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CORNWALL COUNTY COUNCIL.

ANNUAL REPORT

ON THE

HEALTH OF CORNWALL

(Sanitary Circumstances, Sanitary Administration and
Vital Statistics) for the year

1913,

With a Summary of Reports of District Medical
Officers of Health,

BY

ROBERT BURNET, M.B., M.Sc., D.P.H.,

County Medical Officer of Health

AND

Principal Medical Officer to the Education Committee.

September 30th, 1914.

TRURO :

O. BLACKFORD, PRINTER TO T.M. THE KING AND QUEEN.

1914

STAFF

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Medical Officer in charge of Administration for
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Vacant.

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J. R. SANDERS.

Clerk (Statistics)—

Vacant.

Clerk (Medical Inspection)—

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County Nurse Instructress (Education)—

LILIAN E. WALTON, Cert. R.S.I.

Inspectress under Midwives' Act—

C. A. TAIT MACKAY, Cert. R.S.I., C.M.B., I.S.T.M. (Lond.)

(Superintendent, County Nursing Association).

Assistant ditto—

Vacant.

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COUNTY HALL,

TRURO,

September 30th, 1914.

**To the Chairman and Members of the County Sanitary
Committee.**

Gentlemen,

I have the honour to present to you my Annual Report on the Sanitary Circumstances, Sanitary Administration, and Vital Statistics of Cornwall for the year ended December 31st, 1913.

The principal work of the department during the year has been associated with the completion of the necessary schemes for the prevention and cure of Tuberculosis.

During the year the Tuberculosis Order of 1913, under the Contagious Diseases of Animals Acts, 1894 to 1911, was issued by the Board of Agriculture and Fisheries. This Order is a highly important one, because it aims at the prevention of the spread of infection from animals to man. It provides for the destruction of every cow found to be suffering from tuberculosis of the udder, or to be giving tuberculous milk, as well as of all bovine animals which are suffering from tuberculosis with emaciation. This should be of great utility in dealing with tuberculous milk, which is a source of danger to children. From May 1st to December 31st, 1913, the total cost incurred under this Order was over £800.

The Vital Statistics of the Administrative County for the year under review are satisfactory; the General Death-Rate was 11.85, being the lowest on record; whilst

the Infantile Mortality figure was 91.77, as compared with 84 in 1912, and 129 in 1911. The Birth-Rate of 19.55, as compared with 19.98, is still much too low.

Some Local Authorities have still to be reminded that much remains to be done with regard to Housing, Water Supply, and Sewage Disposal, if they are to justify that confidence placed in them by the County's increasing number of visitors.

With regard to the Administration of the Midwives' Act of 1902, the number of midwives on the county roll (183) is sufficient evidence of the working of the scheme which was inaugurated in 1911, when only 124 had notified their intention to practise. All the forms required by the Central Midwives' Board are furnished by the County Council, and a register is kept of the different notifications under the Act.

Owing to the regrettable outbreak of this Great European War, and my compulsory absence from the County temporarily, in order to take my place in the Wessex Division, the arduous work of final calculation and compilation associated with this Report has fallen on my colleague, Dr. E. M. Clarke, whose services in this respect I cannot over-estimate.

I have to thank you, gentlemen, for your continued co-operation. To my staff, I am indebted for their loyalty and support; and, finally, I must express my gratitude to the many Medical Officers of Health for much valuable assistance.

I am,

Your obedient Servant,

ROBERT BURNET.

Part I.

NATURAL AND SOCIAL CONDITIONS OF THE COUNTY.

Physical Features.

Cornwall is the most South-Westerly county in England. Separated from Devon by the River Tamar, it forms a peninsula, with the sea on three sides. Its length from Devonshire to Land's End is 80 miles, and its breadth at its widest part is 45 miles. The area of the county is 868,167 acres, and the estimated population in 1913 was 329,303. The surface of the land is very hilly, the highest points being Brown Willy, near Camelford (1,375 feet), Rough Tor (1,296 feet), Caradon Hill (1,208 feet), Sharppoint Tor (1,200 feet), Tober Tor (1,127 feet), Mennaclew (1,124 feet), Kit Hill (1,067 feet), Trewartha Tor (1,050 feet), Hensbarrow (1,034 feet), and Caden Barrow (1,011 feet).

Generally, the rocks belong to the primary strata, and include enormous quantities of granite. The coast is rugged, but has many large bays—Bude, Port Isaac, Watergate, Perran, and St. Ives, on the North—Mount's Bay and Whitesand on the West—and Falmouth, Gerrans, Veryan, St. Austell, Looe, Whitesand, and Cawsand Bays on the South.

The chief rivers are, the Tamar (tidal for about 20 miles), the Inny and Lynher (its tributaries), the latter navigable to Notter Bridge, the Tidi (navigable to St. Germans), the Looe (forming the haven at Looe), the Fowey (navigable in part between Lostwithiel and Fowey Harbour), the Fal (navigable for over ten miles), the Hel

(forming Helford Haven below Gweek), the Camel (entering the sea at Padstow and navigable for eight miles), and the Heyl (forming the estuary of Hayle). The soil is mainly porus, but in places much clay and rock abound, rendering the surface impervious to water and surface drainage difficult. The main roads are well kept, and despite the sudden change of traffic and vehicles of recent years, still retain a good surface; the dust nuisance, however, is still considerable, although tar spraying has done much towards mitigation.

Social and Industrial Influences.

Cornwall was first brought into prominence by the Iberian navigators from Spain, who during their search for gold in the river beds, came upon the metal tin, with which they traded with the Phœnicians. After the decline of the Iberians came a prosperous period for the Celts, and two mixed (British and Iberian) tribes existed at the time of its conquest by the Romans. There was a subsequent relapse following the fall of the latter, but on the advance of the West Saxons they had to submit until Athlestan brought Cornwall and the Scilly Isles under English rule.

To-day Metalliferous Mining (tin, etc.) is one of the most important industries in West Cornwall. Besides this, China Clay, Fishing, Farming, Fruit Growing, and general Agricultural pursuits, contribute to the staple industries; in addition, there are numerous slate and granite quarries. The occupations are mainly, therefore, outdoor ones; the workers are often exposed to much driving rain, but this has little effect on them; neither do the School Children take much heed, perhaps not enough, of the rain in the very wet weather. Many Cornish miners seek occupation abroad, and particularly in South Africa, where they frequently contract "Miners' Phthisis," a disease which is liable to be caused by dusty occupations, and is peculiarly liable to follow the constant inhalation of the stone dust caused by "dry boring."

A man comes home to die, only to infect the whole family. One is forced to the conclusion, therefore, that the cases of acute Phthisis in the County are frequently associated with consumptive patients thus imported, foci of infection being scattered broadcast in the affected neighbourhood.

Although wages in Cornwall are small as a rule, the cost of living is considerably less than in large towns. There is little destitution in the majority of the villages, and in many no actual poverty. The people are very temperate, and in many of the rural parts there are no public houses.

The County does not contain any very large centre of population. There are five towns with a population above 10,000, all of them in the South-West, and only one with a population reaching 16,000. The population of the remaining small towns and Urban Districts are all below 8,000.

The following two pages will be found to contain all the necessary information with regard to the relation between the area and the population of each district for the Intercensal Period of 1901—11, with an account of the increase or decrease, and also of the number of families or separate occupiers in each area.

CENSUS, 1911.

Table shewing population, number of families or separate occupiers, area in acres, and increase or decrease of population in Intercensal Period.

RURAL DISTRICTS.

DISTRICT.	Families or Separate Occupiers.	Population.		Increase or Decrease of Population in Intercensal Period		Area in Acres.
		1901	1911	Increase	Decrease	
Bodmin	2481	10393	10357	..	36	85087
Calstock	1294	5874	4881	..	993	5830
Camelford	1779	7188	7385	197	..	52544
East Kerrier ..	2011	8192	8009	..	183	24229
Helston	4264	17685	17192	..	493	73020
Holsworthy (part of)	77	329	325	..	4	5302
Launceston	1827	7797	7544	..	253	73187
Liskeard	3853	15674	15349	..	325	102018
Redruth	4559	18383	18004	..	379	26546
St. Austell .. .	7732	29597	32707	3110	.	58316
St. Columb .. .	2675	10747	11262	515	.	77028
St. Germans ..	2872	14386	12274	..	2112	41763
Stratton	1135	5008	4924	..	84	53395
Truro	5373	22062	20515	..	1547	88236
West Penwith ..	2721	11298	11165	..	133	41202
Scilly Isles ..	460	2092	2097	5	..	4041
Totals	45113	186705	183990	Decrease 2715		811744

Average number of persons per house, 4.05.

CENSUS, 1911.

Table showing population, number of families or separate occupiers, area in acres, and increase or decrease of population in Intercensal Period.

URBAN DISTRICTS.

DISTRICT.	Families or Separate Occupiers 1911.	Population.		Increase or Decrease of Population in Intercensal Period		Area in Acres.
		1901	1911	Increase	Decrease	
Bodmin - -	1052	5353	5734	381	...	2797
Callington - -	434	1714	1713	...	1	2531
Camborne - -	3912	14726	15829	1103	...	6932
Falmouth - -	2896	11789	13136	1347	...	791
Hayle - -	249	1084	1028	...	56	247
Helston - -	723	3088	2938	...	150	309
Launceston - -	962	4053	4117	64	...	2182
Liskeard - -	1075	4010	4371	361	...	2704
Looe - -	708	2548	2718	170	...	590
Lostwithiel - -	377	1331	1373	42	...	389
Ludgvan - -	553	2274	2213	...	61	4543
Madron - -	829	3486	3703	217	...	5571
Newquay - -	1019	3115	4415	1300	...	865
Padstow - -	582	1566	2480	914	...	191
Paul - -	1404	6332	6014	...	318	3446
Penryn - -	788	3190	3092	...	98	286
Penzance - -	3141	13136	13488	352	...	362
Phillack - -	885	3881	3611	...	270	2909
Redruth - -	2633	10451	10815	364	...	4006
St. Austell - -	828	3340	3365	25	...	196
St. Ives - -	1823	6699	7179	480	...	1889
St. Just - -	1384	5646	5753	107	...	7634
Saltash - -	914	3357	4130	773	...	193
Stratton and Bude	710	2308	2979	671	...	1882
Torpoint - -	1081	3404	4283	879	...	975
Truro - -	2704	11562	11325	...	237	1139
Wadebridge - -	586	2186	2339	153	...	864
Totals - -	34252	135629	144141	Increase 8512		56423

Average number of persons per house, 4'2.

WHOLE COUNTY 79366 323334 328131 5797 868167

Average number of persons per house, 4'13.

Climatological Records.

The statement that "In Cornwall England possesses a Riviera which is to-day defying foreign rivals," is one which is amply justified. In certain localities on the South Coast, particularly in the neighbourhood of Falmouth, the climate is so mild in winter-time that it is difficult to realise the newspaper reports of the severely cold weather frequently prevailing simultaneously in other parts of the British Isles. Hence it is that in Cornwall a suitable winter climate can always be found for senile persons and others who may not reasonably be expected to stand with impunity the hardships of the average English winter; for this reason, also, Colonials, Anglo-Indians, and others are enabled to prolong their English visits for any length of time, whilst it is of course obvious that the same advantages must accrue to persons with delicate constitutions.

It is a remarkable fact that in this County bracing and relaxing climates are to be met with in places frequently but a few miles apart; the narrowness of the peninsula, shelter or otherwise from the Atlantic breezes, prevailing winds and sea currents, all combine in producing these effects. Speaking generally, therefore, the climate of Cornwall is exceptionally mild, especially in the Southerly and Westerly districts, but a little less so in Northerly and Easterly parts, mainly because of the high elevation in these regions. For the most part the climate is moist and relaxing in varying degrees on the South Coasts, but distinctly bracing and dry in the North, although the distances between the North and South Coasts are in some places which exhibit these contrasts but a very few miles. In some places, such as Falmouth, and particularly at Flush-

ing, the thermometer has been known to remain above freezing point throughout the entire year. Snow, even in small amount, is comparatively rare in the County.

The following four pages contain information as to the Rainfall. Temperature, Humidity, and Sunshine recorded at twenty-three stations, located at important positions in the County. Monthly returns are carefully prepared and supplied by the gentlemen whose names are given in the last column of page 13, their respective stations being indicated in the first column opposite their names :—

DISTRICT MONTHLY RAINFALL—1913.

Stations.	Altitude.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
	feet.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.
Poughill	507	5.07	1.14	5.00	3.79	2.91	1.50	0.37	1.18	2.36	2.71	4.23	3.25	19.41
Bude	50	4.96	0.95	4.27	3.09	3.04	1.30	0.37	0.98	1.97	3.27	4.47	3.27	31.71
Tintagel	245	5.78	1.26	3.39	2.70	2.67	0.63	0.37	0.98	1.97	3.27	4.47	3.27	30.76
Launceston	446	7.91	2.14	4.94	6.05	3.10	1.69	0.34	1.73	3.10	5.29	5.70	3.33	44.93
Alboston	...	7.90	2.63	4.92	5.93	4.02	1.27	0.28	1.40	3.10	3.90	5.65	2.82	43.82
Pentillie Castle	150	11.59	2.43	6.84	6.00	4.56	1.53	0.25	1.14	2.37	4.57	6.52	6.52	54.02
Liskeard	375	7.50	1.38	5.16	4.39	2.18	1.43	0.44	0.69	2.41	4.49	6.94	4.58	41.59
Newquay	100	5.13	1.14	4.68	3.91	3.06	1.42	0.64	0.94	4.38	4.87	4.32	3.94	38.43
Plymouth (Devon)	117	7.66	1.35	4.04	4.33	3.13	0.81	0.40	1.16	2.91	3.88	4.14	2.66	36.47
Cremyll	25	7.80	1.53	4.03	4.54	3.23	1.05	0.35	0.98	2.47	4.30	5.11	2.76	38.15
Fowey	...	5.73	1.21	3.63	4.64	3.32	0.99	0.51	0.32	3.43	3.45	4.63	3.42	35.28
St Austell	300	7.93	1.47	4.57	5.26	4.10	1.71	0.77	0.60	3.56	5.09	5.98	4.37	45.41
St. Agnes	318	6.24	1.20	4.30	4.83	3.62	1.16	0.39	0.98	2.79	3.64	4.85	2.96	36.96
Probus	...	6.22	1.14	3.77	3.26	3.29	1.31	0.47	1.12	3.13	4.81	4.13	3.70	36.35
Redruth	...	8.74	2.01	4.77	6.26	4.45	1.29	0.43	1.36	3.58	5.02	6.38	3.04	47.33
Trevice	240	9.09	1.74	5.13	6.04	3.91	1.81	0.47	1.37	5.30	4.76	6.77	4.99	51.38
Camborne	...	7.80	1.36	4.49	5.33	4.06	1.73	0.51	1.69	4.21	4.45	5.37	3.65	44.65
St. Ives	60	6.47	0.97	4.01	4.20	2.93	0.90	0.11	1.38	1.89	2.68	4.36	3.73	33.66
Phillack	70	6.47	1.07	3.80	4.30	3.52	1.38	0.28	1.64	3.40	3.19	3.92	3.10	36.07
Falmouth (Obs.)	169	7.59	1.16	4.91	5.52	3.63	1.42	0.31	1.16	2.44	5.45	5.77	5.52	45.38
Bosahan	240	5.55	0.88	3.55	4.20	3.04	0.92	0.26	1.70	2.38	4.54	3.99	2.94	33.95
Mullion	...	5.22	0.71	2.97	3.87	2.29	0.80	0.39	1.64	3.49	4.77	2.75	2.83	31.73
Marazion	30	8.08	1.31	4.88	5.00	3.86	1.24	0.32	1.52	3.17	2.99	4.85	5.12	42.34
Penzance	55	7.11	1.00	4.60	4.61	3.71	1.27	0.38	1.80	2.79	2.39	4.77	5.30	39.73

Temperature and Humidity—1913.

	Mean Tempera- ture	Mean Daily Range of Tempera- ture	Absolute Extremes of Temperature		Mean Relative Humidity of the Air
			Highest	Lowest	
	°	°	°	°	saturation—100
January ...	44.45	8.57	53.7	31.2	88
February ...	43.61	8.77	54.8	28.6	87
March ...	45.79	10.63	56.1	31.4	85
April ...	47.59	10.40	61.7	36.4	83
May ...	53.83	10.03	72.2	40.3	80
June ...	56.72	12.51	73.8	44.8	79
July ...	59.88	12.41	73.3	48.6	79
August ...	61.87	13.28	75.7	46.6	80
September ...	58.76	10.67	70.8	46.6	86
October ...	54.63	10.74	65.5	39.3	86
November ...	50.03	10.18	59.6	36.7	86
December ...	44.92	7.04	55.9	27.7	86
Means ...	51.84	10.43	Highest 75.7	Lowest 27.7	83

Winter and Summer Temperature and Humidity—1913.

	Mean Tempera- ture	Mean Daily Range of Tempera- ture	Absolute Extremes of Temperature		Mean Relative Humidity of the Air
			Highest	Lowest	
	°	°	°	°	Saturation—100
WINTER.					
January ...	44.45	8.57	53.7	31.2	88
February ...	43.61	8.77	54.8	28.6	87
March ...	45.79	10.63	56.1	31.4	85
April ...	47.59	10.40	61.7	36.4	83
November ...	50.03	10.18	59.6	36.7	86
December ...	44.92	7.04	55.9	27.7	86
Means ...	46.06	9.26	Highest 61.7	Lowest 27.7	86
SUMMER.					
May ...	53.83	10.03	72.2	40.3	80
June ...	56.72	12.51	73.8	44.8	79
July ...	52.88	12.41	73.3	48.6	79
August ...	61.87	13.28	75.7	46.6	80
September ...	58.76	10.67	70.8	46.6	86
October ...	54.63	10.74	65.5	39.3	86
Means ...	57.61	11.60	Highest 75.7	Lowest 39.3	81

RAINFALL—1913.

			Mean Total Rainfall.	No. of Days with rain (0.01 in. or more).	Greatest fall in one day.
			Inches		Inches
January	-	-	7.08	27	1.01
February	-	-	1.41	10	0.45
March	-	-	4.45	22	0.67
April	-	-	4.67	19	0.92
May	-	-	3.40	18	0.78
June	-	-	1.23	12	0.29
July	-	-	0.38	7	0.16
August	-	-	1.18	9	0.52
September	-	-	2.92	15	0.77
October	-	-	4.11	18	0.87
November	-	-	5.02	24	0.72
December	-	-	3.81	18	0.95
Totals	-	-	39.66	199	1.01

SUMMARY.

Temperature, Humidity, Rainfall, and Sunshine—1913.

STATIONS	Mean Tem- pera- ture	Mean Daily Range of Temper- ature	Mean Relative Humidity	Total Rainfall	Total duration of hours of bright sunshine	Authority supplying the Monthly Returns
	°	°	%	Inches		
Bude ...	*	*	*	31·71	*	Mr. Karl Durston
Tintagel ...	*	*	*	30·76	*	Mr. W. Taylor
Launceston ...	†49·91	†15·00	†86	44·93	*	Capt. Ching, R.N.
Albaston ...	*	*	*	43·82	*	Mr. N. R. Rosekilly
Pentillie Castle	*	*	*	54·02	*	Mr. W. T. Johnson
Liskeard ...	49·38	10·25	*	41·59	*	Mr. W. A. Jenkin
Newquay ...	51·05	8·70	86	38·43	1509	Dr. Vigurs
Plymouth (Devon)	52·12	10·55	84	36·47	1468	Mr. H. V. Prigg
Cremyll ...	52·34	†12·59	*	38·15	*	Mr. S. B. Wilcox
Fowey ...	51·85	11·49	*	35·28	1561	Dr. Boger
St. Austell ...	*	*	*	45·41	*	Mr. W. M. Coode
St. Agnes ...	*	*	*	36·96	*	Dr. Whitworth
Probus ...	*	*	*	36·35	*	Mr. H. Tresawna
Redruth ...	*	*	*	47·33	*	Mr. A. Lanyon
Trevince ...	*	*	*	51·38	*	Mr. E. B. Beauchamp
St. Ives ...	51·98	8·28	78	33·66	*	Dr. Nicholls
Phillack ...	*	*	*	36·07	*	Rev. A. P. Hockin
Falmouth (Ob.)	51·65	9·77	86	45·38	1568	Mr. E. P. Kitto (First ½-year)
						Mr. J. B. Phillips (Second ½-year)
Bosahan ...	51·82	8·88	*	33·95	1578	Mr. T. Crawford
Lizard Lights	53·72	*	*	*	*	Mr. H. P. Harrison
Mullion ...	52·30	11·37	*	31·73	1561	Mr. R. Thomas
Marazion ...	*	*	*	42·34	*	Mr. T. F. Michell
Penzance ...	53·10	9·15	81	39·73	‡1267	Mr. C. H. Benn

* No Observations. † 11 Months' average. ‡ 11 Months' total.

Certain Health Resorts.

FALMOUTH,

312 miles from London, and 60 from Plymouth, furnishes a valuable marine winter health resort and residential place for most invalids and infirm and elderly persons. It is twelve miles by train from Truro, and lies on the south-west bank of the River Fal, overlooking Falmouth Harbour on one side, and the Bay on the other. The town has a southerly aspect, and with a somewhat crescentic shape, lies on a peninsula. The climate is exceptionally mild generally, but affords such local differences as are so necessary for selection in the various affections.

Sir Edward Sieveking M.D., LL.D., is reported to have stated concerning the town: "To those who wish to escape from the summer heat of other localities, for those who require an equable climate during the cold that prevails in the winter months, Falmouth offers attractions not readily found elsewhere."

Also at the annual Meeting of the British Medical Association in 1896, Sir Joseph Fayrer, K.C.S.I., M.D., said: "I think it will be found that Falmouth merits the preference assigned by all who know it, whilst the many advantages arising from proximity to the sea, the beautiful and interesting surroundings, bright sunshine, lovely flowers, and vegetation, which suggest the geniality of spring in the midst of winter, all combine to confer on it qualities such as are rarely met with, and are not the least valuable that they are easy of access and near home."

For further information of the climatology of this resort, reference must be made to the general climatological tables given in the previous section. In addition, however, it would be well to note that for the winter months, the

mean temperature during 35 years, from 1871, was as follows :—November, 47.4 ; December, 44.6 ; January, 43.4 ; February, 43.3 ; March, 43.8 ; and April, 47.4.

The area, population, and general information as to the health, etc., of the borough, will be found in the pages set apart for the purpose. In addition to cases of senility, chronic cases of Bright's Disease, and certain forms of lung trouble, together with nervous and other diseases, are credited with doing extremely well in Falmouth.

PENZANCE.

326 miles from London, 130 from Exeter, 10 from Land's End, and 21 miles from the Lizard, is the most westerly marine climatic health resort in England. It is situated on the north-western shore of Mount's Bay ; facing mainly south, it is sheltered on the northern and western side. Penzance furnishes thus a magnificent winter health resort. Its climate is similar to that of Falmouth, being characterized by the great amount of sunshine ; in fact, what has already been said of the latter town with regard to climatic conditions, is almost entirely applicable to Penzance. The atmosphere has a high average relative humidity. The following are the average mean temperatures at Penzance for the last 19 years (Nov., 1894 to April, 1913) according to Chas. H. Benn, Esq., F.R. Met. Soc., Borough Meteorologist ; November, 48.8 ; December, 47.4 ; January, 45.3 ; February, 44.8 ; March, 46.4 ; April, 49.6.

Reference should be made to the preceding Climatological Records of the County for further information on the subject, and a full account of the area, population, sanitary circumstances, etc., of the district, will be found in portions of this report which deal specially with these considerations. No attempt has been made in these pages to give any description of the places named, with regard to the points of view of the pleasure-seeker or holiday-maker ; for this the

various guides must be consulted. For those who require a sunny and equable winter residence, for the senile, and for such as have been accustomed to a tropical climate, Penzance is unique. Cases of chronic interstitial nephritis, certain forms of lung trouble, chronic cases of nervous and heart disease, and some cases of neurasthenia, are said to undergo much improvement in this Health Resort.

NEWQUAY.

281½ miles from London, and 16 miles from Truro, is another marine health resort of great importance. It lies on the north-west coast of Cornwall on a natural promontory (Towan Head). The town is supplied with a copious and constant water supply on the conduit system, the analyses of which continue to bear evidence of its excellent purity and freedom from contamination. The climate of Newquay is, on the whole, very equable and very bracing in summer and autumn. There is no extreme cold, such as is felt at many English health resorts at this period of the year. In summer and autumn Newquay is, perhaps, one of the most bracing, pleasant, and cool of all English health resorts. Its mean annual temperature was 52.3 for an average of fifteen years, and in 1911 its sunshine record was 2.002 hours. According to Dr. Vigurs, the average mean temperatures for the last twenty years for winter months are as follows:—November, 48.0; December, 46.2; January, 43.8; February, 43.4; March, 45.0; April, 48.1. Its average death-rate is a very low one. For further details of the health, sanitary administration, statistics, and area and population, reference should be made to the portions of this report which deal specially with these items. Again no attempt has been made to enter into the details of the natural beauty of the place, places of interest, etc., which are adequately dealt with in the guide books, but cases of anæmia, debility, convalescents after surgical operations, etc., soon show marked improvement under the influence of the pure Atlantic breezes. In addition, certain

cases of chronic lung trouble, chronic rheumatism, rheumatoid arthritis, gout, functional diseases of the nervous system and neurasthenia are reported to benefit much by a sojourn in this bracing health resort.

