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Heart Disease.	Cancer.		
1900	19·7	2·15	0·9	1·3	0·2	3·1	1·7	0·9	105	27.7
Average of 20 preceding years ..	18 0	1·24							119	25·4

Infectious Disease.

Scarlet Fever.—73 cases occurred, of which 23 were in Much Wenlock during the first quarter, the Schools there being closed for 6 weeks. There were 42 cases in the Madeley division between April and the end of the year.

Diphtheria.—10 cases occurred in 10 houses, 4 being in Madeley where the schools were in consequence temporarily closed.

Enteric Fever.—19 cases affecting 13 houses and causing 2 deaths occurred during the year. Of these, 12 cases in one yard in Ironbridge were due to the drinking of polluted water, and are elsewhere referred to. Energetic steps were taken to control the outbreak.

Measles.—A very severe and fatal outbreak in April and May affected Ironbridge, Madeley, and Broseley, and formed the subject of a special report which has already been before the County Council.

Influenza caused 15 deaths.

Hospital Isolation and Disinfection.—A cottage is retained by the Much Wenlock Sanitary Committee as a small emergency hospital for smallpox and cholera in that Division, and Dr. Gepp suggests that the Sanitary Committees of the various divisions should carefully consider whether the borough as a whole should provide a central isolation hospital and disinfecting station or whether each division should provide for its own needs as Much Wenlock has done. The Infectious Diseases Prevention Act is in force in the District.

House Accommodation is generally adequate in amount, but there are many old houses in an unsatisfactory condition, and some have had to be certified as unfit for habitation. There is some crowding upon area in the lower parts of Ironbridge.

Very little building takes place and there are no building bye-laws.

Sewerage.

The various communities drain into the Severn or into some tributary watercourse. Dr. Gepp considers that a joint scheme is required for Ironbridge, Madeley, Coalbrookdale, and Coalport, and also a scheme for the improvement of the sewerage and treatment of the sewage of Much Wenlock. The sewage of Broseley should also be collected and treated.

Scavenging.

Madeley ward has arranged for the public scavenging of nightsoil, ashes and house refuse, and in respect of nightsoil removal, their example is commended to the other Divisions.

Water Supply.

The lower part of Ironbridge and the villages of Coalport and Jackfield have a public standpipe supply from springs at Sutton Hill. Madeley and Broseley are being supplied from Harrington, and Much Wenlock from a well sunk in the Tannery field, into the shale measures lying over the Wenlock limestone.

Registered Places.

Two Common Lodging Houses in Madeley ward and 1 in Much Wenlock are regulated by bye-laws.

There are no bye-laws for *Slaughter-houses*, or regulations for Cowsheds and Dairies in force, nor is any register kept of these places.

WHITCHURCH (Rural.)

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.

Area in acres (exclusive of area covered by water) ... 11989.

Census population, 1891 ... ... 2080.

Physical Features, &c., of District.

"The District comprises 11,989 acres of agricultural land on the Northern boundary of the County. "The general elevation is from 300 to 400 feet, the contour being gently undulating. The subsoil is the red "marl of the New Red Sandstone, with the exception of a small area in the South-Eastern part, where an "outlier of the Lias occurs. The natural drainage is by small streams to North and South, the watershed "between the Weaver and Dee and Severn systems crossing the District. The District is entirely rural in "character and the population scattered, the villages of Tilstock, Ashfield, and Ightfield comprising the "main collections of houses. The land is mainly employed for grazing and dairy farming."

Statistics for 1900.

The estimated population in 1900 was 2,112.

Period.	Death-rate per 1000 population from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tuberc. Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Cancer.	Heart.		
1900	12·6	1·87	0·9	..	..	0·7	..	2·8	146	22·5
Average of 21 preceding years ..	14·2	0·86	..	..	..	..	..	..	75	27·8

Incidence of Infectious Disease.

An imported case of scarlet fever which ended fatally occurred at Broughall and gave rise to two non-fatal cases in same house. At Ightfield an untraced case of diphtheria occurred. Measles was prevalent at Ash, Broughall and Tillstock, and the schools there were consequently closed for some weeks in January and February. Influenza caused 2 deaths.

Isolation and Disinfection: no provision is made for these requirements.

The Infectious Diseases Prevention Act, 1890, with the exception of the clauses relating to disinfection at the public expense, has been adopted in the District.

House Accommodation is generally adequate in amount, though many of the old cottages are undesirably small and sometimes defective.

Sewerage and Drainage.

There are few, if any, recognized public sewers, but in Tillstock and Ash Parva a number of houses are connected with road-water-drains discharging on grass land. Occasional complaint has been made of offensive nuisance near the outfall.

Excrement Disposal is mainly by means of privy-vaults.

Water Supply.