ST. IVES

Is a municipal borough on the northern coast of west Cornwall, lying in St. Ives Bay. It is nine miles to the north-west of Penzance, and is 325 miles from London. The importance of St. Ives as a health resort is rapidly increasing ; as regards climate, it occupies a position somewhat intermediate between Penzance and Newquay, as might be expected from its geographical position. In fact, it to a very large extent combines, from a health point of view, the advantages of both. The air is distinctly bracing, and the winter is never severe.

Information on the subject of the town's population, area, health statistics, sanitary circumstances, and other matters, will be found under the several headings especially set apart in these pages.

It is obvious that after stating the types of illness like to be benefitted by the climates of Falmouth, Penzance, and Newquay in the foregoing articles, it will be easy to conclude which of the list might reasonably be chosen for St. Ives, or, in fact, for any of the succeeding smaller health resorts, which must be mentioned, due regard being given to their several geographical positions.

BUDE,

Twenty miles north-west from Launceston, is a seaport and bathing resort at the mouth of the River Strat, on the extreme northern coast of Cornwall. Like Newquay, Bude enjoys the Atlantic breezes, and has in consequence a bracing climate and pure atmosphere. Even in winter, the climate is equable, with freedom from frosts and snow, the

mean winter temperature being 44.5. It would appear, then, that Bude could well qualify for a popular winter resort, notwithstanding the fact that it is so well patronised by summer visitors who are in search of an invigorating atmosphere and bracing climate.

Perranporth, Fowey, Looe, Padstow, Porth, Carbis Bay, Boscastle, Tintagel, Sennen, Marazion, Mullion, Porthleven, Lizard, Mylor and Flushing, Portscatho, and others, have all certain definite claims as health resorts, but their size and accommodation, as compared with the places previously mentioned, do not admit of details being furnished in a reference so short as is required for this volume.

Part II.

BIRTHS AND DEATHS.

Births.

6,440 births were registered in the Administrative County during the year 1913 ; 1,310 occurred in the eleven Boroughs, 1,584 in the remaining 16 Urban Districts, and 3,546 in the 16 Rural Districts.

With a population, therefore, of 329,303, the Birth-Rate per thousand living in the Administrative County was 19.55 in 1913, as against 19.98 for the year 1912. The rate for England and Wales was 23.9, in the Rural Districts of England and Wales, 22.3 ; in the 96 great towns, 25.1, and in the 145 smaller towns 23.9. In Cornwall, the Birth-Rate for the eleven Boroughs was 18.31, for the 16 Urban Districts 21.33, and for the 16 Rural Districts, 19.37.

It will be observed that the lowest Birth-Rate is in the Boroughs, and the highest in the Urban Districts, in which more of the poorer classes are to be found, whilst the Rural Districts give an intermediate rate.

A reference to Table I. of the Vital Statistics will give the actual Birth-Rates for the year in all the Districts.

In England and Wales the Birth-Rate has declined from 33.5 per 1,000 from 1881-1885, to 23.9 in 1913. Most of the great countries have suffered in the same way. The decline in the Birth-Rate is to be deplored, as little doubt remains that it is to a very large extent due to the efforts of certain of the upper and middle classes, and upper working classes, to limit their families by restricting child-bearing. Such a tendency is bound to find a reaction sooner or later. The trouble is enhanced by the fact that the middle and better working class families are being thus robbed of lives most valuable to the nation, whilst in the

poorest classes the tendency is very little shown. In other words, the privilege of bringing children into the world who would be an asset to the nation, is withheld, whilst the advent of children who are physically less fit to represent the nation, and who may even have to be supported by it, goes on apace. With a diminished Birth-Rate, it behoves us to consider the vast importance of diminishing the Infant Death-Rate, or the future of the nation is distinctly threatened.

Deaths.

During the year 1913, 4,568 deaths occurred in the Administrative County ; 962 occurred in the eleven Boroughs, 1,109 in the 16 Urban Districts, and 2,497 in the 16 Rural Districts. The County Death-Rate was 11.85 per thousand living.

ALL CORNWALL	...	11.8	ALL ENGLAND	.....	13.4
11 Boroughs	.....	11.7	96 Great Towns	...	14.7
16 Urban Districts		13.0	145 Smaller Towns		13.0
16 Rural Districts		11.5	Rural Districts	...	12.1

Death-Rates of the several Districts will be found in Table I. of Vital Statistics.

Death-Rates.

	England.	Cornwall.
1904	16.2	14.7
1905	15.2	15.9
1906	15.4	14.4
1907	15.0	15.0
1908	14.7	14.7
1909	14.5	14.8
1910	13.4	14.3
1911	14.6	15.4
1912	13.3	11.9
1913	13.4	11.8

The Infantile Mortality figure was 91.77 as compared with 84.01 per 1,000 births in 1912.

Birth-Rate, Death-Rate, and Analysis of Mortality of England and Wales, and the Principal Towns compared with those of Cornwall—1913.

		Birth-Rate.	Death-Rate.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Enteric Fever	Diarrhoea and Enteritis.	Deaths under 1 year per 1,000 births.
England & Wales	1909	25·6	14·5	0·00	0·35	0·09	0·14	0·20	0·06	0·28	109
	1910	24·8	13·4	0·00	0·23	0·06	0·12	0·24	0·05	0·29	106
	1911	24·4	14·6	0·00	0·36	0·05	0·13	0·21	0·07	1·06	130
	1912	23·8	13·3	0·00	0·35	0·05	0·11	0·23	0·04	...	95
	1913	23·9	13·4	0·00	0·28	0·06	0·12	0·14	0·04	...	109
CORNWALL	1909	21·4	14·8	0·00	0·09	0·02	0·08	0·13	0·06	0·15	96
	1910	20·9	14·3	0·00	0·05	0·02	0·12	0·07	0·02	0·09	85
	1911	20·4	15·4	0·00	0·05	0·01	0·22	0·32	0·03	0·89	129
	1912	20·0	11·9	0·00	0·06	0·01	0·10	0·11	0·02	0·10	84
	1913	19·5	11·8	0·00	0·12	0·01	0·14	0·05	0·02	0·25	92
96 Great Towns, including London	1913	25·1	14·7	0·00	0·34	0·07	0·13	0·17	0·04	...	117
145 Smaller Towns	1913	23·9	13·0	0·00	0·30	0·05	0·11	0·13	0·05	...	112
England & Wales, less the 241 Towns	1913	22·3	12·1	0·00	0·20	0·05	0·11	0·12	0·04	...	96
London	1913	24·5	14·2	0·00	0·34	0·04	0·09	0·17	0·02	...	105

INFANTILE MORTALITY.

The Infant Mortality Figure represents the number of deaths of infants under one year of age, per thousand births, hence relying not only on the number of deaths, but also on the number of births of a class of individuals who are the most frail, it is obvious that this figure necessarily becomes a very sensitive index. For this reason, therefore, and especially in view of the fact that many influences of environment are simultaneously brought to bear on it, the Infant Mortality Figure, or record of Infant Death-Rate, must be considered over a sufficient period of time, to be of any real value. For instance, the Birth-Rate of a certain place may, for a certain short period, be extremely low by coincidence : the number of infant deaths for that period might remain quite an average, yet the Infant Mortality Figure would be sufficiently high to give a wrong impression of the real state of things.

Infant mortality is about one-third higher in Urban Districts than in Rural Districts, as a rule ; it is often twice as great among illegitimate children, not because there is any difference in the health at birth of such children, but on account of the fact that these unfortunate children are so frequently neglected, criminally or otherwise. It is sad to reflect that every fifth child that dies, dies in the first week of its life.

The causes of a high Infant Mortality are poverty and insanitary conditions (bad cleansing of streets, inefficient removal of night-soil, etc., bad air and overcrowding), the employment of married women, ignorance in infant rearing (unnatural feeding).

Usual Diseases Responsible for a High Infant Mortality.

Premature Birth, Diarrhœal Diseases, Convulsions, Marasmus, Measles, and Whooping Cough, Chest Diseases, etc.

Administrative Measures Against Infantile Mortality.

I. The Midwives' Act, 1902, assures better attention at birth, and therefore less deaths due to want of care.

II. Adoption of the Notification of Births' Act, (1907), by means of which, within 36 hours of the birth of a child, the Health Authorities are notified, so that Health Visitors may be sent, where necessary, to give advice on infant Rearing and care.

III. The Public Health Acts, so far as they improve the general sanitation and remove some of the above stated causes. Attention to special directions coming from time to time from the Local Government Board.

IV. Organisation of Classes for Elder Girls in schools, presided over by persons specially trained in the required subjects (nurses, etc), who are appointed by Local Education Authorities under the Board of Education. Cornwall has appointed a nurse for this purpose.

V. Voluntary Agencies, such as committees of ladies who would personally visit houses for the purpose of giving advice, acting in co-operation with the local Health and Education Authorities, from whom they would get information and be provided with printed pamphlets and directions to mothers and those who may be about to become mothers. These should receive as much trained assistance as possible.

Attention to the above, giving due encouragement to the ignorant, and applying rigorous prosecution where there is wilful neglect, would result in a great improvement in respect to Infantile Mortality in those parts of the county which are mostly concerned.

Until such time that the Notification of Births' Act (1907) is adopted either for the county as a whole, or for the separate authorities, it should be strongly urged that the before-mentioned Ladies' Committees will do much to save a large number of lives annually. Certainly these ladies who

are willing to give their assistance, should be approached by the officers of the local authorities concerned, with a view of forming such committees, before the next dry summer is at hand, with its large number of infant victims. In the Borough of Falmouth such an organisation has been in full working order for some time, and ought always to receive the support it deserves, from both the civic and private sources which are available.

Doubtless other Cornish towns have already commenced a similar campaign against the infant death-rate, but one cannot be too emphatic in advising such as have not, to start a committee at once.

In the Urban District of Barking (Essex) the Boy Scouts are doing valuable service by taking round literature to such houses, as, on account of recent births in them, are particularly concerned, the boys receiving their messages at the Health Office.

As has been already stated, therefore, a better idea of the county's Infantile Mortality Figures will be furnished from an average of, say, five years : 1909—96 ; 1910—85 ; 1911—129 ; 1912—84 ; 1913—92.

In the whole County 591 deaths occurred of infants under one year of age, of which 282 belonged to the Urban Districts, and 309 to the Rural.

Districts With a High Infant Mortality.

1. Phillack U.D. ...	159	9. Camborne U.D. ...	111
2. St. Just U.D. ...	145	10. Paul U.D.	108
3. Helston Borough	131	11. Launceston R.D.	108
4. Padstow U.D. ...	130	12. West Penwith R.D.	108
5. Penryn Borough	129	13. Truro City	105
6. Liskeard Borough	127	14. Lostwithiel Borough	103
7. Penzance Borough	122	15. St. Columb R.D.	102
8. Redruth R.D. ...	114	16. St. Austell U.D.	102

Districts With a Low Infant Mortality.

1. Camelford R.D. ... Nil	5. Newquay U.D. ... 42
2. Scilly Isles R.D. ... Nil	6. Saltash Borough ... 45
3. Stratton and Bude	7. Stratton R.D. 45
U.D. 32	8. Boscastle R.D. ... 48
4. Calstock R.D. 42	

There is little doubt that the adoption of the Notification of Births' Act, 1907, and the organisation of committees for infant care, as previously stated, are at least important in those districts which have such high Infant Mortalities.

Infantile Mortality,—1913.

ENGLAND & WALES.		CORNWALL.	
Total	109	Whole County	92
96 Great Towns	117	No Great Towns	
145 Smaller Towns ...	112	Boroughs and Urban	
England and Wales		Districts	97
less the 241 towns	96	Rural Districts	87

The high rate in some rural districts points to the fact that much remains to be done with regard to preventive measures by education and health visiting. Some of the Urban Districts have a high rate; here the supervision ought to be most easy, and the establishment of Ladies' Committees, with some qualified nursing assistance, would furnish an experiment worth trying by the District Council before the next hot and dry summer arrives. One could certainly vouch for the complete success of such a scheme, which would involve the saving of so many infant lives.

Illegitimate Children.

Out of 6,440 children born in the County during the year, 205, or 3.2 per cent., were ascertained to be illegitimate. 107 of these births took place in the urban areas, and 98 in the rural, the percentage of the urban, 3.7 being much higher than that for the rural, which was 2.7.

Speaking generally throughout the County, the death-rate of illegitimate children is about double that of legitimate ones. This is not because these children when born, as a rule, are more handicapped on account of any debility at birth, but because they are more handicapped by the treatment extended to them afterwards. Many illegitimate children are born of young and healthy parents, perhaps most of them are, and yet, despite the strong physique at birth these children have often to pay the penalty which is more justly deserved by the persons who wilfully neglect them.

This is another instance of the wastage of infant life at a time when the nation is yearning for children.

Apparently Society, of whatever grade, must refuse them, whilst the State can only concern itself with such as pass the fine filter of the Poor Law .

Notification of Births Act, 1907.

Seeing that no Local Authority may adopt this Act without the approval of the Local Government Board, and that approval can only be given if the particular Authority possesses the requisite staff (nurses, health visitors, etc.), for carrying it out, it is obvious that in Cornwall the control of Infant Mortality cannot be undertaken by means of the Act at the hands of District Councils with, perhaps, the exceptions of two or three larger Boroughs and Urban Districts. It is to be hoped, therefore, in view of the recently organised co-operation of the District Nursing Associations with the County Council in regard to Midwives, lectures on Infant Care, etc., that the County Council might reasonably expect the Local Government Board to approve of the adoption of the Act for the whole county area.

Once the county machinery is in good working order, it would be well to make the necessary application. It is insufficient in Cornwall to seek for the adoption of the Act in urban areas only, as some of the rural districts have

occasionally Infant Mortality Rates which are high enough to cause very grave concern were they to be recorded even in urban areas.

The fact that the Act requires the compulsory notification of every still-birth within the same period (36 hours) as that required for the others, is of vast importance. No Local Authority in Cornwall has adopted the Notification of Births' Act.

Still Births.

41 cases have been notified on the midwives' forms. All the forms of the Central Midwives' Board are now issued by the County Council, and many more midwives have been added to the roll. The adoption of the Notification of Births' Act, and, finally, the compulsory registration of still-births, after due medical certification, constitute the only safe means of reducing the number of still-births, and lessening negligence, and even crime, for many of these "still-births" must be instances of "live-births," as I feel sure more frequent and more stringent enquiries would tend to show.

Scarlet Fever 3 deaths, the same as in 1912.

The disease is generally becoming milder in type and less fatal, although unfortunately the general public are still prone to consider the complaint more to be dreaded than either Measles or Whooping Cough, which is a great mistake, as will be easily seen from the statistics. The distribution of the above three deaths will be readily seen in the tables.

Diphtheria & Mem. Croup 46 deaths, against 33 in 1912.

Districts mostly affected :—

St. Just	16
St. Austell R.	6
Redruth R.	5
Truro R.	3
Redruth U.	3

Measles. 40 deaths against 22 in 1912. 9 were in Rural Districts, and 31 in Urban.

Districts mostly affected :—

Urban.		Rural.	
Penzance	9	St. Columb ...	6
Madron	4		
St. Just	4		
Looe	3		
Padstow	3		
Paul	3		

Whooping Cough. 19 deaths against 36 in 1912. Rural contribution, 10 ; Urban contribution, 9. The principal districts affected were : Redruth Rural (5 deaths), and Camborne Urban (3 deaths).

Typhus, Typhoid (Enteric), and Continued Fever. 9 deaths from Typhoid, against 8 in 1912. 2 deaths occurred in Camborne Urban, and 1 each in Liskeard R., Bodmin R., Redruth R., Falmouth Borough, Redruth U., Paul U., and St. Just U.

Small Pox. No deaths.

Diarrhœa and Enteritis. 82 deaths, against 34 in 1912, and 295 in 1911. Districts chiefly affected :—

Urban.		Rural.	
Camborne	13	St. Austell	7
Penzance	10	Redruth	4
Falmouth	6	West Penwith	4
Phillack	5	St. Columb	3
Bodmin	3		

60 of the deaths were of children under 1 year of age, against 22 in 1912, and 233 in 1911.

It is clear that statistics for a single year under this heading are valueless, unless a comparison is made with previous years, since any year might become an epidemic year, which, in its turn, might be succeeded by a year or years of comparative immunity to one or more of these diseases until

the immunising effect had diminished and fresh susceptibles had been born, thus causing another epidemic to be due.

Influenza. 43 deaths (26 Rural and 17 Urban), mainly distributed as follows: St. Austell R., 4; Liskeard R., 3; Redruth R., 3; Helston R., 3.

Phthisis (Pulmonary Tuberculosis). 414 deaths against 403 in 1912 (202 in the Urban Districts and 212 in the Rural Districts).

Main Distribution:—

Urban.		Rural.	
Camborne	48	Redruth	48
Redruth	24	St. Austell	31
Penzance	16	Helston	29
St. Just	16	Truro	20
Truro City	10	Bodmin	14
St. Ives	10	West Penwith	14

Other Tuberculous Diseases (including Tuberculous Meningitis). 93 deaths against 105 in 1912 (46 in the Urban Districts and 47 in the Rural Districts).

Main Distribution:—

Redruth Urban	10
St. Austell Rural	8
Truro Rural	7

Cancer and Malignant Disease. 387 deaths, against 389 in 1912 (Urban districts 167, Rural districts 220).

188 deaths	...	65 and upwards.
166	„	45—65.

Respiratory Diseases (Bronchitis, Pneumonia, and all other Diseases of the Respiratory Organs).

	1913	1912
Bronchitis	250	295
Pneumonia	190	202
All others	38	32
	<hr/> 478	<hr/> 529

Alcoholism. 7 deaths, against 6 in 1912.

Diseases and Accidents of Parturition. 19 deaths against 24 in 1912.

Congenital Debility and Malformation, including Premature Birth. 280 deaths against 276 in 1912.

Puerperal Fever. 3 deaths against 4 in 1912.

Urban.		Rural.	
Truro City	..... 1	Launceston	..... 1
		Liskeard	..... 1

INFECTIOUS DISEASE.

Notifications, Attack Rates, and Cases removed to Hospital—1913.

	SANITARY DISTRICT.	Population estimated to 1913.	Small Pox.		Diphtheria.		Erysipelas.		Scarlet Fever.		Enteric Fever.		Relapsing Fever.		Continued Fever.		Puerperal Fever.		Cerebro-spinal Meningitis.		Poliomyelitis.		Pulmonary Tuberculosis.		Other Forms of Tuberculosis.		TOTAL.		Cases removed to Hospital.	
			Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate		
1	RURAL																													
2	Stratton ..	4,904	1	0.20	1	0.13	3	0.61	4	0.81	..	
3	Launceston ..	7,484	2	0.26	2	0.26	3	0.40	1	3	0.40	4	0.53	5	0.66	20	2.67	..	
4	Calstock ..	4,644	25	5.38	18	3.87	43	9.25	..	
5	Boscastle ..	2,319	4	1.72	1	0.43	13	5.60	1	0.43	19	8.19	..	
6	Camelford ..	5,112	..	..	4	0.78	..	..	3	0.58	..	..	..	..	..	..	..	..	..	..	..	4	0.78	..	..	11	2.15	1
7	Liskeard ..	15,272	..	..	5	0.32	3	0.19	48	3.14	2	0.13	..	..	..	..	..	..	..	..	..	13	0.85	6	0.39	77	5.04	..
8	St. Germans ..	12,283	..	..	2	0.16	4	0.32	34	2.76	3	0.24	..	..	..	..	..	..	..	..	..	19	1.54	12	0.97	74	6.02	..
9	Bodmin ..	10,349	..	..	4	0.38	4	0.38	1	0.09	1	0.09	..	..	..	..	..	..	..	..	..	13	1.25	5	0.48	28	2.70	2
10	St. Columb ..	11,385	1	0.08	2	0.17	2	0.17	1	0.03	57	1.70	15	0.44	265	7.92	..	
11	St. Austell ..	33,452	..	..	90	2.69	14	0.41	86	2.57	2	0.06	..	..	..	..	..	..	..	..	..	26	1.29	10	0.49	84	4.17	..
12	Truro ..	20,145	..	..	24	1.19	15	0.74	9	0.44	..	..	..	..	..	..	..	..	..	..	..	57	3.18	9	0.50	182	10.16	9
13	Redruth ..	17,914	..	..	48	2.68	5	0.28	55	3.07	6	0.33	..	..	1	0.05	1	0.05	..	..	..	7	0.87	4	0.50	33	4.14	..
14	East Kerrier ..	7,966	2	0.25	18	2.25	2	0.25	3	0.17	38	2.22	8	0.46	65	3.80	2	
15	Helston ..	17,074	..	..	3	0.17	5	0.29	8	0.46	..	..	..	..	..	..	..	..	..	..	..	12	1.07	1	0.09	30	2.69	..
16	West Penwith ..	11,134	..	..	12	1.07	2	0.17	1	0.09	2	0.17	..	..	..	..	..	..	..	..	..	..	..	..	..	Nil	..	..
16	Scilly Isles ..	2,098	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	TOTALS ..	183,535	224	1.22	59	0.32	300	1.63	18	0.09	1	0.00	2	0.01	8	0.04	259	1.41	75	0.40	946	5.15	14	
17	URBAN																													
18	Callington ..	1,713	..	..	1	0.58	2	1.16	1	0.58	1	0.58	..	..	..	..	..	..	..	..	..	2	1.16	2	1.16	9	5.25	..
19	Stratton & Bude ..	3,139	..	..	..	..	1	0.31	9	2.86	..	..	..	..	..	..	..	..	..	..	..	2	0.63	1	0.31	13	4.84	4
20	Launceston ..	4,132	1	0.24	2	0.48	4	0.96	1	0.24	10	2.42	3	0.72	21	5.08	..	
21	Liskeard ..	4,457	..	..	2	0.44	..	..	25	5.60	..	..	..	..	5	1.12	..	..	..	..	..	3	0.67	6	1.34	41	9.19	..
22	Torpoint ..	4,493	8	1.78	1	0.22	14	3.11	2	0.44	1	0.36	1	0.22	8	1.78	4	0.89	38	8.45	2	
23	Looe ..	2,758	2	0.72	3	1.08	1	0.36	1	0.36	1	0.36	8	2.90	7	2.53	23	8.33	..
24	Saltash ..	4,315	3	0.69	1	0.23	12	2.78	7	1.62	2	0.35	15	3.47	6	1.39	44	10.19	..	
25	Bodmin ..	5,675	..	..	17	2.99	2	0.35	..	..	..	..	..	..	..	..	..	..	..	..	..	16	2.81	11	1.93	48	8.45	..
26	Lostwithiel ..	1,383	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1.44	..	..	2	1.44	..
27	Wadebridge ..	2,375	..	..	3	1.26	1	0.42	1	0.42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2.10	..
28	Truro City ..	11,269	7	0.62	1	0.08	1	0.08	3	0.26	1	0.08	13	1.15	13	1.15	39	3.46	6
29	Penryn ..	3,069	..	..	..	..	..	..	3	0.97	..	..	..	..	..	..	..	..	..	..	..	4	1.30	..	..	7	2.28	..
30	Falmouth ..	13,458	2	0.14	2	0.14	23	1.70	1	0.07	1	0.07	15	1.11	12	0.89	56	4.16	3	
31	Helston ..	2,903	3	1.03	2	0.68	5	1.72	..	
32	St. Ives ..	7,294	..	..	2	0.27	5	0.68	..	..	3	0.41	..	..	..	..	..	..	..	..	..	11	1.50	..	..	21	2.87	..
33	Penzance ..	13,572	..	..	22	1.62	6	0.44	24	1.76	..	..	..	..	..	..	..	..	..	..	..	16	1.18	2	0.14	70	5.15	10
34	Padstow ..	2,699	..	..	..	..	..	..	..	..	4	1.48	..	..	..	..	1	0.37	..	..	..	..	..	..	..	5	1.85	..
35	Newquay ..	4,466	..	..	1	0.22	2	0.44	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2.24	..	..	13	2.91	..
36	St. Austell ..	3,371	..	..	4	1.18	5	1.48	46	13.64	..	..	..	..	..	..	..	..	..	..	..	15	4.45	1	0.29	71	21.06	..
37	Redruth ..	10,902	..	..	7	0.64	3	0.27	32	2.93	10	0.91	..	..	..	..	..	..	..	..	..	34	3.13	3	0.27	89	8.16	1
38	Camborne ..	16,093	..	..	5	0.31	16	0.99	18	1.11	4	0.24	..	..	1	0.06	..	..	..	..	..	88	5.46	39	2.42	171	10.62	..
39	Phillack ..	3,547	..	..	1	0.28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	0.56	1	0.28	4	1.12	..
40	Hayle ..	1,015	..	..	1	0.98	1	0.98	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1.97	..
41	Madron ..	3,755	..	..	8	2.13	..	..	26	6.92	..	..	..	..	..	..	..	..	..	..	..	10	2.66	..	..	44	11.71	..
42	Paul ..	5,938	..	..	11	1.85	1	0.16	8	1.34	2	0.33	..	..	..	..	..	..	..	..	..	10	1.68	3	0.50	35	5.89	1
43	Ludgvan ..	2,199	1	0.45	2	0.90	4	1.82	..	
44	St. Just ..	5,778	..	..	124	21.46	2	0.34	7	1.21	1	0.17	..	..	..	..	..	..	..	..	..	24	4.15	6	1.03	164	28.38	..
	TOTALS ..	145,768	234	1.60	56	0.38	261	1.79	36	0.24	6	0.04	5	0.03	7	0.05	319	2.18	120	0.82	1044	7.16	27	
	Total Rural ..	183,535	224	1.22	59	0.32	300	1.63	18	0.09	1	0.00	2	0.01	8	0.04	259	1.41	75	0.40	946	5.15	14	
	Total Urban ..	145,768	234	1.60	56	0.38	261	1.79	36	0.24	6	0.04	5	0.03	7	0.05	319	2.18	120	0.82	1044	7.16	27	
	Whole County ..	329,303	458	1.39	115	0.34	561	1.70	54	0.16	7	0.02	7	0.02	15	0.04	578	1.75	195	0.59	1990	6.04	41	

Part III.

INFECTIOUS DISEASES.

The figures dealing with the number of cases, classified in age periods, notified in each sanitary district, will be found in Table II., pages i. to xxiii., under Vital Statistics, Part XII.

The Deaths from Infectious Diseases are considered separately under the Births and Deaths, Part II.

Small-Pox.

Fortunately no case of this disease was notified as occurring during the year 1913. We must realise, however, that the increasing number of exemptions from Vaccination, and the facilities offered for obtaining the same, will some day be responsible for general regret, when we are compelled to face an epidemic of the disease. That there happens to be no case of this dreadful disease in England at any particular time is no excuse for treating the matter lightly ; it may be introduced from abroad by means of infected merchandise, or by the actual landing of a case, or a dangerous contact at one of our many ports. It is probably the most infectious of all diseases, and it only requires a nidus, such as that provided by a batch of unprotected persons, for the flame of infection to take thorough hold.

Diphtheria, including Membranous Croup. 458 cases notified, against 350 in 1912, 11 of which were removed to Hospital.

Rural Districts contributed 224—1 removed to Hospital.

Diphtheria becomes largely endemic in Rural Districts, and epidemics are difficult to control when once established.

Urban Districts' contribution.—234 cases. 10 removed to Hospital.

The most affected Districts were : (Number of Cases notified per 1,000 of the population)—

Rural Districts.	Rate per 1,000.	Urban Districts.	Rate per 1,000.
Calstock.....	5.38	St. Just	21.46
St. Austell.....	2.69	Bodmin Borough	2.99
Redruth.....	2.68	Madron	2.13
Boscastle.....	1.72	Paul	1.85
Truro.....	1.19	Torpoint	1.78
West Penwith.....	1.07	Penzance Borough	1.62

ST. JUST.

REPORT

UPON THE

Repeated outbreaks of Diphtheria in the Urban District of St. Just.



COUNTY HALL, TRURO,
MAY 17TH, 1913.

For several years there have been recurrent small outbreaks of this disease, which manifested itself in a mild form, a fact which is, to some extent, responsible for its continuance, by reason of the difficulty occasioned in diagnosis. There are other factors, however, which must certainly be regarded as further tending to influence the spread of the disease, and to cause it to remain endemic in the district ; not the least of these are :—

I.—The lack of Isolation Hospital Accommodation,
and

II.—The need for the use of a proper Disinfecting Apparatus for dealing with infected clothing, etc.

Unless, however, there is some improvement in certain details, mainly administrative, which affect the Sanitary

conditions of the district, many of the advantages accruing from the provision of the hospital accommodation and disinfectant must inevitably be lost.

PART I.—St. Just Urban District ; its Sanitary Circumstances and Administration.

The St. Just Urban District was formed from the West Penwith Rural on the 1st of April, 1897 ; it has an area of 7,633 acres, a population at the 1911 census of 5,753, with 1,384 inhabited houses. This area is situated at the extreme West of Cornwall ; it is bounded on the North and West by the Atlantic Ocean, and on the East and South by the Rural District of West Penwith, with a very small portion of the Madron Urban District intercepting.

The Urban District consists of the town of St. Just, the village of Pendeen, and a few small hamlets, tenanted chiefly by miners. The main industries are tin and copper mining, as well as agriculture.

Housing and Disposal of House Refuse and Excreta.

Speaking generally, the houses are in a very fair condition, but there are some dilapidated and ill-ventilated dwellings in the village of Pendeen, and in North Row and other parts of the town of St. Just ; the yards are, as a rule, unpaved and unflagged. There is no evidence of over-crowding. Five new houses have been erected during the year 1912, and six enlarged. The sanitary conveniences constitute the greatest drawback ; they are mainly of the privy-pit type, and frequently quite insanitary. Recently in North Row, St. Just, two of these were observed to be contiguous, the contents flowing from the one at a higher to the other at a lower level, and at Carn Bosavern a leaking privy was found soaking the earth at a higher level than the cottages ; the Medical Officer of Health was advised to arrange for the serving of notices for the abatement of these nuisances. There is no regular collection of privy material and house refuse by the Sanitary Authority, and the cottagers find difficulty in disposing of it, some of them apparently not being

very particular as to the method and frequency of removal. As a result there is a tendency to dump house refuse in unauthorised places, and insanitary accumulations are far too prevalent. The Medical Officer of Health stated that the District Council purchased a covered cart some years ago for the purpose of removing house refuse and privy material, but that its use was not systematic ; apparently it has now practically fallen into abeyance, the man in charge not often being available, and the occupiers of cottages have to see to the removal themselves. There are a few water closets, but the main system is the privy-pit of a very primitive nature, with nothing to prevent the dangerous soakage of foul contents into the soil. Similarly, when separate ashpits are in use, these are not always properly enclosed, and, in many instances, house refuse is dumped in an irregular way in proximity to dwellings.

Drainage and Sewerage.

A proper system of house drainage is lacking ; it is mainly provided by means of yard gullies, which are generally found to be trapped, but loose flags and stones are allowed to retain liquid matter in the vicinity of the gully in many instances, there being no proper yard paving or flagging. Often the drains discharge into "bolts," which, in conjunction with systems of stoneware piping, represent the only sewers ; these were constructed of loosely-jointed stones some forty years ago. In the main they may be considered in two systems, the one on the North side of the town (Fore Street), and the other on the South (Bosorne Road). That on the North includes Fore Street, and passing below the Drill Hall, crosses the road and is piped through two fields to a tank about 18 feet by 7 feet by 7 feet in dimensions ; the sewage is sometimes diverted over the second field by an open channel for manurial purposes. On leaving the tank, the offensive overflow finds its way irregularly into the Kenidjack Valley, joining the stream which is used for the Tin Stamps. That on the south pollutes the stream in the Bosorne Valley, and,

according to the Medical Officer, gives reason for complaints by the inhabitants of Bosorne, which have repeatedly occurred during a period of very many years.

The village of Pendeen has piped drains with trapped gullies.

The Water Supply.

Indirectly, much of the trouble associated with the outbreak of epidemic disease in the district is traceable to the lack of a sufficient supply of pure drinking water ; the drainage and sewerage have been shown to be inadequate, and no good drainage scheme can be carried to a successful issue without an accessible water supply.

Particularly is this the case in the town of St. Just, where some of the inhabitants have apparently to fetch their drinking water from the public pumps, a distance of hundreds of yards, as for instance the cottagers in Moncherrow Terrace and other places. For very many years the question of a water supply has engaged the attention of the Urban District Council, but it is regrettable to find that no progress has been made, despite the repeated advice of their Medical Officer with regard to its urgency, and notwithstanding much correspondence with, and reporting by, the County Council and the Local Government Board. In October, 1904, Dr. J. Spencer Low, His Majesty's Inspector under the Local Government Board, reported that the town of St. Just was only supplied by wells, and that there was liability to pollution ; the Green Lane pump fixed on an old mine shaft in a cultivated field was then said to have a diminished supply in summer, was exposed to pollution ; the Cape Cornwall Road pump was also described as connected with an old mine shaft, and the well at Carn Bosaverne was reported as shallow and also liable to pollution. Further, the well at Higher Boscaswell is not beyond suspicion of similar liability to pollution, on account of the privy-pits of a row of cottages being placed at a higher level than the well itself. In his Annual Report for 1911 the County Medical Officer advised that periodical analyses should be made of

the public wells in the district. The village of Truthwall has still no water supply. The Local Authority has, therefore, been for many years well aware of the urgent need for a better and more adequate supply of water for the district.

Elementary Schools.

There are four in the district :—

- I.—PENDEEN (Boys, Girls, and Infants).
- II.—CARNYORTH (Mixed and Infants).
- III.—CAPE CORNWALL (Boys, Girls, and Infants).
- IV.—KELYNACK (Mixed and Infants).

I.—PENDEEN. This School was closed from May 15th until after the Whitsuntide holidays (1912), and the Girls' and Infants' Departments only from April 3rd to 29th (1912), on account of the prevalence of Diphtheria and F. Tonsillitis, and the Infants' Department from July 20th until after the Midsummer holidays (1912), on account of the prevalence of Whooping Cough. The sanitary conveniences (four for the Boys and four for the Girls) are not satisfactory, being of the deep privy-pit type, the pits being situated between the two sets of offices, and emptied from the Infants' playground. The attention of the Education Authority has been called to the matter, and it is understood that the premises are likely to be abandoned in the near future ; there is no water supply. Adjoining this school is some land belonging to the Education Authority, which by its nature and position is liable to tempt people to tip rubbish upon it ; this Authority has been asked, therefore, by the County Medical Officer to warn the lessees. Nothing of a harmful nature was discovered, however, notwithstanding complaints to this effect.

II.—CARNYORTH. This School was closed from May 15th until after the Whitsuntide holidays (1912), on account of the prevalence of Diphtheria and F. Tonsillitis. The privypits are shallower and more sanitary than those of Pendeen, but there is no water supply.

III. CAPE CORNWALL. The Infants' Department was closed from April 10th to May 1st, 1913, on account of the prevalence of Measles. The privies are not insanitary, but there is no water supply.

IV.—KELYNACK. This School was not closed during the year 1912; the privies are not insanitary, but there is no water supply.

Sanitary Administration.

There are no common lodging houses, and no offensive trades in the district.

The Medical Officer of Health reports that all the eight slaughter houses are registered, and are kept clean, and that the occupiers have been ready to comply with any suggestions made by him; the meat exposed for sale is reported by him as of very good quality, and that no action was needed to be taken with regard to it.

Similarly all the bakehouses are reported as registered and clean and well kept.

The Milk Supply. This was not found to be associated with the epidemic. There are five milk-sellers in the district, but there is no registration, nor have any regulations been adopted under the Dairies, Cowsheds and Milkshops Orders, 1885-1889, and no legal proceedings have been taken with regard thereto.

Nuisances abated number 53, out of 700 premises inspected during the year 1912, 2 nuisances were abated with regard to animals improperly kept, 5 concerning pools, ditches, gutters, and watercourses, 20 were referred to drains, etc., and 4 to accumulations. Of the 53 notices served, 33 were statutory.

Under the Housing (Inspection of District) Regulations, 1910, 500 inspections were made, which were referred to 300 houses during the year 1912, but only one dwelling house is reported in which defects were rectified (i.e., made fit for human habitation), without recourse to Closing Orders, Sec. 15. No closing orders were made. Building bye-laws have been adopted.

The Medical Officer of Health is Dr. R. G. Nesbitt, who is paid for his services at the rate of £30 per annum. The Sanitary Inspector is Mr. Joseph Hodge, whose salary is £52 per annum, his duties including those of Surveyor; he holds no sanitary certificate, but has a useful knowledge of his district. In the case of each of these two officers, £15 per annum is paid towards the salary by the County Council.

PART II.—The Outbreak of Diphtheria.

Dr. Nesbitt, the Medical Officer of Health, dates the commencement of the epidemic as from July 11th, 1911, but a glance at the returns even as far back as the year 1905 will be sufficient to show that the district has been liable to outbreaks of the disease for some time past, there being nine cases with one death in November, and fourteen cases in December of that year. The most important epidemic, however, is the present one, which commenced in July, 1911, since when it has slowly increased in magnitude, adding but a few cases each month to its number. This tendency to spread slowly at once suggests that foci of infection remain subsequent to each case, and enquiry into the methods of disinfection very soon found a foundation for this opinion. The Medical Officer states that all infected premises have been disinfected by means of the fumes of burning sulphur, and the Sanitary Inspector causes wall-papers of infected rooms to be stripped; but the Local Authority have not collected infected articles for the purpose of disinfecting them, because they have no disinfecting apparatus; disinfectants are freely used, but these constitute a false security in the hands of ignorant people. Hence, in the absence of an Isolation Hospital also, there are two very potent foci of infection existing in these small cottages, without considering the necessarily large number of "carriers" of the disease constantly at large:—

I.—The person suffering, not properly isolated.

II.—The subsequently infected clothing, and other articles which escape disinfection.

Cases Notified from July, 1911, to April, 1913 (inclusive).

Month.	Year.		Number of cases notified.		Number of Deaths.
July	1911	.....	1	.....	0
August,	„	.....	3	.....	0
Sept.	„	.....	2	.....	0
Oct.	„	.....	4	.....	1
Nov.	„	.....	5	.....	1
Dec.	„	.....	0	.....	0
Jan.	1912	.....	3	.....	0
Feb.	„	.....	7	.....	0
March	„	.....	10	.....	0
April	„	.....	5	.....	0
May	„	.....	15	.....	2
June	„	.....	8	.....	0
July	„	.....	2	.....	2
August	„	.....	1	.....	0
Sept.	„	.....	10	.....	1
Oct.	„	.....	2	.....	1
Nov.	„	.....	4	.....	0
Dec.	„	.....	4	.....	0
Jan.	1913	.....	4	.....	1
Feb.	„	.....	13	.....	0
March	„	.....	16	.....	1
April	„	.....	5	.....	0
Total			124	Total	10

Case Mortality - - 8.06 per cent.

As there were many unrecognised cases of a very mild nature, which had not been treated at all by medical men, it is obvious that this figure is estimated too high. The disease was mistaken in the first instance for ordinary follicular tonsillitis, but its nature was cleared up by having swabs taken, which were reported positive for the Klebs Löffler Bacillus. There is a tendency for the bacterial growth to remain limited to the follicles of the tonsils, extensively spreading membranes being comparatively infrequent, and cases of membranous croup are rare.

That three-quarters of the notified cases occurred in the Pendeen portion of the St. Just district is to be accounted for by a school epidemic in March, 1912. Visits to the schools were made, and the children examined; cases of impaired speech at once aroused suspicion of slight post-diphtheritic paralysis. The District Council were advised to avail themselves of the powers of the Provision of Diphtheria Antitoxin Order of 1910, so that free Antitoxin could be supplied. This was done, and swabs were taken for bacteriological examination. The Girls' and Infants' Schools were closed from April 3rd to the 29th, and for a further period from May 15th until after the Whitsuntide holidays. For this latter period, also, the Boys' School was closed, and also the Mixed and Infants' Departments of Carnyorth School. It is evident, therefore, that the excess of incidence at Pendeen was due to the presence of school "carriers," i.e., children harbouring the disease germs in their mouths, although themselves not necessarily at the time suffering from the complaint. After school closure the number of notifications diminished, though it again reached a high figure in March and April of this year, but with no special incidence on this school.

All the Head Teachers in the county are in possession of a booklet on Infectious Diseases, compiled by the County Medical Officer of Health, who is also the Principal School Medical Officer. Below is an extract of the information given with regard to Diphtheria, but without Isolation Hospital accommodation its value is much diminished.

INFECTIOUS DISEASES.

<i>Disease.</i>	<i>Incubation period.</i>	<i>Symptoms.</i>	<i>Affected Child.</i>	<i>Children from same house.</i>
Diphtheria	2 to 8 days.	Sore throat (may be slight); white patches on tonsils. A nasal discharge causing irritation, suspicious during epidemics.	Should be removed to hospital and have two weeks at home after leaving hospital. If treated at home, he should not attend school for two weeks after house is disinfected, unless his throat is certified by a Doctor as proved free from Diphtheria germs.	With the patient at home, other children may not attend school until he does. With the patient in hospital, other children should be excluded for two weeks, unless their throats have been medically certified as free from Diphtheria germs.

The Medical Officer of Health was advised to insist on negative swabs being obtained before allowing children to return to school after an attack, and also that Antitoxin be used in all cases of the disease, however mild, a course which had not always been adopted.

The Medical Officer of Health has drawn the attention of the District Council to the fact that cases have not infrequently occurred in the same house, mentioning particularly an instance in Calartha Terrace, Pendeen, from a house in which a case was notified on July 11th, 1911, to be followed by another one on August 2nd. In some of the infected houses, older inhabitants of the household suffered from mild attacks of sore throat, presumably about the time the patient was still suffering, and it is quite likely some of these were in fact true cases of Diphtheria. On the other hand, it is clear that there were cases of ordinary tonsillitis running their course simultaneously with those of Diphtheria, and certain negative swabs received amply supported this contention. This fact would tend to confirm the opinion that the insanitary conditions previously mentioned did much to enhance the progress of the epidemic, if not directly associated with its cause. In many instances the type of cottage which had to house, and so imperfectly isolate the infectious patient, was such as could only be expected to retain in its ill-ventilated and irregularly shaped and small rooms, the germs of the disease for some time, perhaps indefinite, with such meagre methods of disinfection.

PART III.—Conclusion and Recommendations.

The County Medical Officer of Health in his Annual Report for 1911, recommended the adoption of the Infectious Diseases' Prevention Act, 1890, and in the year 1904, Dr. J. Spencer Low, His Majesty's Inspector under the Local Government Board, recommended the same thing, but apparently no notice has been taken of this advice. In 1897 there were 23 cases of Typhoid Fever, with 3 deaths, which then fully demonstrated the urgent need for Isolation Hospital accommodation; the present Diphtheria epidemic further emphasises this fact, and furnishes a grave warning as to the

fate of the district should Typhoid Fever again manifest itself during the existence of such unfavourable sanitary circumstances, and with such an inadequate and doubtful supply of water for all purposes. Schemes for the provision of a proper water supply, and for drainage, sewerage, and sewage disposal, should be adopted by the Urban District Council without further delay. With regard to Isolation Hospital accommodation, application should be made to the Local Government Board for the constitution of a Joint Hospital District with neighbouring authorities by a Provisional Order under Section 279 of the Public Health Act, 1875, as suggested by the County Medical Officer of Health, page 129 of his Annual Report for 1911, and also in a previous memorandum, a copy of which was sent to the Urban District Council. Failing this, the County Council should use their powers under the Isolation Hospitals Acts, 1893 and 1901, to constitute a Hospital District to include the Urban District of St. Just.

A Joint Hospital thus formed would not only be proportionately more efficient than a smaller one, both with regard to equipment and administration, but would be large enough to possess a good type of Steam Disinfecting Apparatus, capable of dealing with infected clothing from all the constituent authorities concerned.

The general lack of sanitary progress, and weakness in administration, tend to demonstrate the value of a combination of districts, with a whole-time officer as Medical Officer of Health, and a staff of qualified sanitary inspectors. The early formation of a Joint Hospital Board would be a step which could reasonably be expected to prepare the way for such a change, which would solve the difficulties in the way of a more adequate prevention of epidemic disease.

(Signed) ROBERT BURNET,

M.Sc., M.B., Ch.B., D.P.H.,

County Medical Officer of Health.

To the Sanitary Committee
of the
Cornwall County Council.

CALSTOCK (R.D.)

In April, 1913, a Special Report was made by the M.O.H. concerning an epidemic of Diphtheria at Harrowbarrow. The first case was notified on January 30th, and was confirmed by bacteriological examination. In February a quantity of town refuse from Plymouth was deposited in a heap within 40 yards of the School. The ordour from this heap was so offensive that the windows at the back of the School had to be kept closed. Within a few days a large number of children developed "sore throat." In all, 12 cases were notified, 11 of them being children attending the School. Three cases occurred in the School House in the family of the Head Teacher. The School was closed from March 6th to May 13th, and the premises disinfected with formalin vapour. A second or third bacteriological examination of the affected children was made before they were allowed to return to School.

The M.O.H. rightly suggests that the "deposit" should be considered a "nuisance" and the offenders prosecuted.

ST. AUSTELL (R.D.)

In August, 1913, a Special Report was made by the M.O.H. on the Epidemic of Diphtheria at St. Dennis. Thirty-six cases of Diphtheria, causing 2 deaths, occurred at St. Dennis between the end of February and July 31st, 1913. The M.O.H. traced the origin of the epidemic to a "missed" case in a boy, whose sore throat was attributed to Tonsillitis by his Medical attendant. A few days later his brother was affected with similar symptoms. These cases occurred at the end of February, and on March 12th a notification was received relating to the baby sister of these two boys, she died from Diphtheria on the same day. The epidemic emphasises the difficulties found in Rural Districts, where there is no efficient isolation, and where all directions given concerning patients and "carriers" are often ignored. It also demonstrates that Diphtheria is generally spread by

personal contact. The absence of an Isolation Hospital prevents suitable measures being taken to stamp out an epidemic. In the opinion of the M.O.H., if the first notified case had been removed to Hospital, the epidemic would have ceased, and 32 children would have been saved from severe illness.

Erysipelas.

Cases notified, 115, 59 from Rural Districts, and 56 from Urban. 1 case was removed to hospital.

Scarlet Fever.

Cases notified, 561, 18 being removed to hospitals for Infectious Diseases. 300 of the cases occurred in the Rural Districts, of which 7 were removed to hospital, whilst 261 occurred in the Urban areas, 11 being isolated in hospital.

TYPHUS, TYPHOID (ENTERIC) AND CONTINUED FEVER.

Typhus Fever.

Fortunately no case of this disease has occurred in the County during the year. It still occurs on the continent in large centres of population, and occasionally even now, manifests itself in England. It is widely distributed throughout Central Europe, and especially in Poland. It is common in Northern Africa, in India, China, Mexico, and parts of the United States, but it is practically unknown in Australia, New Zealand, and tropical Africa. In all the countries in which it occurs it shows a tendency to be confined to endemic centres, where it becomes epidemic from time to time. It is most frequent between the ages of 15 and 30, and, like Typhoid, rarely occurs in infants, but we must not lose sight of the fact that, like this latter disease, it may occur in so mild a form that it easily escapes notice. Unlike Typhoid, however, the germ of typhus fever is still unknown, and it is quite possible that the disease may become extinct before its causative organism is found. The common body louse plays an important part in its transmission.

Typhoid Fever.

This used to be confounded with the latter disease, hence its name. There were 54 cases in Cornwall during the year, as compared with 41 last year. "Carriers," or persons who, after recovering from the disease, still impart it to others, constitute a very grave obstacle in controlling it. It is very disconcerting to have to admit that these people may be dangerous to the public when they are in perfect health themselves, and even years (in some instances) after they have recovered from their attack. More strict supervision of water supplies and safeguards against the pollution of rivers by sewage, are important factors in the prevention of this serious disease. There still remains for the careful consideration of the public the great danger associated with the eating of shellfish, and particularly oysters, cockles, and mussels. These shellfish, found at the estuaries of rivers, are naturally more liable to contamination by sewage than most articles of diet; nevertheless, it is astonishing what little effect this solemn warning has on the consumer, despite the large and undoubted death-rate annually produced by the careless consumption of these otherwise valuable articles of food. Cockles and mussels should be boiled, and never eaten raw; oysters should not be accepted unless it is possible to get evidence of a certified source. Even cooking of these shellfish is a matter for serious deliberation, as this process, although rendering them perhaps less digestible and more difficult to take, yet it does not rob them of palatability; it certainly ensures an absence of active Typhoid bacilli. It is encouraging to know, however, that the better known owners of oyster beds are careful to ensure purification for some period prior to their sale, and we are indebted to the late Dr. Bulstrode, of the Local Government Board, for his interest and influence in securing a better condition of things in Cornwall, with the result that some of the best and purest of these shellfish are sent in large quantities to all parts of the country. Of the 54 cases notified, 18 occurred in the Rural Districts, and 36 in the Urban.

The disappearance of the disease is mainly prevented by the continuance of the chain of infection by the "healthy carriers."

Continued Fever.

In this class comes those illnesses which are associated, as the name indicates, with a continued rise of temperature; many of them are in reality genuine cases of Typhoid pursuing an aberrant course, or with the commoner symptoms masked or in abeyance, or perhaps some of them are indistinguishable from Para-typhoid or other febrile conditions; it is, therefore, always advisable to classify these cases along with cases of Enteric or true Typhoid Fever. 7 cases of Continued and none of Relapsing Fever were notified during the year.

Puerperal Fever.

7 cases were notified during the year, 2 in the Rural and 5 in the Urban areas.

Poliomyelitis and Cerebro-Spinal Meningitis.