The Council has provided a good public pump and well at *Broughall*. *Ightfield* also possesses a public pump provided by a property owner. *Tilstock.*—In the medical officer's annual report for 1898 the unsatisfactory condition of many of the private wells was fully reported upon and the Council is now proceeding with the sinking of a public well in a selected site in a grass field outside the village. The well is to be sunk 15 feet, or deeper if necessary, and is to be steined with a double ring of hard blue brick set in cement from top to bottom of the well and puddled outside the brickwork to a depth of seven feet, the brickwork being carried a foot above ground level, covered with flags and well puddled over. The public pump will be placed in the village in a fairly central spot, and connected to the well by some 300 yards or more of two-inch cast-iron piping, flanged and bolted.

At *Ash Parva* some 13 farms and cottages have access to an ample spring of pure and excellent water some 20 yards from the roadside.

At *Ash Magna* nearly half the houses have a supply either only on sufferance or by carrying a quarter of a mile from Ash Parva, and the Council is recommended to provide a readily accessible supply, either from a public pump and well, or by arranging for storage rights at Ash Parva spring, and piping it thence to Ash Magna.

Cowsheds, Dairies, &c., are looked after under the Model Regulations.

WHITCHURCH (Urban).

Medical Officer of Health ... ... M. GEPP, L.R.C.P.E., D.P.H.
Area in acres (exclusive of area covered by water) ... . 4,496.
Census population, 1891 ... ... 4,881.

Physical and general Character of District.

"The District comprises 4,496 acres, lying at an elevation of from some 270 to some 350 feet above "sea-level, and upon the eastern extremity of the Dee watershed. The sub-soil is Red Marl of the New "Red Sandstone. The fall of the ground is from south and east to west and north-west, and the "natural drainage is by small tributary brooks of the Dee, leaving the District towards the north-west. "The town occupies roughly the centre and higher part of the District, and is compact and old, with "extensions of more recent building along some of the main roads radiating from the town. The "surrounding parts of the District are rural and agricultural and extend to a distance of between two "and three miles north-east and south-west of the town, but to not more than about a mile to north-"west and south-east."

Statistics for 1900.

The estimated population in 1900 was 5,004.

Period.	Death-rates per 1000 populatien from								Infant Death-rate per 1000 births.	Birth-rate.
	All Causes.	Seven Chief Zymotics.	Epidemic Influenza.	Phthisis.	Other Tubercular Diseases.	Bronchitis, Pneumonia, Pleurisy, &c.	Cancer.	Heart.		
1900	17·7	1·41	0·8	1·3	0·6	2·5	1·6	2·4	96	25·2
Average of 20 preceding years ..	18·8	1·30	..	..	..	..	..	..	119	28·5

Incidence of Infectious Disease.

One untraced case of diphtheria and an imported case of enteric were the only notifications during the year, but a commercial traveller suffering from unrecognized smallpox stayed one night in one of the hotels in the town. Two other strangers occupied the same bedroom a day or two after his departure, but no cases of suspected infection followed.

Influenza caused 4 deaths amongst aged persons.

Measles was very prevalent in March and April and the National Infant Schools were closed.

Isolation and Disinfection.

There is no hospital and no disinfector. The Council are recommended to provide an isolation cottage and a caretaker; also to purchase a steam disinfector, and the very inexpensive apparatus for fumigating with formic aldehyde.

House Accommodation is adequate in amount and generally in fitness. Some of the older houses are very small and in indifferent condition, and some have no through ventilation. A systematic house-to-house sanitary survey is recommended.

Under the Housing of the Working Classes Act, 1890, seven houses were condemned and have since been made habitable.

Plans for all new houses have now to be approved by the District Council in accordance with the Bye-Laws.

Sewerage and Drainage.

The town is well sewered on modern lines, and there are a number of shaft ventilators with rotary extractors. The sewage is disposed of "not only unobjectionally but so 'as to fully utilize its manurial value without the cost of special 'treatment. By the excellent "plan adopted . . . . . the effluent carrier after leaving the town, is led along a slope "of a mile or more of rich land, on almost any part of which sewage can be discharged as "required. At the end of the carrier are settling tanks." The carrier-drains have been recently extended.

At the N.W. end of the District, a few of the houses drain their slop and surface water directly into Grindley Brook and some others into a ditch, and here the provision of a sewer would be an improvement, but presents difficulties in regard to levels.

Excrement Disposal and Scavenging.—Better classes house and new houses and cottages are provided with water-closets, but many old and often offensive privy-vaults exist, and where these are necessarily a nuisance their conversion to water-cosets is recommended, as is also the adoption of a system of public scavenging.

Water Supply.—A good supply is pumped to a reservoir and laid on to the houses from wells sunk into the drift occupying a limited valley at Fenn's Bank at the S.W. limit of the District, nearly 3 miles from the town. A new well near to Fenn's Bank but on a fresh catchment has recently been sunk and yields an ample additional supply of good quality.

The water mains are about to he extended for the supply of houses at Grindley Brook.

Slaughter-houses and Common Lodging Houses are visited weekly by the inspector, who is also going round the district to ensure the registration of all cowkeepers and milksellers.

The Council has approved in principle the provision of a public slaughterhouse, but immediate action is not considered desirable.

A new sanitary inspector has been appointed who is doing good work.