15 cases of the former (8 in Rural Districts and 7 in Urban), and none of the latter, were notified. The confusion in the diagnosis of these two diseases is still apparent.

Phthisis (Pulmonary Tuberculosis).

578 cases notified (259 in the Rural Districts, and 319 in the Urban).

Deaths	1913	1912
Rural Districts	212	226
Urban Districts	202	177
	<hr/>	<hr/>
Total	414	403

Other Tuberculous Diseases (including Tuberculous Meningitis.)

195 cases notified (75 in the Rural Districts and 120 in the Urban.

Number of Cases notified each week by Medical Officers of Health; week ending February 1st, 1913, to week ending January, 3rd, 1914.

Number of Cases notified each week by Medical Officers of Health; week ending February 1st, 1913, to week ending January, 3rd, 1914.

Pulmonary Cases—Black. Non-Pulmonary—red

[illegible]

Infectious Disease Rate.

Rural Districts	5.15 per 1,000.
Urban Districts	7.16 „ „
Whole County	6.04 „ „

TUBERCULOSIS.**Deaths in 1913.**

Phthisis (Pulmonary Tuberculosis). 414 deaths against 403 in 1912 (202 in the Urban Districts and 212 in the Rural Districts).

Main Distribution :—

Urban.		Rural.	
Camborne	48	Redruth	48
Redruth	24	St. Austell	31
Penzance	16	Helston	29
St. Just	16	Truro	20
Truro City	10	Bodmin	14
St. Ives	10	West Penwith ...	14

Other Tuberculous Diseases (including Tuberculous Meningitis). 93 deaths against 105 in 1912 (46 in the Urban Districts and 47 in the Rural Districts).

Main Distribution :—

Redruth Urban	10
St. Austell Rural	8
Truro Rural	7

Circular to the County Council, issued in 1913.

TUBERCULOSIS.

Few are they, and fortunate, who have no personal knowledge of the terrible suffering and loss caused by Tuberculosis ; when there exists reasons for the firm conviction that by vigorous and concerted action this Scourge may be practically wiped out, at once arise the questions :—What must be done ? How can it be done ? What will it cost ?

The steps indicated in the Astor Report show what must be the broad basis of a scheme that aims at eradication of the Disease—local conditions necessitating modifications to adapt the general principles to meet particular requirements.

It would appear that once the machinery necessary for dealing adequately with a large proportion of the population exists, the extension of the system to deal equally with the remainder is not only far less costly in proportion during the early stages, but in the end is actually far less costly since it gives the only means whereby the Disease may be eventually rooted out, and thus expenditure in this direction cease.

A principle that elects to spend money in combating the results of an infection, and makes no attempt at the same time to stop the source of infection, is one that commends itself not at all to the economist. The selection of some cases for treatment, while leaving other similar cases unconsidered, to take their chance of recovery and, what is far more serious to the community, to act meanwhile as foci for further spreading the disease, is a measure opposed alike to Humanity to Reason and to Economy.

CHARLES ROPER.

The work done in connection with the development of the County Scheme for dealing with this Disease during 1913 was mainly in the direction of a closer enquiry into the Disease as it effects Cornwall, and a critical examination of the original Scheme in view of the knowledge thus obtained, with the result that action has been taken towards the development of this Scheme.

Premises, suitable for adaptation as Dispensaries, were taken, after obtaining the approval of the Local Government Board, at Tuckingmill, Penzance, St. Austell and Liskeard.

A number of suggested sites for a Sanatorium were visited. The most suitable of these appeared to be Watergate Bay Hotel; the Local Government Board were asked to send down a Medical Inspector and on his confirming this opinion,

negotiations for purchase were entered into ; unfortunately the freeholder of the Hôtel site felt himself unable to approve of the Scheme, and refused his consent to the purchase.

During the year the County Tuberculosis Officer personally visited the homes of about 400 cases of Tuberculosis in the County, examined and advised the patients, and investigated the conditions with a view to checking the liability of infection by contacts.

Consideration of a Report by the Tuberculosis Officer as to the probable additional cost of developing the scheme so as to offer treatment to all suitable cases, whether Insured or not, taken in conjunction with the benefit likely to arise from such a course, led to the Council deciding to render this officer's services available for all cases.

Phthisis. Of the 414 deaths, 202 occurred in the Urban areas, leaving 212 in the distinctly Rural Districts. Since many of these so-called " Urban " areas would be in reality " Rural " in many counties, it follows that the death-rate, 1.25 per thousand living, is high in this agricultural county for a disease which is admittedly more associated with Urban communities.

England and Wales in 1910 recorded only 1.02, the average for the previous ten years being only 1.16. The districts in which this rate ruled high were: Camborne Urban, 2.98; St. Just Urban, 2.77; Redruth Rural, 2.68; and Redruth Urban, 2.20. It is obvious that industrial phthisis associated with the mines chiefly accounts for the high rate mentioned in these districts, and the home-coming of infected miners from abroad must add considerably to the quota directly, as well as indirectly by the number of people they infect. Evidence of the precautions taken in the mines is to be found in the accompanying bill :—

METALLIFEROUS MINES REGULATION ACT,
1872 and 1875.

(Metalliferous Mines in the Counties of Cornwall and Devon.)

35 and 36 Vict., Cap. 77, and 38 and 39 Vict., Cap. 39
SPECIAL RULES.

(Drills and Sanitary).

For Mine.

The following rules shall be observed so far as is reasonably practicable :—

1. No person shall use or cause or allow to be used in the mine any percussion rock drill unless a water jet or spray or other means equally efficient is provided and used so as entirely to prevent the escape of dust into the air.

2. After blasting in an end, rise, or other place, no person shall return to that place until after the lapse of at least half an hour, unless the air in such place has been cleared of the dust and smoke arising from such blasting by efficient ventilation or other special means, or unless an effective respirator or other apparatus is used to prevent his inhaling such dust or smoke. Blasting shall be so arranged that men working in other places shall be exposed as little as practicable to dust and smoke.

3. In ends, or rises, and as far as practicable in other places, no person shall remove or cause or allow to be removed, the rock broken if dry and dusty, unless it has been effectively damped so as to prevent the escape of dust into the air during removal.

4. The owner, agent, or manager shall cause all stone breaking machines used at the mine to be provided and kept provided with an efficient watering or other arrangement to prevent the escape of dust into the air, and no person shall

work or cause or allow to be worked, any such machine unless such an arrangement is provided and effectively used.

5. The owner, agent, or manager shall cause a sufficient number of suitable sanitary conveniences to be provided above and below ground in suitable and convenient places for the use of the persons employed, and to be constantly kept in a cleanly and sanitary condition, and no person shall relieve his bowels below ground elsewhere than in those conveniences. No person shall soil or render unfit for use in any way any convenience or sanitary utensil or appliance provided for the use of the persons employed. Pump cisterns, sumps, and water accumulations in the mine shall not be directly or indirectly used for the purpose of Rule 5 as a sanitary convenience.

6. It shall be the duty of the owner, agent or manager to see that all plant, material, and other things necessary to enable the above rules to be carried out are provided and maintained in working order, and to appoint sufficient competent officials to enforce the requirements of the rules, and for this purpose to assign to each his respective duties.

It shall be the duty of the officials so appointed to see that the rules are observed by all persons employed in the mine, and to carry out the duties assigned to them.

It shall be the duty of all persons employed in the mine to comply with the requirements of the rules and with such instructions as may be given to them by the officials with a view to such requirements being carried out.

Name of the Mine

Situation of the Mine

County

Name and Address of Owner

Name of Agent or Manager

Too much attention has of late been given, and is still being given, to the tubercle bacillus, and the phthisical patient, and too little thought as to their origin—the factory which produces them, so to speak. It is useless to hope to get rid of anything by extermination, if it is allowed to be produced practically unchecked.

The problem of Consumption is largely the problem of Housing, yet bad housing is suffered to continue, with all its evils, whilst the disease itself is fought as it arises, only to be replaced by repeated reinforcements from its certain source. True it is that poverty, industrialism, alcoholism, etc., are, in some instances, causative agents, the first of these being frequently associated with bad housing, the want of cubic space, light, ventilation, fresh air, and cleanliness. The Housing and Town Planning Act, 1909, is not too severe, but is severe enough to become impossible in certain districts: houses must be closed as unfit for habitation, yet Local Authorities must make provision for the population displaced, with insufficient money to do so, and inability to borrow, on account of the present condition of their rates, and the general poverty of their districts. Houses have thus to be left in an insanitary state, and consumption further given its chance. It is a matter of finance, and if sufficient money were handed over to responsible authorities to enable them to immediately erect workmen's dwelling and secure a perfect housing system, with full opportunities for keeping it perfect by a rigid application of the Housing Acts, consumption would soon be a thing of the past. Speaking generally, the disease is not hereditary, but only the tendency to catch it is transmitted from parent to child; this tendency can be minimised by raising the resistance, and this can always be done by hygienic surroundings, or, in other words—proper housing. Now money is available for giving consumptives sanatorium treatment, but how much good will be undone when the patients return to their insanitary homes, only to re-develop the disease, if, as it rarely happens, it is cured, and to rekindle it if it is arrested? We must be careful not

to spend too much public money on the less important matters, and leave the important untouched; to cure consumption is good, but to prevent it is better. The Death-rate from Phthisis in England and Wales per 1,000 persons living dropped from 1.426 in 1895 to 1.140 in 1905, and from 2.7 for the decennium 1851—1860 to 1.3 for the decennium 1891—1900, due obviously to improvements in the general hygienic surroundings. To what extent would it drop, then, if we had proper housing for the masses ?

**STATISTICS SHOWING THE PREVALENCE OF
MINERS' PHTHISIS
IN THE COUNTY OF CORNWALL.**

Number of Deaths recorded during the years 1911, 1912, 1913—386.

The district in which the disease may be considered to be most prevalent is the mining district represented by the Redruth Registration District.

Redruth Registration District.

Deaths from Miners' Phthisis in given periods compared (compiled from returns of Registrars of the Sub-Districts):—

1911, 1912, 1913.			1900, 1901, 1902, from the Government report of Messrs. Haldane, Martin & Thomas	
59	...	Camborne	...	81
61	...	Illogan	...	39
35	...	Gwennap	...	29
38	...	Redruth	...	25
5	...	Phillack	...	7
<hr/>			<hr/>	
198				181

Number of Deaths from Miners' Phthisis, in men mainly employed in Cornwall:—

1911, 1912, 1913.			1900 1901, 1902. from the report of Messrs. Haldane, Martin and Thomas (as above).	
37	...	Camborne	...	49
35	...	Illogan	...	22
6	...	Gwennap	...	9
12	...	Redruth	...	10
0	...	Phillack	...	4
—				—
90				94

Numbers of such Deaths in miners who have been employed in South Africa:—

1911, 1912, 1913,			1900, 1901, 1902, from report of Dr. Haldane (1904).	
22	...	Camborne	...	32
26	...	Illogan	...	17
29	...	Gwennap	...	20
26	...	Redruth	...	15
5	...	Phillack	...	3
—				—
108				87

These parallel statistics were obtained from identical sources.

It would appear that not only is there no improvement with regard to the incidence of Miners' Phthisis in Cornwall since the triennium 1900—1903, but, on the other hand, the above figures show an increase during the very years that the death-rate from general phthisis has in the main diminished.

Death-Rates from Phthisis per 1,000 Living:

1902—1.46; 1903—1.37; 1904—1.32; 1905—1.37
 1906—1.18; 1907—1.43; 1908—1.36; 1909—1.25
 1910—1.23; 1911—1.25; 1912—1.22; 1913—1.25.

DEATHS FROM MINERS' PHTHISIS.

Summary of Returns From Registration Sub-Districts.

All Cornwall—years 1911, 1912, 1913.

(Out of the 52 districts, 20 made a "nil" return.)

Sub District.		Miners who have worked in Cornwall.	Miners who have worked in South Africa.	Total
1.	Camelford	1	—	1
2.	North Hill	4	1	5
3.	Callington	4	4	8
4.	Liskeard	3	1	4
5.	Lanlivery	—	1	1
6.	Bodmin	8	1	9
7.	St. Columb	—	2	2
8.	Newlyn East	—	1	1
9.	Fowey	—	3	3
10.	St. Austell	3	1	4
11.	Grampound	—	1	1
12.	St. Just (Truro)	—	1	1
13.	St. Agnes	12	7	19
14.	St. Clement	—	1	1
15.	Kenwyn	8	—	8
16.	Kea	4	—	4
17.	Penryn	1	—	1
18.	Constantine	—	2	2
19.	Wendron	4	12	16
20.	Helston	2	—	2
21.	Breage	3	4	7
22.	Crowan	11	1	12
23.	Gwennap	6	29	35
24.	Redruth	12	26	38
25.	Illogan	35	26	61
26.	Camborne	37	22	59
27.	Phillack	—	5	5
28.	Uny Lelant	9	—	9
29.	St. Ives	9	2	11
30.	Marazion	3	3	6
31.	Penzance	2	15	17
32.	St. Just-in-Penwith...	8	25	33
		189	197	386

**Miners and Dependents Repatriated from South Africa by
the Miners' Phthisis Board.**

		Miners	Wives & Widows	Children	TOTAL
January 1913	{ United Kingdom (excluding Cornwall)	41	17	35	93
	{ Cornwall ...	11	2	6	19
February 1913	{ United Kingdom (excluding Cornwall)	27	9	19	55
	{ Cornwall ...	6	2	4	12
March 1913	{ United Kingdom (excluding Cornwall)	17	5	23	45
	{ Cornwall ...	6	2	1	9
April 1913	{ United Kingdom (excluding Cornwall)	55	19	29	103
	{ Cornwall ...	11	4	5	20
May 1913	{ United Kingdom (excluding Cornwall)	33	12	24	69
	{ Cornwall ...	12	4	12	28
June 1913	{ United Kingdom (excluding Cornwall)	46	12	26	84
	{ Cornwall ...	11	3	2	16
July 1913	{ United Kingdom (excluding Cornwall)	17	11	22	50
	{ Cornwall ...	9	5	10	24

		Miners	Wives & Widows	Children	TOTAL
August 1913	United Kingdom (excluding Cornwall)	33	15	26	74
	Cornwall ...	18	2	2	22
September 1913	United Kingdom (excluding Cornwall)	33	12	23	68
	Cornwall ...	24	3	1	28
October 1913	United Kingdom (excluding Cornwall)	33	9	13	55
	Cornwall ...	12	2	9	23
November 1913	United Kingdom (excluding Cornwall)	19	5	9	33
	Cornwall ...	13	3	5	21
December 1913	United Kingdom (excluding Cornwall)	33	9	9	51
	Cornwall ...	11	1	1	13

**Aggregate Number of Miners and Dependents Repatriated
from South Africa for the Year 1913.**

	Miners	Wives & Widows	Children	TOTAL
United Kingdom (excluding Cornwall)	387	135	258	780
Cornwall	144	33	58	235
All England	531	168	316	1015

The above returns have been received from the Office of the High Commissioner of the Union of South Africa.

Short Memorandum on the Relationship which Miners' Phthisis bears to Pulmonary Tuberculosis.

Unfortunately there still appears to be some diversity of opinion on the part of medical practitioners with regard to the strict meaning of "Miners' Phthisis," and this very considerably impairs the value of statistical evidence as to the prevalence of this disease in the County of Cornwall. Happily the resulting "hesitancy of diagnosis," though it renders the figures unreliable, does not diminish seriously the beneficial character of the advice that may be given to the sufferer.

It would be well, however, if it were generally realised that Miners' Phthisis is in itself simply a non-specific Pneumokoniosis, a chronic inflammation of the lung, set up by the physical properties of inhaled dust. By the Miners' Phthisis Act of the Union of South Africa, 1912, it is defined that Miners' Phthisis shall mean Silicosis of the Lungs. Other forms of Pneumokoniosis met with amongst miners and stone-workers, are variously named according to the character of the inhaled dust, e.g.:

Anthracosis—in coal miners.

Siderosis—in iron-workers.

Chalicosis—in stone-cutters.

Some idea of the relative importance of these in regard to the life history of the sufferers may be gathered from the following figures, taken from the evidence of Malcolm Delevingne, Esq., C.B., before the Royal Commission on Metalliferous Mines and Quarries, Vol. I., 1912 :—

If 100	=	normal figure for deaths, from lung disease,	
		amongst occupied males generally,	
then 419	=	corresponding figure for tin-miners.	
155	=	,, ,, ,,	lead-miners.
111	=	,, ,, ,,	coal-miners.
79	=	,, ,, ,,	ironstone-miners.

In Cornwall we largely meet with Silicosis, occurring in tin-miners and gold-miners, and having regard to the confusion that exists between Silicosis and Tuberculosis of the Lungs, it is advisable at the outset to realise the essential difference in the mode of production of these two diseases; by so doing we shall the more readily see how their frequent association arises, and becomes of necessity so very fatal a combination.

Silicosis is produced by continued inhalation of large quantities of particularly hard and sharp particles of dust of igneous origin; the finer mechanisms which tend to expel foreign substances thus introduced (ciliated epithelium, phagocytes, etc.) are unable to cope with the excessive work thus thrown upon them. Some of the particles escape, and passing lower down the respiratory tract, penetrate the mucosa, and reach the lymph spaces. Here by their excess they prove too much for the cells of the connective tissue stroma, and entering the lymph stream, get lodged in the lymphatics and interlobular septa, and set up an interstitial fibrosis which may remain diffuse, or in places lead to consolidation, and very rarely to subsequent softening. Should this latter occur, and a communication be formed with a bronchus, the softened and breaking down contents would be expelled, and a cavity produced.

Tuberculosis, on the other hand, if it attacks the lungs, very rarely does so by, so to speak, a frontal attack. Essentially is Tuberculosis a general disease, with local manifestations, be they pulmonary, interstitial, meningeal, peritoneal, or glandular; rarely, if ever, does the invading bacillus pass directly down the air passages, thus to find lodgment in the ultimate air spaces, and set up its sequence of pathogenetic changes. Having effected its entry into the system by means of the lymphatics, by them it is circulated, and should it be brought to a spot where the defensive forces are impaired, from whatever cause, there it is likely to produce those local changes which so generally overshadow the systemic infection.

After this brief survey of the mode of production of these two conditions, bearing in mind the ubiquity of the Tubercle Bacillus, it is clear that the Silicosis patient is particularly liable to develop Pulmonary Tuberculosis, and that in his case the latter disease, when it develops, is almost hopeless and tends to run a rapid course. Anomalies occur, for which sometimes the reason is not easily to be found, but it is outside the scope of this brief note to discuss more than the bare outlines of the two conditions and their association.

In a case of well-developed Silicosis the impairment of the patient's pulmonary apparatus renders him particularly liable to other respiratory disease, apart from which his lungs should serve their purpose with gradually decreasing efficiency: the fibrosis tends to extend, and the fibrosed portions to contract, much or little in different cases. Commonly the clinical picture presented is that of a healthy-looking man, who complains of some shortness of breath, perhaps some pains in the chest and palpitation; examination reveals little—a limited respiratory movement of the chest, a percussion note which may be merely slightly impaired at the base posteriorly, while auscultation shews faintness of breath sounds, which may be a little harsh and irregular in places. Symptoms and physical signs much beyond this, indicate the probability of other co-existing trouble, which is commonly tuberculous, though, as indicated above, the process may actually extend to cavity formation in the absence of Tuberculosis. We may go even further than this, and say that the symptoms of Silicosis are of such gradual onset that the patient largely accustoms himself to the conditions, and rarely consults his doctor until there occurs either a rapid exacerbation of some pre-existing symptom, or the development of some new disability. This is, perhaps, more frequently at first a readily induced fatigue, or some loss of weight or general feature, rather than a local condition referable to the lung; at this stage experience teaches us that the case has too frequently already developed tuberculous trouble, and the course of the disease is likely to be rapid.

Thus, very briefly, may be sketched some of the more common features of the conditions under consideration. Unfortunately, lack of post-mortem examinations considerably hampers our close enquiry into the morbid processes, and such examinations in the case of "Boys" on the Rand are hardly parallel, as in their case, while there is not the same liability to Silicosis as in the Whites, they are more prone to Tuberculosis, which, moreover, with them is frequently of an acute type.

One further, and very important, point needs consideration—there seems to be a popular idea that Miners' Phthisis is not infectious; Miners' Phthisis, properly so called, that is, Silicosis of the Lungs, is certainly not infectious. On the other hand, where a Tuberculous process is superimposed on a lung, the resistance of which is already considerably impaired, it seems reasonable to suppose that not only is the progress of the disease likely to be rapid, but that the pathological products of the disease, e.g., sputum, spray exhaled by coughing, etc., are likely to be at least as infectious as those of ordinary Phthisis, and possibly more so. There are at present no uniform figures, which might serve as a basis of comparison, for the frequency and intensity of infection of contacts in the two classes of cases, but as the present system for routine examination of all contacts develops, we shall gradually accumulate a mass of evidence, and be able to base our statements on definite statistics, rather than on personal opinions.

Mr. Hugh Johnston, Inspector of Mines for Midland and Southern Division of England, in his report for 1913, states that of the 4,589 males employed underground in 84 mines at work in Cornwall, 158 were between 14 and 16 years of age, the remainder being above 16. In the same county 3,597 males and 145 females were employed above ground, 238 males and 17 females being between 14 and 16. The tonnage of mineral raised in Cornwall was : Dressed tin ore (black tin), 6,844 ; undressed tin, 1,042 (estimated to contain 2 tons of

black tin) ; copper ore and copper precipitate, 434 ; arsenic, 1,491 ; arsenical pyrites, 35 ; uranium ore, 95 ; wolfram, 180 ; and elvan stone, 250.

Of the 19 fatal accidents in metalliferous mines in the division, 17 occurred in Cornwall. There had been a slight decrease in the number of fatalities, but there was still great room for improvement. In former reports he had repeatedly recorded the opinion that a large proportion of the fatal accidents might have been avoided by strict obedience to orders, or by the exercise of greater caution. A careful examination of the reports submitted to him by the inspectors of the 17 fatal accidents in Cornwall tended only to confirm this opinion. In this connection mention is made in the report of the need of better supervision and stricter discipline on the part of the officials, and of greater care on the part of the men. The Inspector deals at some length with accidents which occurred on March 3rd and November 6th respectively at Wheal Jane and at East Pool Mine, and states that the whole circumstances connected with these two accidents appeared to him to justify the severe comments he had repeatedly felt called upon to make with regard to the carelessness and loose discipline which were too common in some of the Cornish mines.

No cases of ankylostomiasis had been directly reported to the Inspector during the year, but he was informed that recent investigations had shown that the disease had not been entirely eradicated in certain mines in Cornwall. With regard to miners' phthisis, Dr. P. S. Haldane, F.R.S., who, as in previous years, had analysed the returns obtained from the sub-registrars of the Redruth registration districts, had prepared tables showing the incidence of phthisis, and had appended the following remarks:—

“ It will be seen that the figures for 1913 are very disappointing. The number of deaths among men working machine drills had been about 50 per cent. greater than three years ago, and the increase is not merely due to men returning from the Transvaal, but also to men who have never worked machine drills outside Cornwall. Out of 14 men who

had worked machine drills in Cornwall, only four had done the work since the regulations of 1905 were introduced, 10 had worked partly before, and partly after the introduction of the regulations, while one had worked entirely before. It seems pretty clear, therefore, that the regulations have not as yet proved effective in preventing the inhalation of stone-dust. Of men who had never worked machine drills, 44 had died of lung disease, and 40 of phthisis, among whom the average age was 48. It is remarkable that no deaths from pneumonia are recorded. The apparent infrequency of deaths from pneumonia is characteristic of the returns for Cornish miners. Of the 40 who died from phthisis, 20 had worked in the Transvaal as well as in Cornwall, and 8 had worked in Cornwall only. Of the 114 deaths among miners of all kinds, 79 (or 69 per cent.) were due to phthisis. This is a very heavy proportion. In an average English population of occupied and retired males only about 14 per cent. die of phthisis, although about 35 per cent. die from respiratory diseases as a whole, as compared with the 73 per cent. among miners in the Redruth district in 1913."

In the section of the report dealing with work under the Quarries Act, it is shown that 4,420 males were employed inside the 429 quarries at work in Cornwall, while those employed outside were 2,726. The workers between 14 and 16 in each case were 99 and 197 respectively. The total tonnage raised in Cornwall was 1,224,646, including 17,606 tons of slate.

SCHOOL CLOSURE.

It frequently happens that the Medical Officer of Health for the Rural District lives many miles away from the school concerned, and it is found more expedient for the County Medical Officer, as Principal School Medical Officer, to close; thus no time is lost in outbreaks which require this procedure. There is a tendency still for some Head Teachers to expect closure at too early a date, when careful exclusion would effect the purpose. In some districts, also, there is an impression that a school ought to be closed immediately

the inhabitants became aware of infectious cases attending ; much correspondence resulting which could be avoided if it could be more clearly seen that the teacher's Form 9 M.I., especially if repeated on successive mornings, will effect all that is necessary by furnishing proper information to those in charge, and who understand the real position.

During the year 80 schools have been closed for varying periods, with an average of about three weeks, due to outbreaks of Infectious Disease among the scholars. The majority of these were closed at the instance of the Education Authority, through the Principal School Medical Officer (County Medical Officer), and the remainder by the local Medical Officer of Health, under the Public Health Act of 1875 (compulsory closure). In each instance the Board of Education has been notified by a signed document through the office of the District Clerk, from the Central Department. The local Medical Officer of Health is also notified of this procedure, when necessary, by printed post card.

**Schools Closed owing to Infectious Illness during the
Year 1913.**

Disease.	No. of Closures.	No. of Scholars Affected.
Measles	38	4,664
Diphtheria	9	1,313
Whooping Cough	4	255
Scarlet Fever	7	1,123
Measles and Scarlet Fever ...	9	831
Measles and Whooping Cough	3	184
Measles and Chicken Pox ...	1	106
Measles and Ringworm	1	64
Whooping Cough and Eczema	1	64
Whooping Cough and Diphtheria	1	362
Mumps	2	155
Roseola	2	180
Scabies	1	175
Poliomyelitis	1	75
TOTALS	80	9,551

School Buildings, etc.—General Sanitary Condition.

During the year under review three new elementary schools have been opened by the Education Authority :

EASTERN DIVISION.

(Architect, Mr. B. C. Andrew)
Pensilva.

WESTERN DIVISION.

(Architect, Mr. Sampson Hill)
Sithney.
Truro.

All of these schools have been built to replace pre-existing ones.

There are 14 schools in which structural alterations have been made in order to improve the sanitary condition, attention being given to the School Offices, Lighting, Heating, and Ventilation ; in some instances a better playground accommodation has been supplied, and in others alterations in the Cloak Rooms have been found necessary with regard to wash bowls, drainage, water supply, hat and coat hooks, due regard being given, when possible, to the heating of these rooms.

The Building and Furnishing Committee, whose meetings both architects attend, adopts a policy by which the County Secretary keeps on the agenda all items connected with defects of premises until they are completely disposed of, repeating them at successive committees even during actual remedial operations, and reporting progress or reason for dilatoriness, if any. Should the agenda contain anything of special sanitary moment, the County Medical Officer (Principal School Medical Officer) attends for the purpose of stating his views on the question involved ; this officer has thought it well to attend all these meetings, and has taken advantage of opportunities to visit schools in company with the Secretary when investigating questions dealt with by this Committee.

There is definite co-ordination with the work of School Managers through the Building and Furnishing Committee whereby attention is immediately given to minor details of repairs, as well as to the greater schemes involving much

structural alteration or renewal. As a consequence of this system of supervision, the average school in Cornwall is certainly good as compared with that of other counties, both with regard to its sanitary condition and to its general comfort. The usual problems associated with rural schools naturally present themselves, not the least of which is the disposal of excreta, whilst the question of water supply is frequently an acute one. A few schools are still without water supply, but arrangements are invariably made for the daily delivery from a neighbouring source ; this is far from satisfactory, as it banishes all hope of making use of any form of water carriage system for dealing with the excrement. In many instances the water supply is good, but water closets cannot be supplied on account of the fact that the district is not sewered ; in a few, despite this fact, a septic tank principle is able to be adopted.

In some cases, however, where the school is situated in an urban area, a perfect system is in vogue, but in the vast majority the earth closet has to be resorted to. A few of these are of the old type, and much too large, but the early realisation of this grave fact has resulted in a rapid adoption of the more modern convenience furnished with a smaller receptacle, and having set apart a separate dry storage for soil. In some districts soil is difficult to obtain, and particularly the real "humus," without which the proper deodorising and disintegration of the excreta cannot take place. Sawdust is made use of in a few places, but this is a failure, and ought to be discontinued. Where the soil difficulty occurs, a pail system should be adopted without hesitation ; there are many such installations, but the main difficulty, and one which is constantly met with, is in connection with the removal of the pails. Notwithstanding the great value of this product for manurial purposes, much hesitation is shown with regard to the emptying of the pails, and in some villages no one is apparently available for this duty. The value of the earth-closet material is nothing to be compared with that of the pail closets, because in the

former much of the nitrogen has been dissipated in the form of ammonia ; nevertheless, the trouble connected with removal less frequently occurs in the case of earth closets.

In some schools chloride of lime has been used mixed with the earth ; this is wrong, as it interferes with the germs whose actual role is that of the scavengers, by virtue of their power of disintegrating the fæcal material. In nature, wild and even domestic animals, such as the carnivora with foul excreta, cover the same with soil immediately it is voided, whereas the herbivora, with a less harmful excrement, do not require to do so ; hence the human subject requires the use of a good soil in places where the earth convenience is necessary ; sand and gravel, though made use of in some schools, are practically as useless as sawdust. A combination of the pail and earth method is to be recommended, when good soil is available, and a frequent removal assured.

In some of the older schools the offices are far too near the schoolrooms, and in a few instances the windows for ventilation exist in too close proximity. In boys' departments the separate disposal of urine constitutes a problem not without difficulty. Soak-away pits are undesirable, and a system of drainage into watertight pits, with cemented walls, is being adopted by the architects as required by the Local Government Board, the liquid being periodically pumped out into a portable tank sent where required. Still, in some rural schools not only does this liquid find its way into adjoining ground, but no system of flushing the actual urinal is available, foul ammoniacal odours being constantly emitted.

In girls' schools with earth closets provided, the excess of this liquid increases the difficulty of scarcity of soil, more of the latter being required than in the case of the boys' conveniences with their separate urinal.

The supervision of the school offices by the Head Teachers, in conjunction with the caretakers, is responsible for the general state of cleanliness noted during the year;

there were exceedingly few exceptions, and to these the attention of those responsible was immediately drawn.

With regard to the heating of schools, although the committee constantly give this their attention, some teachers take advantage of it at the expense of ventilation,, instead of using the former as an adjunct to the latter, the very embodiment of Nature's law. As an experiment which gives great promise of success, certain of the Schools have been provided with hat and coat rails in the cloakrooms, constructed on a special plan, which makes use of the device of maintaining a constant circulation of hot water through pipes distributed equally among the clothes. It is important that this method of drying should be accompanied by adequate ventilation. In some schools, lighting is either not good, or wrongly applied ; but instances of this are constantly receiving the important attention they deserve.

Part IV.

**Digest of Annual and Special Reports on the following
Districts, by their respective Medical Officers of Health.**

No. of District.	Sanitary District.	Population estimated to middle of 1913.	Medical Officer of Health.
RURAL.			
1.	Stratton	4,904	Dr. E. L. Meynell
2.	Launceston	7,484	„ A. Budd
3.	Calstock	4,644	„ A. Bowhay
4.	Boscastle	2,319	„ C. Wade
5.	Camelford	5,112	„ E. J. Jerome
6.	Liskeard	15,272	„ W. Nettle
7.	St. Germans	12,283	„ R. T. Meadows
8.	Bodmin	10,349	„ A. G. Salmon
9.	St. Columb	11,385	„ S. McMahon
10.	St. Austell	33,452	„ A. T. Nankivell
11.	Truro	20,145	„ T. M. Bonar
12.	Redruth	17,914	„ A. E. Permewan
13.	East Kerrier	7,966	„ J. Blamey
14.	Helston	17,074	„ F. Chown
15.	West Penwith	11,134	„ J. R. M. Richmond
16.	Scilly Isles	2,098	„ W. B. Addison
Total Rural.....		183,535	
URBAN.			
17.	Callington	1,713	Dr. H. Davis, Jr.
18.	Stratton and Bude ...	3,139	„ T. A. King
19.	Launceston	4,132	„ A. Budd
20.	Liskeard	4,457	„ W. Nettle
21.	Torpoint	4,493	„ S. G. Vinter
22.	Looe	2,758	„ J. E. Webb

No. of District.	Sanitary District.	Population estimated to middle of 1913.	Medical Officer of Health.
URBAN.			
23.	Saltash	4,315	Dr. G. Meadows
24.	Bodmin (including Gaol and the Asylum)	5,675	„ B. G. Derry
	Do. (excluding do.)	(4,065)	
25.	Lostwithiel	1,383	„ W. M. Thomas
26.	Wadebridge -	2,375	„ J. E. Pellow
27.	Truro City	11,269	„ H. C. Sharp
28.	Penryn	3,069	„ J. Blamey
29.	Falmouth	13,458	„ A. Gregor
30.	Helston	2,903	„ M. R. Taylor
31.	St. Ives	7,294	„ J. M. Nicholls
32.	Penzance	13,572	„ R. C. Lawry
33.	Padstow	2,699	„ F. Harvey
34.	Newquay	4,466	„ A. Hardwick
35.	St. Austell	3,371	„ A. Shaw
36.	Redruth	10 902	„ F. Hichens
37.	Camborne	16,092	J. T. Thomas
38.	Phillack	3,547	„ Z. B. Mudge
39.	Hayle	1,015	„ Z. B. Mudge
40.	Madron	3,755	„ W. R. Wilson
41.	Paul	5,938	„ H. R. Phillips
42.	Ludgvan	2,199	„ H. R. Phillips
43.	St. Just	5,778	„ R. G. Nesbitt
Total Urban		145,768	
County Total		329,303	

STRATTON (R.D.)

M.O.H.—E. L. Meynell, M.B., B.Sc. Salary, £35.

Sanitary Inspector—J. P. Baker. Salary, £40, and £100 as Surveyor.

Area—53,264 acres. Population—4,904.

Births—111 (58 male, 53 female). Birth-rate—22.63.

Deaths—62 (25 male, 37 female). Corrected Death-rate—10.76.

Infant Mortality—46.30.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—5.

Bakehouses—3, not registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Measles and Whooping Cough.

Steam Disinfector—Nil. 10 house rooms and 2 schoolrooms disinfected.

P.H. Act Amendment Act, 1890—Not Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—Regulations under Dairies, Cow-sheds and Milkshops Order adopted.

Remarks.

The health of this district is generally good. Some arrangements should be made for the use of a steam disinfector for clothing and other articles, after the occurrence of infectious disease. Building bye-laws should be adopted.

LAUNCESTON (R.D.)

M.O.H.—Arthur Budd, M.B., B.S. (Durh.). Salary, £40.?

Sanitary Inspector—J. Frayne.

Area—73,187 acres. Population—7,484.

Births—139 (68 male, 71 female). Birth-rate—18.57.

Deaths—102 (56 male, 46 female). Corrected Death-rate—11.19.

Infant Mortality—107.91.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—15. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not Adopted.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—Nil.

Remarks.

The high figure for Infant Mortality is very unsatisfactory. Of the 15 deaths under this heading, 6 were due to premature birth, and 3 to congenital malformation.

CALSTOCK (R.D.)

M.O.H.—Albert Bowhay, M.D., D.P.H. Salary, £30.

Sanitary Inspector—W. Cradick. Salary, £50, and £35 as Highway Surveyor.

Area—5,830 acres. Population—4,644.

Births—72 (38 male, 34 female). Birth-rate—15.50.

Deaths—69 (35 male, 34 female). Corrected Death-rate—12.90 .

Infant Mortality—41.66.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—10. Bakehouses—7 registered.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Scarlet Fever and Diphtheria.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Common Lodging Houses, New Streets and Buildings (P.H. Act Amendment Act, 1890), and Slaughter Houses.

Remarks.

The Birth-rate of this district is exceedingly low. The Infant Death-rate, however (41.66), is quite satisfactory.

BOSCASTLE (R.D.)

M.O.H.—Charles Wade, M.R.C.S. (Eng.), L.R.C.P. (Lond.) Salary, £20.

Sanitary Inspector—J. P. Cook, C.R.San.I. Salary, £92 (for Boscastle and Camelford Districts), £7 as Sewage Works Manager, and £1 as Inspector under Petroleum Acts for both Districts.

Area—17,368 acres. Population—2,319.

Births—42 (25 male, 17 female). Birth-rate—18.11.

Deaths—24 (12 male, 12 female). Corrected Death-rate—8.76.

Infant Mortality—47.61.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses..... Bakehouses.....

Common Lodging Houses.....

Infectious Diseases Prevalent—Scarlet Fever.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not Adopted.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Diseases Prevention Act, 1890—Not adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—Nil.

Remarks.

This district is an extremely healthy one, on account of its position. The outbreak of Scarlet Fever was due to the importation of a mild case from another district.

CAMELFORD (R.D.)

M.O.H.—Ernest J. Jerome, L.R.C.S., L.R.C.P., L.M.
Salary, £20.

Sanitary Inspector—J. P. Cook, C.R.San. I. Salary, £92 (for Boscastle and Camelford Districts), £7 as Sewage Works Manager, and £1 as Inspector under Petroleum Acts for both Districts.

Area—30,993 acres. Population —5,112.

Births—103 (53 male, 50 female). Birth-rate, 20.14.

Deaths—62. Corrected Death-rate—10.27.

Infant Mortality—0.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—10. Bakehouses—5, registered.

Common Lodging Houses—1, registered.

Infectious Diseases Prevalent—Diphtheria, Whooping Cough, and Mumps.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not Adopted.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—Building Bye-laws in course of adoption.

Remarks.

The vital statistics are very satisfactory, and it is pleasing to have the M.O.H.'s report on the decrease in the number of cases of Diphtheria, as compared with the returns for the year 1912. The four cases of Diphtheria were notified in the Parish of Davidstowe; the locality most affected in the two previous years was quite free from it.

LISKEARD (R.D.)

M.O.H.—William Nettle, M.R.C.S., L.R.C.P. (Lond.).
Salary, £100.

Sanitary Inspectors—E. Mallett, salary £80; and W. Truscott, salary £40.

Area—102,018 acres. Population—15,272.

Births—284 (137 male, 147 female). Birth-rate—18.59.

Deaths—205 (106 male, 99 female). Corrected Death-rate—10.84.

Infant Mortality—98.59.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—25. Bakehouses—17 registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Scarlet Fever.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890.—Part III. (Sect. 50) adopted.

P.H. Act Amendment Act, 1907—Parts II., III., and IV. adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, and Regulations under Dairies, Cowsheds, and Milkshops Order.

Remarks.

The Infantile Mortality figure is the highest for the last five years; of the 28 deaths under this heading, 14 were caused by premature birth and general debility, and 8 by broncho-pneumonia and bronchitis.

ST. GERMANS (R.D.)

M.O.H.—R. T. Meadows, M.D., C.M., D.P.H. Salary £90
Sanitary Inspector—P. B. Govett, M.R.San.I. Salary,
£110, and £20 as San. Surveyor.

Area—41,763 acres. Population—12,283.

Births—288 (males 108, females 120). Birth-rate—18.5.

Deaths—125 (males 57, females 68). Corrected Death-rate
—8.65.

Infant Mortality—83.33.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—1. Offensive Trades—1.

Slaughter Houses—13. Bakehouses—14, registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Scarlet Fever.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Prevention of Nuisances,
Slaughter Houses, and Regulations under Dairies,
Cowsheds, and Milkshops Order.

Remarks.

The population is a mixed one consisting of a naval and military part and civil part. The naval and military part is very variable, so that the census of 1911 showed a decrease of 2113 since the census of 1901. As regards the civil population only, there was an increase of 35 in the same period.

BODMIN (R.D.)

M.O.H.—A. G. Salmon, M.D. (Lond.). Salary, £80.

Sanitary Inspector—W. J. Jenkins, M.R.San.I. Salary, £58, and £2 as Surveyor.

Area—85,087 acres. Population—10,349.

Births—184 (93 male, 91 female). Birth-rate—17.77.

Deaths—136 (males 75, females 61). Corrected Death-rate—10.95.

Infant Mortality—65.21

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—7. Bakehouses—1.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Part III. adopted and Bye-laws made.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Prevention of Nuisances. New Streets and Buildings (P.H. Act, 1875, and P.H. Act Amendment Act, 1890), Slaughter Houses, and Regulations under Dairies, Cowsheds, and Milkshops Order.

Remarks.

Port Isaac is still without a proper water supply, so that further sanitary improvements are retarded. Several schemes have been considered, and it is to be hoped that a suitable scheme will be adopted soon.

St. COLUMB (R.D.)

M.O.H.—S. McMahon, L.R.C.P., L.R.C.S., L.M. Salary, £50.

Sanitary Inspector—W. B. Earwaker, C.R.San.I., M.Inst. Mun.E. Salary, £104.

Area—77,028 acres. Population—11,385.

Births—206 (male 98, female 108). Birth-rate—18.10.

Deaths—137 (65 male, 72 female.) Corrected Death-rate—10.23.

Infant Mortality—101.94.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—17. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Bye-laws made under same.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Private Scavenging, Prevention of Nuisances, Common Lodging Houses, Houses let in Lodgings, Offensive Trades, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, Cemeteries and Regulations under Dairies, Cowsheds, and Milkshops Order.

Remarks.

In his report, Dr. McMahon draws attention to the need of

- (1) An Isolation Hospital.
- (2) Means of Disinfecting Bedding.
- (3) Increased supply of water for St. Columb Town.
- (4) Drainage for Trevone.

ST. AUSTELL (R.D.)

M.O.H.—A. T. Nankivell, M.D., D.P.H. Salary £350.

Sanitary Inspectors—W. H. Moffatt. Salary £120, and £30 as Surveyor ; and E. R. C. Harvey, Salary £90, and £5 as Surveyor.

Area 58,316 acres. Population 33,452.

Births 723. Birth-rate 21.61.

Deaths 453. Corrected Death-rate 12.25.

Infant Mortality 88.52.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—1. Offensive Trades—Nil.

Slaughter Houses—43. Bakehouses—23.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Diphtheria.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not Adopted.

P. H. Act Amendment Act, 1907—Parts II., III., IV., V. adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

Six weeks before the end of the year the new Borough of Fowey was formed. This removes 2,276 persons from the Rural District of St. Austell. The above figures have been calculated without allowing for this loss, but the error can only be very slight.

TRURO (R.D.)

M.O.H.—T. M. Bonar, M.B., M.S., D.P.H. Salary, £120

Sanitary Inspector—E. W. Tonkin. Salary £105, and £5 as Building Inspector.

Area 88,236 acres. Population 20,145.

Births 359 (199 male, 160 female). Birth-rate 17.82.

Deaths 324 (154 male, 170 female). Corrected Death-rate 12.55.

Infant Mortality 86.35.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—1. Offensive Trades—Nil.

Slaughter Houses—40. Bakehouses—8, registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfectors—Nil.

P.H. Act Amendment Act, 1890—Adopted (Part III.)

P.H. Act Amendment Act, 1907—Adopted. (Part III.).

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Applied for as regards Slaughter Houses, etc.

Bye-laws and Regulations—For New Streets and Buildings (P.H. Act, 1875), and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The vital statistics of this district are satisfactory.

REDRUTH (R.D.)

M.O.H.—A. E. Permewan, M.D. (Lond.), M.D. Stat. Med. (Lond.), D.P.H. (Cantab.) Salary, £100.

Sanitary Inspector—J. Tredinnick. Salary, £120.

Area—26,546 acres. Population—17,914.

Births—403 (213 male, 190 female). Birth-rate—22.50.

Deaths—307 (males 139, females 168). Corrected Death-rate—14.93.

Infant Mortality—114.14.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—21. Bakehouses—4 registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Scarlet Fever and Diphtheria.

Steam Disinfector—Yes.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For New Streets and Buildings (P.H. Act, 1875, and P.H. Act Amendment Act, 1890), and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The vital statistics of this district are, on the whole, not what one would consider satisfactory for a Rural District, although it is necessary to realise that in it are several villages whose inhabitants are associated with mining industries and not agriculture. The Birth-rate, unlike other statistics, is very satisfactory. Considerable improvements are needed in drainage, especially in St. Day.

EAST KERRIER (R.D.)

M.O.H.—J. Blamey, M.R.C.S., L.S.A. Salary, £70.

Sanitary Inspector—J. H. Chubb. Salary, £70, and £80 as Surveyor.

Area—24,229 acres. Population—7,966.

Births—129. Birth-rate—16.19.

Deaths—91. Corrected Death-rate—9.19.

Infant Mortality—62.01.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—One.

Slaughter Houses—15. Bakehouses—2 registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Scarlet Fever.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Not Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For New Streets and Buildings (P.H. Act, 1875), and Regulations under Dairies, Cowsheds, and Milkshops Order.

Remarks.

Although the vital statistics for the year under review are in the main satisfactory, much remains to be done by the District Council, with regard to the Housing of the Working Classes.

HELSTON (R.D.)

M.O.H.—F. Chown, M.B. (Lond.), L.S.A., D.P.H.
Salary, £80.

Sanitary Inspector—R. J. Wearne. Salary, £80, £20 as
Surveyor, and £1 as Inspector under Petroleum Act.

Area—73,020 acres. Population—17,074.

Births—335. Birth-rate—19.62.

Deaths—235. Corrected Death-rate—11.44.

Infant Mortality—98.50.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—2. Offensive Trades—Nil.

Slaughter Houses—27. Bakehouses—1.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Part III. and Part II.,
Section 25—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations—For New Streets and Buildings
(P.H. Act Amendment Act, 1890).

Remarks.

The Infant Mortality Figure is much lower than in 1912,
when it was 136.22. The figure for the years 1908—1912
was 99 per 1,000.

WEST PENWITH (R.D.)

M.O.H.—J. R. M. Richmond, L.S.A., L.M.S.S.A. Salary, £60.

Sanitary Inspector—J. Nicholas. Salary, £100.

Area—41,202 acres. Population—11,134.

Births—204. Birth-rate—18.32.

Deaths—146. Corrected Death-rate—11.13.

Infant Mortality—107.84.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades.....

Slaughter Houses—9. Bakehouses—1.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Diphtheria and Measles.

Steam Disinfectors—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Amendment Act, 1907.....

Infectious Disease Prevention Act, 1890—Adopted.

Urban Powers obtained—Nil.

Bye-laws and Regulations.....

Remarks.

The Infant Mortality Rate is much higher than in 1912, when it was only 51.88. In 1911 it was 119.82. The Water Supply in some of the villages in this district is liable to be polluted, and a pure supply is urgently needed.

SCILLY ISLES (R.D.)

M.O.H.—W. B. Addison, B.A., M.B., B.C. (Cantab).

Area—4,041 acres. Population—2,098.

Births—24. Birth-rate—11.43.

Deaths—18. Corrected Death-rate—7.52.

Infant Mortality—Nil.

Infectious Diseases Prevalent—Nil.

Remarks.

These islands are remarkably healthy, being constantly swept by the fresh sea breezes.

CALLINGTON (U.D.)

M.O.H.—H. Davis, Jun., M.R.C.S., L.R.C.P. (Lond.),
D.P.H. Salary, £30.

Sanitary Inspector—J. Richards. Salary, £30, and £24 as
Surveyor.

Area—2,531 acres. Population—1,713.

Births—22 (11 male, 11 female). Birth-rate—12.84.

Deaths—21 (8 male, 13 female). Corrected Death-rate—
11.11.

Infantile Mortality—90.90.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—2. Bakehouses—5.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Part III. adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Prevention of Nuisances,
New Streets and Buildings (P.H. Act, 1875, and P.H.
Act Amendment Act, 1890), Slaughter Houses, and
Regulations under Dairies, Cowsheds, and Milkshops
Order.

Remarks.

The Birth-rate is low, and the Infant Mortality Figure high, but, with a small population, the rates are subject to considerable variation. In 1912 the Birthrate was 23.35, and the Infantile Mortality Rate 25.00. The adoption of the Infectious Disease Prevention Act is to be recommended.

STRATTON AND BUDE (U.D.)

M.O.H.—T. A. King, M.R.C.S., L.R.C.P. (Lond.).
Salary, £20.

Sanitary Inspector—J. Ellis. Salary, £60, and £60 as
Surveyor.

Area—1,882 acres. Population—3,139.

Births—63. Birth-rate—20.06.

Deaths—37. Corrected Death-rate—10.03.

Infant Mortality—31.74.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—4. Bakehouses—5.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—.....

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—Nil.

Remarks.

This is a healthy district with a bracing climate, and the above Statistics bear out this statement. Bude is deservedly a popular Health Resort, and is growing rapidly in this respect.

LAUNCESTON BOROUGH.

M.O.H.—A. Budd, M.B., B.S. (Durh.). Salary, £35.

Sanitary Inspector—A. W. Grace, A.S.I. Salary, £70,
and £60 as Borough Surveyor.

Area—2,182 acres. Population—4,132.

Births—65. Birth-rate—15.73.

Deaths—43. Corrected Death-rate—9.07.

Infant Mortality—61.53.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—4. Bakehouses—8.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Part III. adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances,
Common Lodging Houses, New Streets and Buildings
(P.H. Act, 1875), Slaughter Houses, Markets and Fairs,
Pleasure Grounds, and Regulations under Dairies, Cow-
sheds and Milkshops Order.

Remarks.

The vital statistics for the year are very favourable.

LISKEARD BOROUGH.

M.O.H.—W. Nettle, M.R.C.S. (Eng.), L.S.A. Salary, £30.

Sanitary Inspector—T. McMeikan. Salary, £80, and £95 as Borough Surveyor.

Area—2,704 acres. Population—4,457.

Births—63 (39 male, 24 female). Birth-rate—14.13.

Deaths—60. Corrected Death-rate—10.69.

Infant Mortality—126.98.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—1. Offensive Trades—1.

Slaughter Houses—4 "licensed," 3 "registered." Bake-houses—8 registered.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Parts I.—VI. adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, Slaughter Houses, and Regulations under Dairies, Cowsheds, and Milkshops Order.

Remarks.

Dr. Nettle states that the adoption of The Notification of Births Act, 1907, would be beneficial.

TORPOINT (U.D.)

M.O.H.—S. G. Vinter, M.R.C.S., L.R.C.P. (Lond.),
D.P.H. Salary, £32.

Sanitary Inspector—R. H. Beaumont, A.M.I.C.E. Salary,
£70, £60 as Surveyor, and £12 as Inspector under
Housing and Town Planning Act.

Area—975 acres. Population—4,493.

Births—112. Birth-rate—24.92.

Deaths—56 (34 male, 22 female). Corrected Death-rate—
10.70.

Infant Mortality—80.35.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—1.

Slaughter Houses—3. Bakehouses—4 registered.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Roseola and Measles.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted, all but
Sections 39, 42, 67, and Part VI.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances,
Common Lodging Houses, Houses let in Lodgings, New
Streets and Buildings (P.H. Act, 1875, and P.H. Act
Amendment Act, 1890), Slaughter Houses, Pleasure
Grounds, and Regulations under Dairies, Cowsheds and
Milkshops Order.

Remarks.

The vital statistics are again very satisfactory.

LOOE (U.D.).

M.O.H.—J. E. Webb, M.B., C.M. Salary, £30.

Sanitary Inspector—C. Martyn. Salary, £40, and £15 as Highway Surveyor.

Area 590 acres. Population 2,758.

Births 37 (18 male, 19 female). Birth-rate 13.41.

Deaths 36. Corrected Death-rate 11.02.

Infant Mortality 81.08.

Housing, Water Supply, Drainage and River Pollution, Milk Supply.—See parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—3. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Measles.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, New Streets and Buildings (P.H. Act Amendment Act, 1890), Slaughter Houses, Cemeteries, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Birth-rate is very low, lower than any recorded for the District for five years.

SALTASH BOROUGH.

M.O.H.—G. S. Meadows, M.B., C.M. (Edin). Salary £30.

Sanitary Inspector—W. W. Harvey. Salary £60, and £30 as Borough Surveyor.

Area 193 acres. Population 4,315

Births 67. Birth-rate 15.52.

Deaths 45. Corrected Death-rate 9.89.

Infant Mortality 44.77.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—2. Bakehouses—5.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Scarlet Fever and Enteric.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Part III. adopted.

P.H. Act Amendment Act, 1907—Section 92 adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, New Streets and Buildings (P.H. Act, 1875, and P.H. Act Amendment Act, 1890), Markets and Fairs, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The general health of the district has been satisfactory. Dr. Meadows states that the work of the District Nurse is a distinct factor in the reduction of Infant Mortality.

BODMIN BOROUGH.

M.O.H.—B. G. Derry, L.R.C.P. (Lond.), M.R.C.S. (Eng.)

Salary £26

Sanitary Inspector—R. T. Buscomb. Salary £60 and £80 as
Borough Surveyor.

Area 2,797 acres. Population 5,675 (4,065 without Gaol and
Asylum).

Births 86 (43 males, 43 females). Birth-rate 21.15.

Deaths 64. Corrected Death-rate 13.59.

Infant Mortality 69.76.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—3. Bakehouses—No register kept.

Common Lodging Houses—None registered.

Infectious Diseases Prevalent—Diphtheria.

Steam Disinfectors—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Not adopted

Bye-laws and Regulations—For Prevention of Nuisances,
Common Lodging Houses, New Streets and Buildings
(P.H. Act, 1875), Slaughter Houses, Cemeteries,
Markets and Fairs.

Remarks.

The Death-rate is rather high. The above rates have
been calculated on the Borough population only.

LOSTWITHIEL BOROUGH.

M.O.H.—W. M. Thomas, M.R.C.S., L.R.C.P. (Lond.).
Salary, £8.

Sanitary Inspector—W. J. Knight. Salary, £20, and £10
as Borough Surveyor.

Area—389 acres. Population—1,383.

Births—29 (13 males, 16 females). Birth-rate—20.96.

Deaths—24. Corrected Death-rate—12.07.

Infant Mortality—103.44.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—3, "licensed" but "unregistered."
Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Diseases Prevention Act, 1890—Adopted.

Bye-laws and Regulations—Regulations under Dairies,
Cowsheds and Milkshops Order.

Remarks.

It would be better if the Annual Report of the Medical Officer of Health could be printed. The Infant Mortality figure is high, but there were only 3 deaths of infants under one year of age.

WADEBRIDGE (U.D.)

M.O.H.—J. E. Pellow, M.A., M.B., B.C. (Cantab.).

M.R.C.S., L.R.C.P. (Lond.). Salary, £20.

Sanitary Inspector—J. Bate. Salary, £20.

Area—864 acres. Population—2,375.

Births—49. Birth-rate—20.63.

Deaths—35. Corrected Death-rate—11.73.

Infant Mortality—81.63.

Housing, Water Supply, Drainage and River Pollution, Milk

Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—2. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Private Scavenging, Prevention of Nuisances, Common Lodging Houses, New Streets and Buildings, Slaughter Houses.

Remarks.

Dr. Pellow reports that the health of the district has maintained its good standard.

TRURO CITY.

M.O.H.—H. C. Sharp, B.A., M.B., B.C. (Cantab.).

Salary, £65.

Sanitary Inspector—W. H. Ennor, C.R.San.I. Salary £125, rising to £150.

Area—1,139 acres. Population—11,269.

Births—229. Birth-rate—20.31.

Deaths—154. Corrected Death-rate—10.66.

Infant Mortality—104.80.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—1.

Slaughter Houses—5 registered (unlicensed). Bake-houses—5.

Common Lodging Houses—5.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Sect. 52-67, Parts IV—VI.—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, Offensive Trades, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, Cemeteries, Market and Fairs, Pleasure Grounds, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Infantile Mortality is still high, and the M.O.H. reports that half the deaths of children under one year occur from premature birth or debility. This he considers due to insufficient food and too hard work on the part of the mother during the latter month of pregnancy.

A steam disinfector would be a very great advantage to the City, as not only would it effectively assist the control of the ordinary Infectious Diseases, but would be of much service in outbreaks of Contagious Diseases, such as Scabies, which frequently manifests itself among the school children; parents of such children could then be invited by the Local Authority to send infected clothing, etc., to be dealt with. In cases of cancer, tuberculosis, and other chronic diseases, accompanied with septicity in addition to the specific organisms that may be associated with them, disinfection in an efficient apparatus is of vast importance.

PENRYN BOROUGH.

M.O.H.—J. Blamey, M.R.C.S. (Eng.), L.S.A. Salary £30.

Sanitary Inspector—F. Harris. Salary £47 and £33 as Surveyor.

Area—286 acres. Population—3,069.

Births—70 (35 male, 35 female). Birth-rate—22.80.

Deaths—53. Corrected Death-rate—13.88.

Infant Mortality—128.57.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—1. Bakehouses—6.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, Slaughter Houses, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Infant Mortality and Death-rates are higher than in 1912. Of the 9 infantile deaths 2 were due to premature birth and 2 to diarrhœa.

FALMOUTH BOROUGH.

M.O.H.—A. Gregor, M.D. (Aberd.), M.B., C.M., L.M.
Salary £80.

Sanitary Inspector—H. Kelway. Salary, £110.

Area—791 acres. Population—13,458.

Births—235 (117 male, 118 female). Birth-rate—17.46.

Deaths—183 (83 male, 100 female). Corrected Death-rate—
11.92.

Infant Mortality—93.61.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—2.

Slaughter Houses—1. Bakehouses—18.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations for Private Scavenging, Preven-
tion of Nuisances, Common Lodging Houses, New
Streets and Buildings, Markets and Fairs, and Regula-
tions under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Infant Mortality rate is higher than in 1912, when
it was only 56.76. This is chiefly due to premature births.

HELSTON BOROUGH.

M.O.H.—M. R. Taylor, M.R.C.S., L.R.C.P. (Lond.). Salary £20

Sanitary Inspector—W. J. Winn. Salary £52, and £25 as Highway Surveyor.

Area—309 acres. Population—2,903.

Births—61. Birth-rate—21.01.

Deaths—44. Corrected Death-rate—11.65.

Infant Mortality—131.14.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—1.

Slaughter Houses—7. Bakehouses—4.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, Markets and Fairs, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Vital Statistics are satisfactory except the Infant Mortality. There were 8 deaths under this heading, but only one death was due to diarrhœa.

ST. IVES BOROUGH.

M.O.H.—J. M. Nicholls, L.R.C.P. (Lond.), M.R.C.S. (Eng.). Salary, £30.

Sanitary Inspector—S. Palmer. Salary, £70, £60 as Surveyor, £20 as Water Works Manager, and £6 6s. as Cowsheds Inspector.

Area—1,889 acres. Population—7,294.

Births—160. Birth-rate—21.93.

Deaths—86. Corrected Death-rate—9.74.

Infant Mortality—68.75.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—3. Bakehouses—10.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Private Scavenging, Prevention of Nuisances, New Streets and Buildings (P.H. Act, 1875), Slaughter Houses, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

The Vital Statistics are satisfactory.

PENZANCE BOROUGH.

M.O.H.—R. C. Lawry, M.R.C.S., L.R.C.P. (Lond.).
Salary, £60, and £5 as Supt. of Isolation Hospital.

Sanitary Inspector—N. C. Whear. Salary, £160, and £20 as
Inspector under Port Sanitary Authority.

Area—362 acres. Population—13,572.

Births—245. Birth-rate—18.05.

Deaths—206. Corrected Death-rate—13.13.

Infant Mortality—122.44.

Housing, Water Supply, Drainage and River Pollution; Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—3.

Slaughter Houses—18 "registered" and "licensed."

Bakehouses—18.

Common Lodging Houses—2.

Infectious Diseases Prevalent—Diphtheria, Scarlet Fever,
and Measles.

Steam Disinfector.—Yes.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—Parts II.-VI., and
X. adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Common Lodging Houses,
New Streets and Buildings (P.H. Act, 1875), Slaughter
Houses, Markets and Fairs, Pleasure Grounds, and
Regulations under Dairies, Cowsheds and Milkshops
Order.

Remarks.

The high Infant Mortality rate is due to 8 deaths from
Summer Diarrhœa. The Council are considering the Noti-
fication of Births Act of 1907, and this would lessen the
number of deaths due to ignorance on the part of the mothers.

PADSTOW (U.D.)

M.O.H.—F. Harvey, M.R.C.S. (Eng.), L.S.A. Salary, £30.
Sanitary Inspector—P. Blake, Salary, £20, and £5 as Surveyor.

Area—191 acres. Population—2,699.

Births—46. Birth-rate—17.04.

Deaths—36. Corrected Death-rate—13.14.

Infant Mortality—130.43.

Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—Nil. Bakehouses—1.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Measles.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Common Lodging Houses, Slaughter Houses, and Regulations under Dairies, Cow-sheds and Milkshops Order.

Remarks.

The population has been calculated from the difference between the census of 1911 and that of 1901. But Dr. Harvey notes that this figure is too high (owing to fluctuation in the floating population), and estimates the population as about 1,800. This would affect the birth and death-rates, but not the Infant Mortality rate. The latter is very high, but none of the deaths were caused by Diarrhœa.

NEWQUAY (U.D.)

M.O.H.—A. Hardwick, M.D. (Durh.), M.B., B.S., L.S.A.,
D.P.H. Salary, £65.

Sanitary Inspector—J. Ennor. Salary, £100, and £20 as
Assistant Surveyor.

Area—865 acres. Population—4,466.

Births—72. Birth-rate—16.19.

Deaths—51. Corrected Death-rate—10.65.

Infant Mortality—41.66.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—5 licensed. Bakehouses—5.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Section III. adopted.

P.H. Act Amendment Act, 1907—All except Sect. 39-42
and 67—Adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances,
New Streets and Buildings (P.H. Act, 1875), Slaughter
Houses, Tents and Vans, Cemeteries, Pleasure Grounds,
and Regulations under Dairies, Cowsheds and Milkshops
Order.

Remarks.

The Vital Statistics are remarkably good, although the
the Birth-rate is low. For the second year in succession the
Zymotic Death-rate has been "nil."

ST. AUSTELL (U.D.)

M.O.D.—A. Shaw, M.D., C.M. (Glas.). Salary £25.
 Sanitary Inspector—E. D. Groves. Salary £60 and £120 as Surveyor.
 Area—196 acres. Population—3,371.
 Births—59. Birth-rate—17.50.
 Deaths—58. Corrected Death-rate—14.16.
 Infant Mortality—101.69.
 Housing, Water Supply, Drainage and River Pollution, Milk Supply—See Parts VI., VII., VIII., and X.
 Knacker's Yards and Offensive Trades—Nil.
 Slaughter Houses—1. Bakehouses—7.
 Common Lodging Houses—Nil.
 Infectious Diseases Prevalent—Scarlet Fever.
 Steam Disinfector—Nil.
 P.H. Act Amendment Act, 1890.—Sections II.-IV.—Adopted.
 P.H. Act Amendment Act, 1907—Adopted.
 Infectious Disease Prevention Act, 1890—Adopted.
 Bye-laws and Regulations—For Prevention of Nuisances, Common Lodging Houses, Houses let in Lodgings, Offensive Trades, New Streets and Buildings (P.H. Act, 1875, and P.H. Act Amendment Act, 1890), Slaughter Houses, Tents and Vans, and Regulations under Dairies, Cowsheds and Milkshops Order.

Remarks.

There is an improvement as regards Infant Mortality, although the rate is still high. Improved housing is needed for this District.

REDRUTH (U.D.)

M.O.H.—F. Hichens, M.D. (Lond.), M.B., B.S., M.R.C.S.
(Eng.), L.S.A., D.P.H. Salary £60.

Sanitary Inspector—H. Monson. Salary £135, including
Surveyor and Water Engineer.

Area—4,006 acres. Population—10,902.

Births—267. Birth-rate—24.49.

Deaths—173. Corrected Death-rate—14.49.

Infant Mortality—71.16.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—13. Bakehouses—6.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Scarlet Fever, Mumps and
Whooping Cough.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Part III. adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Private Scavenging, Preven-
tion of Nuisances, Common Lodging Houses, New Streets
and Buildings (P.H. Act, 1875), Slaughter Houses, and
Regulations under Dairies, Cowsheds and Milkshops
Order.

Remarks.

The Vital Statistics are more favourable than those for
1912, especially the Infant Mortality Rate, which has dropped
from 130 to 71. During the last five years this rate has been
much too high.

CAMBORNE (U.D.)

M.O.H.—J. T. Thomas, M.R.C.S., L.R.C.P. (Lond.).
Salary £60.

Sanitary Inspector—J. Williams. Salary £75 and £5 as
Collector of Market Tolls.

Area—6,932 acres. Population—16,093.

Births—368. Birth-rate—22.87.

Deaths—266. Corrected Death-rate—15.48.

Infant Mortality—111.41.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards—Nil. Offensive Trades—2.

Slaughter Houses—11. Bakehouses—9.

Common Lodging Houses—1.

Infectious Diseases Prevalent—Measles and Whooping Cough.

Steam Disinfectors.—Yes.

P. H. Act Amendment Act, 1890—Section 22 adopted.

P.H. Act Amendment Act, 1907—.....

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Prevention of Nuisances,
Common Lodging Houses, New Streets and Buildings
(P.H. Act, 1875), Slaughter Houses, Baths and Wash-
houses.

Remarks.

Although the Infant Mortality figure is the lowest re-
corded for this district, it is still rather high. Of the 41
deaths under this heading 12 were due to prematurity, and 11
to gastro-enteritis.

PHILLACK (U.D.)

M.O.H.—Z. B. Mudge, L.R.C.P. (Lond.), M.R.C.S. (Eng.).
Salary £30.

Sanitary Inspector—Z. W. Chinn. Salary £15 and £30 as
Surveyor.

Area—2,909 acres. Population—3,547.

Births—88. Birth-rate—24.80.

Deaths—62. Corrected Death-rate—14.83.

Infant Mortality—159.09.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—5 "licensed." Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector.—Yes.

P.H. Act Amendment Act, 1890—Part III. adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Private Scavenging, Preven-
tion of Nuisances, Common Lodging Houses, Slaughter
Houses, and Regulations under Dairies, Cowsheds and
Milkshops Order.

Remarks.

Of the Vital Statistics, the Infantile Mortality Figure is
not satisfactory. Ignorance and poverty are the chief factors
in producing this high rate.

HAYLE (U.D.)

M.O.H.—Z. B. Mudge, L.R.C.P. (Lond.), M.R.C.S. (Eng.).
Salary £20.

Sanitary Inspector—Z. W. Chinn. Salary, £20, and £20 as
Surveyor.

Area—247 acres Population—1,015.

Births—16. Birth-rate—15.76.

Deaths—17. Corrected Death-rate—14.05.

Infant Mortality—62.50.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—Nil. Bakehouses—2.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector.—Yes.

P.H. Act Amendment Act, 1890—Parts III.-IV. adopted.

P.H. Act Amendment Act, 1907—.....

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Private Scavenging, Preven-
tion of Nuisances, Common Lodging Houses, Slaughter
Houses.

Remarks.

The Report should be printed by the Council. The Vital
Statistics show an improvement when compared with those
for 1912.

MADRON (U.D.)

M.O.H.—W. R. Wilson, F.R.C.S.I., L.R.C.P.I., L.S.A.,
D.P.H., R.C.P., and S.I. Salary £20.

Sanitary Inspector—W. N. Matthews. Salary £20 and £60
as Surveyor.

Area—5,571 acres. Population—3,755.

Births—71. Birth-rate—18.91.

Deaths—42. Corrected Death-rate—9.21.

Infant Mortality—70.42.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—Nil. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Diphtheria, Measles, and
Scarlet Fever.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—.....

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Private Scavenging, New
Streets and Buildings (P.H. Act, 1875), Slaughter
Houses, and Regulations under Dairies, Cowsheds and
and Milkshops Order.

Remarks.

The Vital Statistics are satisfactory, especially the
Death-rate.

PAUL (U.D.)

M.O.H.—H. R. Phillips, B.A. (Cantab.), M.B., B.C.,
L.S.A. Salary, £20.

Sanitary Inspector—W. F. Trembath. Salary, £30, and
£35 as Surveyor and Inspector under Housing and
Town Planning Act.

Area—3,446 acres. Population—5,938.

Births—111. Birth-rate—18.69.

Deaths—69. Corrected Death-rate—9.75.

Infant Mortality—108.10.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—Nil. Bakehouses—13.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Diphtheria and Scarlet Fever.

Steam Disinfector.—Yes.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Adopted.

Bye-laws and Regulations—For Private Scavenging, Preven-
tion of Nuisances, New Streets and Buildings (P.H.
Act, 1875, and P.H. Act Amendment Act, 1890),
Slaughter Houses, and Regulations under Dairies, Cow-
sheds and Milkshops Order.

Remarks.

Although the Infant Mortality figure is not low, the
other rates are satisfactory.

LUDGYAN (U.D.)

M.O.H.—H. R. Phillips, B.A. (Cantab), M.B., B.C.,
L.S.A. Salary, £20.

Sanitary Inspector—J. N. Rowe. Salary, £26, and £26 as
Surveyor and Inspector under Housing and Town Plan-
ning Act.

Area—4,543 acres. Population—2,199.

Births—51. Birth-rate—23.19.

Deaths—35. Corrected Death-rate—14.07.

Infant Mortality—98.03.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—2. Bakehouses—Nil.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Nil.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Not adopted.

P.H. Act Amendment Act, 1907—Not adopted.

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—Nil.

Remarks.

The Vital Statistics are about the average for this
district. The Death-rate and Infant Mortality rate are high.

ST. JUST (U.D.)

M.O.H.—R. G. Nesbitt, L.R.C.P.I. and L.M., L.R.C.S.I.,
L.M. Salary, £30.

Sanitary Inspector—J. Hodge. Salary, £30, and £22 as Road
Surveyor.

Area—7,634 acres. Population—5,778.

Births—152. Birth-rate—26.30.

Deaths—115. Corrected Death-rate—17.05.

Infant Mortality—144.73.

Housing, Water Supply, Drainage and River Pollution, Milk
Supply—See Parts VI., VII., VIII., and X.

Knacker's Yards and Offensive Trades—Nil.

Slaughter Houses—7, "licensed," "unregistered." Bake-
houses—3.

Common Lodging Houses—Nil.

Infectious Diseases Prevalent—Diphtheria and Measles.

Steam Disinfector—Nil.

P.H. Act Amendment Act, 1890—Adopted.

P.H. Act Amendment Act, 1907—.....

Infectious Disease Prevention Act, 1890—Not adopted.

Bye-laws and Regulations—For Slaughter Houses.

Remarks.

The Infant Mortality and Death-rates are both very high. The continued prevalence of Diphtheria is the cause of the high Zymotic Rate. Deficient Water Supply and incomplete Drainage are at the root of the trouble with regard to the adverse Statistics. The question of a Water Supply is now acutely urgent, and it would be well if the Local Authority took steps to combine with other Authorities in a Joint Hospital Scheme for the Isolation of Infectious Diseases, in accordance with a previous suggestion of the County Medical Officer, who has made a Special Report (reprinted in this volume) on the Water Supply, Sanitary Circumstances, etc., of the District. The M.O.H. (Dr. Nesbitt) has also sent a Special Report to the Local Government Board and the County Council.

HOLSWORTHY (R.D.) Part of

M.O.H.—W. G. Gray, M.R.C.S., L.R.C.P., L.M.

Area—5,302 acres. Population—325.

Remarks.

Since the total population is 7,347, it is obvious that statistics for the small Cornish population would be of little value, as compared with the larger Devonshire portion; hence, it is better, from the point of view of a County Medical Officer, to consider this district as belonging to Devon.

Part V.

ISOLATION HOSPITALS.

Cornwall is not properly supplied with hospitals for the isolation of the infectious sick, and the recent Government report on the epidemic of Poliomyelitis emphasises this fact as "a matter of much importance, not only to the inhabitants, but to the large migratory population which comes—often with children—for holiday and health." The accompanying map indicates this lack of accommodation generally, and entire absence of it in many places which urgently require it.

Out of 1990 cases of Infectious Disease notified, only 41 were isolated in hospitals. Of the existing hospitals, much that is adverse can be said in several instances, mainly due to the smallness of each individual scheme; for efficiency, a hospital ought to be ready to receive at the shortest notice the earliest cases of any outbreak of infectious disease, and for this it is necessary to have larger up-to-date institutions under Joint Hospital Boards, with a staff of nurses always resident. Better scheme for drainage could then be entertained, and it would not be necessary to have to find a nurse at the last minute, and to see to the airing of beds, etc., at a time when assistance is urgently required for other purposes. The motor ambulance brings such schemes for large areas within reasonable reach for practical purposes.



The following table illustrates comparatively the type of accommodation supplied by such authorities as possess it:

DISTRICT.	No. of beds available.	No. of diseases treatable concurrently	REMARKS.
Falmouth Borough... ..	8	2	Temporary building. Water supply and disposal of excreta unsatisfactory. On the site of an additional Port Hospital.
Penzance Borough	14	2	Temporary building, used also by the Port Sanitary Authority and Paul U.D.C.
Truro	15	2	No administration block, discharge block or disinfecting apparatus. No provision for Small-pox.
Camborne	8	1	No administration or discharge blocks. No Laundry.
Newquay	8	2	Used also for Small-pox.
Redruth Rural	14	For Small pox.	Beds loaned to Urban District Council when available.
Truro Rural	6	2	Scheme too small.
Stratton Rural and Stratton and Bude Urban jointly...	8	2	Newly erected.

Extracts from Memorandum for the guidance of Local Authorities in applying to the Local Government Board for sanction to loans for the provision of Isolation Hospitals; for the constitution of Joint Hospital Districts; and in proceedings under the Isolation Hospitals Acts, 1893 and 1901.

(a) Under the Public Health Act, 1875.

Provision of Hospitals by two or more Local Authorities acting in combination.

When two or more Local Authorities desire to combine in providing a hospital, it is generally desirable to form the combined districts into a Joint Hospital District, by a Provisional Order under Section 279 of the Public Health Act, 1875, with a Joint Hospital Board as the governing body.

A Joint Hospital Board consists of members elected by the local authorities concerned, together with such ex-officio members as the Local Government Board may by the Provisional Order determine (Section 280, Public Health Act, 1875).

A Joint Board is a body corporate with power to hold lands for the purposes of their constitution, and, with the sanction of the Local Government Board, they are empowered to borrow money.

They are empowered to issue precepts to the local authorities within the United District, for the sums to be contributed by such authorities towards the expenses of the Joint Board, and, in case of default, to proceed in a summary manner to raise such sums.

Moreover, by the Provisional Order constituting the United District, the contributions of the constituent authorities are fixed, and the Joint Board are directly invested with various powers in relation to their meetings and officers, conduct of business, contracts, purchase of land either by agreement or compulsory, arbitration, audit of accounts, and legal proceedings.

(b) Under the Isolation Hospitals Acts, 1893 and 1901.

Under the Isolation Hospitals Act, 1893, County Councils are empowered to constitute hospital districts, consisting in each case of a single local area or of two or more local areas, as defined by section 26 of that Act; as amended by section 6 of the Isolation Hospitals Act, 1901; and under section 8 (3) of the Act of 1893, "if any local authority, having jurisdiction within any part of the proposed hospital district, object to the formation of such a district, or to the

addition or subtraction thereto or therefrom of any local area within their jurisdiction, such authority may at any time within three months from the date of the order appeal to the Local Government Board, and the decision of such Board shall be conclusive.

By section 5 of the Act of 1901, it is provided that the Local Government Board may by their decision on any such appeal confirm, disallow, or modify the order of the County Council as they think fit.

When a hospital district has been constituted, the County Council must form a committee, and if a local authority within a hospital district formed by a County Council is aggrieved by the mode in which the hospital committee is constituted it may appeal to the Local Government Board, who may modify the constitution of the committee in such manner as they think expedient and just.

Under section 22 of the Act of 1893, "a County Council may borrow on the security of the county rate, and in manner provided by the Local Government Act, 1888, any money required for the purpose of carrying into effect the provisions of this Act." The sanction of the Local Government Board is required to any such borrowing by a County Council.

Hospital Committees, and the local authorities having jurisdiction in the areas included within a hospital district set up by a County Council, are not empowered themselves to borrow money for the purpose of the Isolation Hospitals Act, 1893; but under section 22 of that Act any loans borrowed by a County Council to carry the provisions of the Act into effect, and any other money expended by them for the purposes of that Act, together with interest thereon, shall be repaid to the County Council out of the local rate, as in the Act directed. By section 4 of the Act of 1901, the interest to be paid in pursuance of section 22 of the Act of 1893 on any money repayable to a County Council shall be at a rate agreed upon between the County Council and the hospital committee concerned, or, in default of agreement, determined by the Local Government Board.

By section 1 of the Isolation Hospitals Act, 1901, any local authority (including a joint board) within the meaning of the Public Health Act, 1875, which has provided under that Act, or any local Act, a hospital for the reception of the sick, may, with the sanction of the Local Government Board, and with the consent of the Council, transfer it to the Council of the County within which the hospital, or any part of the district of the authority is situate. Any hospital so transferred shall be appropriated to a district formed under the Isolation Hospitals Act, 1893, and may be adapted as an isolation hospital.

Under Section 2 of the Act of 1901, the power conferred on a County Council by section 21 of the Act of 1893 to contribute to the expenses of an isolation hospital is declared to include the power to contribute to any hospital for infectious diseases provided by a local authority (including a joint Board) within the meaning of the Public Health Act, 1875, but the consent of the Local Government Board is required to an annual contribution by the County Council to a hospital the cost of providing which, or of any permanent extension or enlargement of which, has been defrayed otherwise than out of borrowed money.

In dealing with applications from County Councils for sanction to loans under these Acts, the Board act upon the principles which guide them in dealing with applications by local authorities for sanction to borrow money for hospital purposes under the Public Health Act, 1875.

Local Government Board,
Whitehall,
June, 1910.

Part VI.

ADMINISTRATION OF THE HOUSING OF THE WORKING CLASSES ACTS, 1890—1909.

Housing and Town Planning, Etc., Act, 1909.

(Short Epitome.)

PART I.

[HOUSING.]

Sections 1 to 9 inclusive give facilities for acquisitions for land and other purposes of the Housing Acts. Part III. of the Housing of the Working Classes Act, 1890 (in this part of the Act referred to as the principal Act), shall take effect without adoption. The Local Authority may purchase land compulsorily for purposes of Part III. of the principal Act by an Order submitted to, and confirmed by, the Local Government Board. Loans may be obtained for an extended period, not to exceed 80 years.

Sections 10 to 13 provide powers for enforcing the execution of the Housing Acts. Complaints may be made to the Local Government Board as to default of Urban or Rural Districts under Part II. or Part III. of the principal Act, and the Board, if satisfied, after holding a public Local Inquiry, may make an Order directing the defaulting Authority to act; where this Order is not complied with, the Local Government Board may, with the consent of the County Council, make an Order directing the County Council to act, instead of enforcing the Order on the defaulting Authority. On the complaint of a Parish Council or meeting, or any four inhabitant householders of the district to the County Council of default by a Rural District Council as to Part III. of the principal Act, the County Council may, after holding a public Local Inquiry, resolve to take over the powers with respect either to the whole district or any parish. The Local Government Board may, on application by the County Council,

confer on the latter as respects any Rural District all or any of its powers under Part III. of the principal Act. Expenses incurred under this Section (13) to be general County expenses.

Sections 14 to 16 inclusive deal with contracts by landlords, and require that the letting for habitation of a house, or part of a house, after the passing of this Act, at a rental so far as the Administrative County of Cornwall is concerned, not exceeding £16, shall imply that the house is in all respects reasonably fit for human habitation, except when let on three years' or longer lease, upon certain terms. The landlord is required to keep the house in all respects reasonably fit for human habitation.

Sections 17 to 21 amend the procedure for closing Orders and demolition Orders, and require Local Authorities to make from time to time inspection of their districts with a view to ascertaining whether any dwelling house therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and to comply with such Regulations and keep such records as may be prescribed by the Board. Appeals against a closing Order or demolition Order may be made to the Local Government Board.

Sections 22 to 29 inclusive deal with amendments with respect to improvement and re-construction schemes, and among other matters give the Local Government Board power to permit the Local Authority to modify or abandon their scheme.

Sections 30 to 35 deal with financial matters.

Sections 36 to 46 are general amendments, and give power of entry to premises, power to the Local Government Board to obtain a report on any crowded area, power to two or more Local Authorities to take joint action, the prohibition of back-to-back houses, and power to the Local Government Board to revoke unreasonable bye-laws.

Sections 49 to 51 define that the provisions of this part to be deemed to be part of the appropriate part of the

principal Act, and also define the terms "street," "dwelling house," "owner," and "cottage."

Sections 52 and 53 apply to Scotland.

PART II.

TOWN PLANNING.

Section 56 enables the Local Government Board to make Regulations for, among other things, securing early notice of a proposed scheme to any Council interested in the land.

Section 61 enables the Local Government Board to take action on any representation after holding a public Local Inquiry.

PART III.

COUNTY MEDICAL OFFICERS.

COUNTY PUBLIC HEALTH AND HOUSING COMMITTEE.

Section 68 requires the appointment of a County Medical Officer of Health, gives to the Local Government Board some power to prescribe the duties of the County Medical Officer, gives the County Medical Officer the same powers of entry as a District Medical Officer of Health, and provides certain conditions with regard to tenure of office.

Section 69 :—

- (1) The Clerk of the Rural District Council shall forward to the County Medical Officer of Health a copy of such representations, etc., required by Section 45 of the principal Act (given above) to be sent to the County Council.
- (2) A District Medical Officer of Health shall give to the County Medical Officer of Health "any information it is in his power to give, and which the Medical Officer of Health for the County may reasonably require from him for the purposes of his duties prescribed by the Local Government Board."

- (3) Any dispute between the District Clerk, the District Medical Officer of Health, and the County Medical Officer of Health under this Section shall be referred to the Local Government Board, whose decision shall be final and binding.
- (4) Failure of the District Clerk or Medical Officer of Health to comply with this Section, if information is laid by the County Council, renders himself liable to a fine not exceeding £10.

Sec. 71.—Every County Council shall establish a Public Health and Housing Committee, to which all matters relating to public health and the housing of working classes (except the power of raising a rate or borrowing money) shall stand referred. The County Council to receive and consider the Report of the Committee. The County Council may delegate to the Committee any of their powers as respects public health and the housing of the working classes, except the power of raising a rate or borrowing money, and except any power of resolving that the powers of the District Council in default should be transferred to the Council.

Sec 72.—The County Council may promote the formation or extension of, and may assist, Societies on the co-operative basis, having for one of their objects the erection or improvement of dwellings for the working classes, and for this purpose may, with the consent of, and subject to Regulations made by the Local Government Board, make grants or advances to the Society, any such advance not to exceed two-thirds of the value of the property.

Seeing that the Inspection of Districts in the case of several Local Authorities would, from the reports furnished, hardly appear satisfactory, it is important to draw urgent attention to the following :—

STATUTORY RULES AND ORDERS, 1910.

No 919.

Housing of the Working Classes, England.

Unhealthy Houses.

THE HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

DATED SEPTEMBER 2, 1910.

To the several Local Authorities in England and Wales for the purposes of Part II. of the Housing of the Working Classes Act, 1890 :—

And to all others whom it may concern.

Whereas by sub-section (1) of Section 17 of the Housing, Town Planning, Etc., Act, 1909, it is enacted that it shall be the duty of every local authority within the meaning of Part II. of the Housing of the Working Classes Act, 1890 (herein-after referred to as "the local authority") to cause to be made from time to time inspection of their district, with a view to ascertain whether any dwelling house therein is in a state so dangerous or injurious to health as to be unfit for human habitation, and that for that purpose it shall be the duty of the local authority, and of every officer of the local authority, to comply with such regulations and to keep such records as may be prescribed by the Local Government Board.

Now, therefore, We, the Local Government Board, in pursuance of the powers given to Us in that behalf, by this Order, prescribe the following Regulations ; that is to say :—

Article 1.—(1) The Local Authority shall as early as practicable after the date of this Order take into consideration the provisions of sub-section (1) of Section 17 of the Act of 1909, and shall determine the procedure to be adopted under these Regulations, to give effect to requirements of that sub-section in regard to the inspection of their district from time to time.

(2) The local authority shall, as part of their procedure, make provision for a thorough inspection to be carried out

from time to time, according to the varying needs or circumstances of the dwelling-houses or localities in the district of the local authority.

(3) The local authority shall cause to be prepared from time to time by the Medical Officer of Health, or by an Officer designated by them but acting under his direction and supervision, a list or lists of dwelling-houses the early inspection of which is, in the opinion of the Medical Officer of Health, desirable. The list or lists may, if thought fit, relate to the dwelling-houses within a defined area of the district without specifying each house separately therein.

Article II.—The inspection under and for the purposes of sub-section (1) of Section 17 of the Act of 1909 shall be made by the Medical Officer of Health, or by an Officer designated by the local authority but acting under his direction and supervision, and the Officer making inspection of any dwelling-house shall examine the state of the dwelling-house in relation to the following matters, namely :—

- (1) The arrangements for preventing the contamination of the water supply.
- (2) Closet accommodation.
- (3) Drainage.
- (4) The condition of the dwelling-house in regard to light, the free circulation of air, dampness, and cleanliness.
- (5) The paving, drainage, and sanitary condition of any yard or out-houses belonging to or occupied with the dwelling-house.
- (6) The arrangements for the deposit of refuse and ashes.
- (7) The existence of any room which would be in pursuance of sub-section (7) of section 17 of the Act of 1909 be a dwelling-house so dangerous or injurious to health as to be unfit for human habitation.
- (8) Any defects in other matters which may tend to render the dwelling-house dangerous or injurious to the health of an inhabitant.

Article III.—Records of the inspection of dwelling-houses made under and for the purpose of sub-section (1) of Section 17 of the Act of 1909 shall be prepared under the direction and supervision of the Medical Officer of Health, and shall be kept by the Officer of the local authority making the inspection, or by some other Officer appointed or employed for the purpose by the local authority.

The records may be kept in a book or books, or on separate sheets or cards, and shall contain information, under appropriate headings, as to:—

1. The situation of the dwelling-house, and its name or number.
2. The name of the Officer who made the inspection.
3. The date when the dwelling-house was inspected.
4. The date of the last previous inspection and a reference to the record thereof.
5. The state of the dwelling-house in regard to each of the matters referred to in Article II. of these Regulations.
6. Any action taken by the Medical Officer of Health, or other officer of the local authority, either independently or on the direction of the local authority.
7. The result of any action so taken.
8. Any further action which should be taken in respect of the dwelling-house.

Article IV.—The local authority shall, as far as may be necessary, take into consideration at each of their ordinary meetings the records kept in pursuance of Article III. of these Regulations, and shall give all such directions and take all such action within their powers as may be necessary or desirable in regard to any dwelling-house to which the records relate, and a note of any directions so given and the result of any action taken shall be added to the records.

Article V.—The Medical Officer of Health shall include in his Annual Report information and particulars in tabular form in regard to the number of dwelling-houses inspected

under and for the purposes of Section 17 of the Act of 1909, the number of dwelling houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation, the number of representations made to the local authority with a view to the making of closing orders, the number of closing orders made, the number of dwelling-houses the defects in which were remedied without the making of closing orders, the number of dwelling-houses which, after the making of closing orders, were put into a fit state for human habitation, and the general character of the defects found to exist. He shall also include any other information and particulars which he may consider desirable in regard to the work of inspection under the said Section.

Article VI.—The Medical Officer of Health, and any other Officer of the local authority, shall observe and execute all lawful orders and directions of the local authority in regard to or incidental to the inspection of the district of the local authority under and for the purposes of Section 17 of the Act of 1909, and the execution of these Regulations.

Article VII.—In these Regulations “the Act of 1909” means the Housing, Town Planning, Etc., Act, 1909.

Article VIII.—These Regulations may be cited as the Housing (Inspection of District) Regulations, 1910.

Housing in Cornwall constitutes one of the greatest barriers to Sanitary progress ; on the amount of housing depends the quantity of water supply required, and on both depend the amount and quality of the drainage. Villages have been built on entirely wrong plans, and particularly is this the case with regard to many of the seaside ones, where drainage and sewerage are rendered difficult to undertake on account of the low-lying position and consequent want of fall ; in many instances, foreshores are unavoidably polluted on account of the faulty position of sewer outfalls relative to tides and prevailing currents.

Many cottages have no backyards and no sanitary conveniences ; these ought certainly to be condemned as unfit for habitation, as well as innumerable others which are rendered unfit for divers reasons. The difficulty then arises with regard to the Local Authority being compelled in the case of closure of insanitary houses, to make provision for the population so displaced. A certain section of the community are unfortunately content to live in mere hovels at an absurdly low rent. With a general lack of houses for the lower working classes, owners are not usually disposed to spend money on repairs when the tenants are content to live in these cottages as they are. It is, however, possible to repair many of the apparently hopeless houses and to render them fit for habitation. Many of the local authorities have not adopted housing schemes when it has clearly been their duty to do so, and it is to be hoped that it will not be necessary in the ensuing year for the County Council and Local Government Board to use their powers under Sections 10 to 13 of the Housing and Town Planning, Etc., Act, 1909.

In a subsequent table will be found a summary of the work done, in the various Sanitary Districts, under the Housing (Inspection of District) Regulations, 1910.

DETAILS OF THE HOUSING IN EACH DISTRICT.

STRATTON (R.D.)

During the year, 98 dwellings were inspected, and in 24 defects were found ; they were rectified without recourse to closing orders. Eight new cottages were built. The M.O.H. reports that there is no scarcity of houses.

LAUNCESTON (R.D.)

Sixty-five dwelling houses were inspected, and "defects in a large number" were found. One closing order was made. Four workmen's dwellings were erected. There is no scarcity of houses.

CALSTOCK (R.D.)

170 dwelling houses were inspected, and 39 were found defective. Two closing orders were made. There were no new houses in 1913, but no scarcity is reported.

BOSCASTLE (R.D.)

26 houses were inspected, and 7 were found defective. No closing orders were made. A scarcity of workmen's cottages throughout the district is reported.

CAMELFORD (R.D.)

67 houses were inspected, and 46 were reported defective. 2 closing orders were made. 22 artizan dwellings were erected during the year. There is a scarcity of houses in St. Breward and near Camelford. Most of the houses in the district have been made habitable, although there is still work in hand. The new houses are needed for the men working at the North Cornwall China Clay Works. No houses have been built by the Sanitary Authority.

LISKEARD (R.D.)

410 dwelling- houses were inspected, and 250 were found defective. Only 65 are reported as having the defects rectified, without recourse to closing orders. Three closing orders were applied for, and one was granted. There is a scarcity of houses in St. Neot, Polperro, and Menheniot. The most frequent defects found were the absence of eaves spouting, and the absence of paving at the backs of the houses.

ST. GERMANS (R.D.)

178 houses were inspected, and 68 found defective. 3 closing orders were made. No general scarcity is reported.

BODMIN (R.D.)

352 houses were inspected, and 126 were defective. No closing orders were made. There is no marked scarcity of houses, but many of the houses in use are not in good condition. Eight new houses were built during the year, and plans for 20 more are being considered.

ST. COLUMB (R.D.)

63 dwelling houses were inspected, and 33 were found to be defective. Ten closing orders were applied for and obtained, but the houses are not yet closed. 15 houses were improved without closing orders. There is a scarcity of houses in St. Columb Town. 51 new houses were erected in 1913, mostly of concrete. The Council have applied for a loan to enable them to erect 6 or 8 cottages.

ST. AUSTELL (R.D.)

352 houses were inspected, and of these 8 were represented to the Council as unfit for human habitation. 7 closing orders were made by the Council, 2 of which have become operative. 52 houses were improved after informal notice. The total number of houses found defective was 99. The M.O.H. states in his Annual Report that there are a score or more of houses which, despite repairs, ought not to remain inhabited. They have not been closed and pulled down, as the Act requires, because there is a house famine at present.

The Council resolved to build 44 workmen's dwellings, but so far the sites have not been selected, with the exception of a site for six houses presented by a landowner in St. Dennis. The Council have also decided to prepare a Town Planning Scheme for part of their area adjacent to the Urban District of St. Austell.

TRURO (R.D.)

290 houses were inspected, 50 of which were found defective. 40 of the defects were rectified without recourse to closing orders, and 10 closing orders were applied for and

obtained. The M.O.H. reports a scarcity of houses in St. Just-in-Roseland. Only 6 new houses were erected in 1913, two of which were suitable for workmen's dwellings.

A special survey of the District was made during the year by a L.G.B. Inspector.

REDRUTH (R.D.)

160 houses were inspected, and 72 were found defective. 59 defects were rectified without recourse to closing orders. Four closing orders were made. 33 new houses were erected during the year. There is a scarcity of houses, especially in Illogan. The M.O.H. thinks 50 new houses at least are needed in this district.

EAST KERRIER (R.D.)

186 houses were inspected, and 68 were found defective. No closing orders were made, but 2 were closed by voluntary action of the owners. Twelve new houses were erected during the year. The Council propose to erect 8 to 10 workmen's dwellings in Flushing. A town planning scheme is proposed for part of Budock.

HELSTON (R.D.)

20 houses were inspected, and 10 were found defective. 6 houses were closed, as a result of closing orders. The M.O.H. reports a general scarcity of houses, "which makes it difficult to deal with certain cases of overcrowding and dilapidated houses." A L.G.B. Inspector visited the District to inquire into the housing conditions.

WEST PENWITH (R.D.)

535 dwellings were inspected, 9 of which were reported to be defective. In 8 of these the defects were rectified without recourse to closing orders. The M.O.H. reports that there is no special scarcity of houses, but that a few workmen's dwellings are desirable at Marazion. Alterations are to be made at Sennen Cove, which will improve matters there.

CALLINGTON (U.D.)

120 houses were inspected, and 63 were found defective. One house was closed as the result of a closing order. There is a general scarcity of houses. No new houses were erected during the year. About 20 houses are still occupied, although unfit.

STRATTON AND BUDE (U.D.)

78 dwelling houses were inspected. No defects are recorded. There is a scarcity of artisan houses in Bude, but no scheme is being considered.

LAUNCESTON (BOROUGH).

In his annual report, the M.O.H. states that, except for re-inspection of premises previously reported on, no progress had been made, owing to the Town Council's difficulty in carrying out its schemes. Two schemes were prepared and tendered for, but were not carried out, owing to the prices being too high to let the houses at economic rents. A third scheme for 24 houses is now in course of preparation, with which the Council hope to proceed.

LISKEARD (BOROUGH).

150 houses were inspected, about 100 were defective, and 6 were unfit for human habitation. 6 closing orders were applied for, but none were made. The defects were made good without closing orders. But the M.O.H. considers that many other houses are really unfit for human habitation, only there are no other houses to which the inhabitants could be moved. There is a scarcity of houses for the very poor. No scheme is contemplated. No Bye-laws are in force with respect to the construction of new houses.

TORPOINT (U.D.)

104 houses were inspected, and 89 were found defective. In 63 the defects were rectified without recourse to closing orders. 7 closing orders were made, but in 4 cases the houses were put in order afterwards. No scarcity of houses is reported.

LOOE (U.D.)

181 dwellings were inspected, and 38 were found defective. 24 were rectified without recourse to closing orders. One house was closed as the result of a closing order. Better houses are needed for the working classes, and a scheme is under consideration.

SALTASH (BOROUGH).

33 houses were inspected, and 16 were found defective. All the defects were rectified without recourse to closing orders. There is no scarcity of houses.

BODMIN (BOROUGH).

64 houses were inspected, and 63 were found defective in some way. Only 3 closing orders were needed. 6 artisan dwellings were erected during the year. There is no scarcity of houses.

LOSTWITHIEL (BOROUGH).

3 houses were inspected, and were found defective. All the defects were rectified. There is no scarcity of houses, but some of the older workmen's dwellings need replacing.

WADEBRIDGE (U.D.)

14 houses were inspected, no serious defects were found. There is no scarcity of houses, although there is a demand for houses at a rental of about £5 a year.

TRURO CITY.

320 houses were inspected, and 140 were found defective. Only one closing order was needed, the other defects being rectified without. 6 cases of overcrowding were dealt with. There is only a slight scarcity of houses. 18 new houses were built, the rentals of which were between £18 and £35 per annum.

PENRYN (BOROUGH).

122 houses were inspected, and 49 were found defective. 40 were put in order without closing orders. There is no scarcity of houses.

FALMOUTH (BOROUGH).

165 houses were inspected, and 48 were found defective. 28 were rectified, and 20 are in suspense. 4 closing orders were made. There is a scarcity of houses for "casual labourers." 38 new houses were erected, of these 14 are residential, 14 for working class erected by builders, and 4 by the Sanitary Authority.

HELSTON (BOROUGH).

45 houses were inspected, 4 were condemned, but were promptly put into proper repair by the owner. In 6 minor cases repairs were also carried out.

ST. IVES (BOROUGH).

141 houses were inspected, and 11 nuisances found, which were abated after formal notice. 16 faulty w.c.'s and drains were rectified, and 100 new w.c.'s were erected to old houses, as a result of the inspections. The M.O.H. reports that good habitable houses are barely sufficient in number.

PENZANCE (BOROUGH).

170 houses were inspected, and 50 were found defective. 33 houses were put in order, and 1 house was closed by voluntary action of the owner. There is a scarcity of houses for the working classes, and the Council have a scheme under consideration for remedying this defect. It was proposed to erect 44 workmen's dwellings on the Weeths Field (approximately an acre), at a cost of £9,330. The L.G.B. did not approve, so that another scheme is being prepared which shall meet the requirements of the Board.

PADSTOW (U.D.)

69 houses were inspected, several of which were defective. The M.O.H. reports that 16 houses should be closed as soon as other houses are available.

NEWQUAY (U.D.)

133 houses were inspected, and 11 were found defective. In 10 the defects were rectified after notice ; no closing orders were made. There is a scarcity of workmen's dwellings. A Housing Scheme is under consideration, but the sanction of the L.G.B. has not yet been obtained.

ST. AUSTELL (U.D.)

162 houses were inspected, and 69 were found defective. 3 houses were closed as the result of closing orders. The 69 were so defective as to raise the question of closing them. 43 of them have no through ventilation nor back entrance, 26 are back to back. A housing scheme has been made by the Council and approved by the L.G.B. 22 houses of 5 rooms each are to be erected. They will be built and let at a rental which will be self-supporting.

REDRUTH (U.D.)

177 houses were inspected, 51 were defective, but the defects were mostly slight. No closing orders were needed, 49 being rectified without. 2 cases of overcrowding were dealt with. There is a slight scarcity of houses, and a scheme is under consideration. 31 houses were erected, the rentals of which are between £12 and £25 per annum.

CAMBORNE (U.D.)

533 houses were inspected, and 144 were found defective. In 2 cases the defects were rectified without closing orders. 5 closing orders were made, but 2 houses were put in order afterwards. 9 cases of overcrowding were dealt with. There is a scarcity of houses at a low rental, and the question is under the consideration of a Special Housing Committee.

Part XII.

TABLE 1—VITAL STATISTICS FOR THE YEAR 1913.

RURAL DISTRICTS.

DISTRICT.	Population (estimated to middle of 1913).	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.			TRANSFERABLE DEATHS. [†]			NET DEATHS BELONGING TO THE DISTRICT.			
		Unrecorded number.	Nett.		Number of Non- residents in the District.	Rate.	Number of Non- residents in the District.	Rate per 1,000 Births.	Under 1 yr. of age.	At all ages.				
			Number.	Rate.						Number.	Rate.	Number.	Rate.	
1	4,904	108	111	22.63	60	12.23	1	3	5	45.04	62	12.64	12.64	
2	7,484	138	139	18.57	93	12.42	1	10	15	107.91	102	13.62	13.62	
3	4,614	67	72	15.50	64	13.78	1	6	3	41.66	69	14.85	14.85	
4	2,319	42	42	18.11	26	11.21	3	1	2	47.61	24	10.34	10.34	
5	5,112	103	103	20.14	63	12.32	2	1	Nil	..	62	12.12	12.12	
6	15,272	280	284	18.59	186	12.18	..	19	28	98.59	205	13.42	13.42	
7	12,283	221	228	19.37	115	9.77	..	10	19	83.33	125	10.62	10.62	
8	10,349	182	184	17.77	119	11.49	2	19	12	65.21	136	13.14	13.14	
9	11,385	208	206	18.10	127	11.15	..	10	21	101.94	137	12.03	12.03	
10	33,452	714	723	21.61	428	12.79	5	30	64	88.52	453	13.54	13.54	
11	20,145	360	359	17.82	305	15.19	..	18	31	86.35	324	16.08	16.08	
12	17,914	414	403	22.50	317	17.69	23	13	46	114.14	307	17.14	17.14	
13	7,966	129	129	16.19	95	11.92	9	5	8	62.01	91	11.42	11.42	
14	17,074	334	335	19.62	218	12.77	..	17	33	98.50	235	13.76	13.76	
15	11,134	204	204	18.32	127	11.41	..	19	22	107.84	146	13.11	13.11	
16	2,098	24	24	11.44	18	8.58	..	1	Nil	..	19	9.05	9.05	
TOTALS	183,535	3,528	3,546	19.37	2,362	12.90	47	182	309	81.4	2,497	13.64	13.64	

URBAN DISTRICTS.

DISTRICT.	Population (estimated to middle of 1913).	Unrecorded number.	Nett.		Number.	Rate.	Number.	Rate.	Number.	Rate.	At all ages.										
			Number.	Rate.							Under 1 yr. of age.	Nett Births.	Number.	Rate.							
17 Callington ..	1,713	22	22	12.84	19	11.09	..	2	2	90.90	21	12.25	12.25								
18 Stratton & Bude ..	3,139	63	63	20.06	43	13.69	7	1	2	31.74	37	11.78	11.78								
19 Launceston ..	4,132	67	65	15.73	46	11.13	4	1	4	61.53	43	10.40	10.40								
20 Liskeard ..	4,457	67	63	14.13	73	16.37	15	2	8	126.98	60	13.46	13.46								
21 Torpoint ..	4,493	115	112	24.92	60	13.35	5	1	9	80.35	56	12.46	12.46								
22 Looe ..	2,758	37	37	13.41	34	12.32	..	2	3	81.08	36	13.05	13.05								
23 Saltash ..	4,315	67	67	15.52	35	8.11	1	11	3	44.77	45	10.42	10.42								
24 Bodmin (including Gaoth and Kynham.) ..	5,675 (4,065)	86	86	21.15	182	32.06	120	2	6	69.76	64	15.74	15.74								
25 Lostwithiel ..	1,383	29	29	20.96	23	16.63	..	1	3	103.44	24	17.35	17.35								
26 Wadebridge ..	2,375	49	49	20.63	28	11.78	..	7	4	81.63	35	14.73	14.73								
27 Truro City ..	11,269	227	229	20.31	150	13.30	19	23	24	104.80	154	13.66	13.66								
28 Penryn ..	3,059	69	70	22.80	51	16.61	1	3	9	128.57	53	17.26	17.26								
29 Falmouth ..	13,458	234	235	17.46	177	13.15	10	16	22	93.61	183	13.60	13.60								
30 Helston ..	2,903	61	61	21.01	50	17.22	8	2	8	131.14	44	15.15	15.15								
31 St. Ives ..	7,294	160	160	21.93	86	11.79	1	1	11	68.75	86	11.79	11.79								
32 Penzance ..	13,572	241	245	18.05	201	14.81	16	21	30	122.44	206	15.18	15.18								
33 Padstow ..	2,699	46	46	17.04	37	13.70	5	4	6	130.43	36	13.33	13.33								
34 Newquay ..	4,466	71	72	16.19	55	12.31	4	..	3	41.66	51	11.41	11.41								
35 St. Austell ..	3,371	70	59	17.50	68	20.17	15	5	6	101.69	58	17.20	17.20								
36 Redruth ..	10,902	265	267	24.49	180	16.51	20	13	19	71.16	173	15.87	15.87								
37 Camborne ..	16,093	360	368	22.87	246	15.28	5	25	41	111.41	266	16.33	16.33								
38 Phillack ..	3,347	87	88	24.80	60	16.91	..	2	14	139.09	62	17.47	17.47								
39 Hayle ..	1,015	16	16	15.76	15	14.77	..	2	1	62.50	17	16.74	16.74								
40 Madron ..	3,755	83	71	18.91	63	16.77	26	5	5	70.42	42	11.18	11.18								
41 Paul ..	5,938	111	111	18.69	63	10.60	..	6	12	108.10	69	11.61	11.61								
42 Ludgvan ..	2,199	50	51	23.19	31	14.09	..	4	5	98.03	35	15.91	15.91								
43 St. Just ..	5,778	152	152	26.30	110	19.03	..	5	22	144.73	115	19.90	19.90								
TOTALS ..	145,768	2,905	2,894	19.85	2,186	14.99	282	167	282	97.44	2,071	14.21	14.21								

TOTALS FOR THE COUNTY.

	Population (estimated to middle of 1913).	Unrecorded number.	Nett.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
Rural ..	183,535	3,528	3,546	19.37	2,362	12.90	47	182	309	87.14	2,497	13.64	13.64		
Urban ..	145,768	2,905	2,894	19.85	2,186	14.99	282	167	282	97.44	2,071	14.21	14.21		
Whole County	329,303	6,433	6,440	19.55	4,548	13.81	329	349	591	91.77	4,568	13.87	13.87		

* The deaths included in column 5 of this table are the whole of those registered during the year as having actually occurred within the district. The deaths included in column 11 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 12 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 13 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 14 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 15 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 16 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 17 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 18 are the number in column 5, corrected by subtraction of the number in column 7, and the deaths included in column 19 are the number in column 5, 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PHILLACK (U.D.)

124 houses were inspected, and 3 were found defective. These 3 houses were put in order, and no closing orders were needed. 4 cases of overcrowding were dealt with. There is a scarcity of houses throughout the district. 12 new houses were built, but many more are required. No scheme is contemplated.

HAYLE (U.D.)

74 houses were inspected, but none were reported as defective. There is no scarcity of houses at present

MADRON (U.D.)

169 houses were inspected, and 40 were found defective. All the defects were rectified without closing orders. There is no scarcity of houses. 14 houses suitable for working men were found vacant during the inspection.

PAUL (U.D.)

99 houses were inspected, and 27 were found defective. In 24 the defects were rectified. No closing orders were made. 14 new houses were erected the rents of which were about £30. Three cases of overcrowding were dealt with. There is no scarcity of houses, but many houses in Newlyn are reported to be unfit, the houses are crowded together, so that there is no room for improvements unless some of them are pulled down. The question of expense stands in the way of any scheme.

LUDGVAN (U.D.)

33 houses were inspected, and 7 were found defective. These defects were rectified, and no closing orders were needed. No scarcity of houses is reported.

ST. JUST (U.D.)

54 houses were inspected, and one was found defective. This defect was rectified. There were a few cases of overcrowding. There is no scarcity of houses.

Part VII.

ON THE WATER SUPPLY OF THE SEVERAL COUNTY DISTRICTS.

STRATTON (R.D.)

There is no system of artificial water supply in the district, and all the cottages have their own well—two or three occasionally having a well in common. In the villages a common well is provided, which serves to supply all or most of the houses. The supply is usually quite good and ample, and there has been no shortage during the year. Beside the provision of several new wells, the protection of those in existence is being improved—indeed, only in one case was there any sign of pollution.

LAUNCESTON (R.D.).

The water supply is derived chiefly from wells and pumps. One case of pollution from a pigs' house occurred at Egloskerry, and analysis of the drinking water proved it to be unfit for consumption. This has been remedied, and a new supply is to be used.

CALSTOCK (R.D.)

In consequence of the increased supply resulting from the improvements referred to in former annual reports, it has been possible to increase the number of private supplies. For this purpose the mains have been extended 2,525 feet at Gunnislake and Harrowbarrow. By a short extension of the main at Latchley, a further source of supply has been tapped. In connection with the extension at Gunnislake, two service reservoirs have been built, having a capacity of 400 and 2,812 gallons respectively.

BOSCASTLE (R.D.)

The water supply is fairly abundant, derived from springs and wells, which are carefully selected and protected from pollution. In no case has any disease been attributed to this source. There was a shortage of water supply at Trevena, causing much inconvenience at the end of the summer. An increased water supply is necessary for this locality, but no steps in this direction have so far been taken. With regard to the water supply of Treknow, a deficiency to which the M.O.H. had previously called attention, has been remedied in a great measure; the supply appears to be now plentiful. The water should have been piped throughout the village.

CAMELFORD (R.D.)

The supply at Camelford continues to be good, and during the summer months was plentiful. It is now being extended to Valley Truckle, a hamlet about a mile away from the town. As mentioned before, St. Breward is partially supplied from the Bodmin Main. With these exceptions, the other villages and the rest of the district are supplied from wells and springs. During the summer months the villages of Pengelly and Medrose suffered from a scarcity of water, and a better and more plentiful supply is wanted. The water supply in the district generally has improved during the past few years.

LISKEARD (R.D.)

Boconnoc.—Water supply of Couch's Mill is of good quality, derived from a spring. Braddoc.—Deep wells of good quality. St. Cleer.—Liskeard mains, etc., and of good quality. (Common Moor—From a spring, ditto. Railway Terrace.—Good water from public taps. Tremar and T. Coombe.—Good quality and sufficient). St. Dominick.—Public wells, sufficient and good. Duloe—Good and abundant spring water, raised by a ram to public cistern, and laid on to houses. St. Ive.—Public pumps, with no suspicion.

Pensilva—Pumps and springs, with no suspected impurity or shortage. St. Keyne.—Of good quality, from public pump. Lanreath and Lansallos.—From public pumps and piped springs respectively, and of good quality. Talland.—Springs to reservoir, with standpipes at intervals. Polruan. Ditto, to public taps. Linkinhorne.—A spring, but unprotected, and some distance from higher parts of village. (Upton Cross.—Public pump of good quality.) Cheese-wring R'way.—Public supply, and good, but distant from the houses. Rilla Mill.—Public well, and good. Liskeard Parish.—Public pumps, and of good quality. Menheniot.—Good public supply, piped from springs. (Merrymeet.—Public pump, with good water). Sandplace.—Good supply from Looe mains. St. Pinnock (public well at East Taphouse requires protection). Golberdon.—Good, from public pump. Lerryn.—Three public shoots, but submerged at high tide of river, and hence unsafe; this is under consideration by the Council. Pelynt.—Good supply from public tap. St. Neot.—Good public supply.

ST. GERMANS (R.D.)

Millbrook.—Here there was a waste, amounting to 20,000 gallons per day from the reservoir. This has been attended to. The reservoir has been made water-tight, and should do away with Millbrook trouble.

Downderry.—Negotiations are still proceeding for the acquirement of a larger supply, which is badly wanted in the summer.

St. Germans.—The experiments in search of water here have been successful. The plans are completed, and, no doubt, before 1914 summer the water will be in use.

Kingsand.—For some years every summer, for quite a long time, Kingsand has tried to exist on five gallons per head a day, and that only at certain hours of the day, and this quantity is dependent on the care and attention of the turncock, who prides himself that in the summer every part of the village has water for a time, once every day. This is

to be deplored, because nearly all houses have w.c.'s. Water has been looked for, and a good supply of good water found which would give about 15,000 gallons a day, or 20 per head in summer months. The water supply has been piped to an intake chamber at a cost of about £30, but it has gone no further, as the Parish Council object to the cost. The water rises from sandstone, at an elevation of 300 feet, and from a point 12 feet below the surface.

The M.O.H. suggests: "Could not Kingsand and Cawsand get in this supply between them, though at present Cawsand can do on what they have if it were better distributed."

Forder and Antony Passage.—Both these places are in need of a better water supply. The pipes full of water are at St. Stephen's, not far from Forder. Antony Passage is, of course, further off, but, seeing the condition of the water supply there, is it not time the pipes were carried on, taking in Forder on the way?

BODMIN (R.D.)

Bridgend has a public water supply, regular and efficient. The scattered villages and houses are supplied by pumps (deep and shallow wells). The villages along and near the north coasts are the places where water supplies are of the most urgent importance.

As in former years, I again repeat that Port Isaac holds first place in the district for the demand for an efficient and ample supply of water. This has been for a considerable time the most pressing sanitary necessity in the whole district. Any further sanitary developments in this place (and they are required) are precluded by the absence of a proper water supply. Many of the houses in the higher part of the town are sadly in want of water in the summer months, and it has to be fetched from a distance. Under these circumstances, the flushing of the closets and drains of the houses, to say the least, must be very inefficient. Last year over 70 householders were dependent on two hand

pumps for the supply of water. The District Council have been considering the supplies from Pennant and Poltrewor-gey, and now they are considering a much larger scheme in conjunction with the Camelford Rural District Council to obtain water from a source in the neighbourhood of Greylake to supply Delabole, Port Isaac, Rock, and other places along the north coast. This latter scheme, if fulfilled, would no doubt be an admirable one for this particular district, and if carried out would no doubt lead eventually to a great development in the places suggested to be served by it. If this scheme is carried out, it is intended to carry on the main to supply this village also. Port Isaac and Rock are the most important places requiring a proper water supply. Competent engineers have inspected and reported on the water supply of Rock, and the water of two wells has been gauged, and one was said to supply 5,600 gallons and the other 4,296 in twenty-four hours, which, as to quantity, would be adequate for the place.

Several wells in different parts of the district have been protected, and made more secure against possible contamination.

ST. COLUMB MAJOR (R.D.)

The water supply has been sufficient for the requirements of the district throughout the year, but at St. Columb Town, where the water is excellent in quality, the present supply is totally inadequate for the requirements of the Town during such dry weather as was experienced in the summer months of 1911.

ST. AUSTELL (R.D.)

Nanpean and Foxhole are supplied with good drinking water by private enterprise; the inhabitants pay a yearly sum for this water. Treviscoe is supplied by wells, and Middle Treviscoe from an old mine level; there the inhabitants have never paid for their water. The supply at Middle Treviscoe is subject to intermittent contamination from surface water. The hamlets of High Street and Lanjeth

have sufficient water, and St. Stephens Churchtown is supplied by wells, of which all but one run dry in the summer time ; in addition to this, almost all the wells are liable to contamination. As there are about 800 people in St. Stephens Churchtown, this lack of good water is a serious defect.

The matter has been under discussion for the last quarter of a century, and in 1912 the Council took the advice of an engineer on the provision of a water supply to the Churchtown. An adequate scheme was prepared, but the owners of the water refused to sell or lease it to the Council. The only advance made in the matter is that the Council have acknowledged their responsibility to provide one of the necessities of life for eight hundred of the people under their care.

There was, as usual, a shortage of water in the Churchtown during the summer of 1913. Several springs were considered, but none were found sufficient or satisfactory for the supply of this village. It seems likely that the Council will have to undertake an expensive scheme and bring in water from some miles away. The parish can very well afford this. The rates are very low, and the rate of one penny in the £ brings in about £160 for sanitary purposes.

St. Dennis.—Wells and springs; some shortage and liability to contamination.

Roche.—Also wells and springs ; possibility of surface contamination in some.

Mevagissey.—The water supply of the town is from wells. The water supply is of good quality, but not sufficiently protected from contamination. The wells do not run dry, even in the hottest summer.

Tregonissey, Slades, and the neighbourhood of Mount Charles and Charlestown are supplied by water from Carclaze and Penwithick. The water is of good quality, but the supply is not sufficient during the driest summers. During 1913 the Local Government Board held a Local

Enquiry regarding the sanction of a loan to pay for the water works at Penwithick. The Board's Inspector was of the opinion that there must be leakage from the water mains, and this opinion has been partially confirmed by the Council's Surveyor, who, in a few observations taken with Deacon's meters, has detected a considerable water waste. At the time of writing, further records are being taken, and the matter is therefore at present *sub judice*.

The Penwithick water seems to be liable to intermittent pollution.

TRURO (R.D.)

The water supplies of St. Agnes and extensions of St. Mawes and Devoran are public ones. The remainder of the district is supplied from wells.

In the case of St. Mawes, it was found that the reservoir made at the introduction of the water was deficient in size, and an enquiry for a loan to enlarge the size of the reservoir was held some time ago. That reservoir is now in course of construction. A public supply for Perranporth is now nearing completion. None of these public supplies has been complained of as to purity, and the source of each may be looked upon as beyond suspicion.

REDRUTH (R.D.)

There is nothing new to record in this respect. No shortage occurred during 1913, either in Illogan or any other part of the district. Speaking generally, we may fairly consider that it is well served, both as to quantity and quality, and there is no evidence of the existence of any water-carried disease during this time.

St. Day.—There, are, however, exceptions to this satisfactory state of things. The most marked one is to be found in the old-fashioned village of St. Day. Here there is a total absence of anything remotely resembling a regular supply. The place is at the top of a hill and it is impossible to carry water there by gravitation alone. At the present

time water from Vogue is carted about the streets in receptacles whose condition it is impossible to vouch for. Apart from quality or delivery it is quite clear, therefore, that the quantity must be quite inadequate. The result must inevitably be to reduce consumption to an extent which involves a positive danger to public health.

Parkbottom.—No progress has yet been made towards providing a more convenient supply for this village, which is clearly in want of one.

Carnkie.—Here there is not a safe and adequate supply. No subject has been more fully discussed and there is every disposition to provide one if possible. Many difficulties have hitherto stood in the way of carrying out any of the schemes suggested. The district on account of mining necessities in regard to a particular stream of water has had to suffer much inconvenience and some risk. Quite lately a new suggestion of a promising nature has been made which may result in an improvement in the near future.

EAST KERRIER (R.D.)

The Penryn side of Budock and St. Gluvias derive water from the Falmouth main : Ponsanooth, Mawnan Smith and Constantine piped from springs, etc., deep wells supplying the more rural parts.

At Flushing, there are two reservoirs which supply mains and standpipes ; new mains have been laid to “ Seven Stars ” Hotel and St. Peter’s Terrace (foot).

Carlidnack, Mawnan still remains inadequately supplied. The present supply is a good one, but it is an unreasonable distance. The Council is entertaining this matter, in conjunction with the contemplated extension of the present supply in Mawnan Smith to the eastern side of the village. An engineer has been consulted, but his report postponed until later on in the year.

At Treluswell the supply has been improved, and also at Longdowns some alterations have been made *re* Small Croft well.

At Mabe, the row of cottages near the School should have the spring water brought nearer.

Two samples of water have been analysed, and 7 wells and 5 cisterns cleansed and repaired.

HELSTON (R.D.)

Porthleven and Crowan are supplied by a public service, and no complaints have been received during the year of any inadequacy. The rural cottages are supplied for the most part by wells and springs.

A fresh source of supply is urgently needed at The Lizard.

WEST PENWITH (R.D.).

Carbis Bay.—Carbis Bay is supplied from Within Well, the water being piped by 3-inch pipes to two public taps to most of the houses in the area.

Private individuals are trying to form a company to supply Carbis Bay with water. I understand that the Prospectus is ready for issue. If they are successful I think this difficult question will be settled.

Lelant.—Village supplied from an adit.

Gulval Churchtown.—Spring piped to a reservoir, thence to stand-pipes, some of the houses having water laid on.

Long Rock.—Spring, thence to stand-pipes.

Marazion and St. Michael's Mount.—From an adit piped to a reservoir, thence to houses and stand-pipes. This supply is, as a rule, insufficient in summer to the higher part of the town.

Goldsithney.—The pump-wells fed by the same adit.

St. Hilary.—Very badly supplied, some people having to fetch water from Relubbus Well, some three-quarters of a mile away.

Perranuthnoe.—From rain-water tanks, an unsatisfactory source of supply.

Sancreed Churchtown and Drift.—Supplied by wells.

St. Buryan Churchtown.—Supplied by private supply which is pumped from a spring by a water-wheel, and is available for general use, established by the owner of the majority of the houses in the village, who has now provided a pump ; also by wells, one a public one, the water of which has been analysed and found unsatisfactory ; the Council have erected a Notice Board warning the public against using the water for drinking purposes. (During 1914 the town well has been closed, owing to an epidemic of enteric.).

Porthcurnow.—From a spring piped to the houses.

Sennen Churchtown.—Supplied by wells.

Sennen Cove.—From an adit piped to a reservoir and thence to five stand-pipes.

Morvah, Zennor, and Towednack.—Supplied by wells.

Nancledra.—From a spring.

CALLINGTON (U.D.)

During the drought several wells were dry for weeks. The supply from the Waterworks Company had to be curtailed during July and August.

STRATTON AND BUDE (U.D.)

The Water Supply is good and ample, but owing to the small main some houses at the top of Killerton Road and Bramble Hill were unable to get an adequate supply during the months of August and September. This could be remedied by taking a small pipe from Hillhead, Stratton, to those places where it was inadequate.

LAUNCESTON (BOROUGH).

Town waterworks and public supply—no complaint as to quality or quantity. No unchecked plumbo-solvent action reported, and there has been no need for curtailment at any time.

LISKEARD (BOROUGH).

The district is abundantly supplied with wholesome water by the public service. The water arises from uncultivated upland sources, and is distributed by gravity through iron pipes from the service reservoirs to all parts of the district. The supply is constant, and judged by chemical analysis is of satisfactory organic purity, it is soft and entirely free from lead.

TORPOINT (U.D.)

The growth of the town from 2,400 to 4,321, which took place principally some eight or ten years ago, presents to the Council the question of water supply to be solved, especially as the new houses have been erected up the hill to the level of the clear water chamber.

The Council have at times considered various schemes which would increase the supply and pressure at a moderate cost, but they have been rejected after careful enquiry by the Council or by the Local Government Board.

The year 1916 is however now nearer, when the loans on the original scheme will have been paid off ; the Council are again considering the possibility of settling the question by the finding of a supply which will be all that can be desired, both for its abundance and its purity, and which will meet the demands of any likely future growth.

Unfortunately, the present supply at Craffhole has been endangered by the drainage of the village of Craffhole, which stands on the brow of one side of the catchment area of the Craffhole reservoir. In this village, each house had formerly its own cesspit; it was seen, however, that the washing-water from the village found its way down the lane towards the reservoir. Complaints were sent by the Torpoint Urban District Council to the St. Germans Rural District Council relative to this, and they, with the idea of lessening the nuisance, concentrated the drainage of the village into two tanks of fenestrated brickwork ; the overflow from these gravitates

towards the head of the reservoir, and thus the liability to pollution has been much increased.

The St. Germans Rural District Council are now considering a plan for the remedying of this by treating the sewage and conducting it past the reservoir.

With regard to the pressure, this is so low that in the upper part of the town it takes half an hour to fill a bucket with water, and the flush tanks are only filled twice in 24 hours.

There has been no curtailment of the general supply during the year, and the report of the Clinical Research Society shows that it is of satisfactory quality.

LOOE (U.D.)

The Water Supply of this district has proved adequate during the year. The augmentation, so economically and effectually carried out from Lake Orchard on the Wayland Farm will prove, according to Dr. Webb, to be a distinct improvement. It will go far to overcome the want, in past years, felt in the higher levels in the district. "The reservoirs at Wayland and Wringworthy are supplied by collecting the water from springs and small streams in the neighbourhood. Analysis has always shown these waters to be quite suitable for drinking and domestic purposes."

SALTASH (BOROUGH)

Abundant and of good quality. It is derived from two sources, the lower levels of the town being supplied from a spring situated in a disused mine adit on the North-East boundary, the water being of a hard quality, while the remainder of the town is supplied from the Plymouth Reservoir on Dartmoor, a soft upland water. Both supplies are free from risk of pollution. In 1912 a service tank was introduced into the system, with the object of supplying the lower levels of the town with the softer Plymouth water during the early part of the week, when the washing of clothes is carried on.

BODMIN (BOROUGH).

The water supply belongs to the Bodmin Waterworks Company, and is abundant, and reported as of excellent quality. It is obtained from the uplands adjoining St. Breward (six miles distant), and is conveyed by gravitation through cast-iron mains on the constant system.

LOSTWITHIEL (BOROUGH).

The water supply has been greatly improved by the provision of a reservoir on Bodmin Hill. No insufficiency nor unsatisfactory quality, nor unchecked plumbo-solvent action have been reported.

WADEBRIDGE (U.D.)

The water supply is derived from springs on the hills to west of the town, which are quite free from contamination; it is carried in pipes to a reservoir holding 220,000 gallons, situated just outside the town. It is under the control of the Urban District Council. In past years the supply has been somewhat deficient during the summer months, necessitating the cutting off of the supply for several hours a day; but last year this was not necessary. The water is of good quality.

TRURO (CITY).

The water supply is derived almost entirely from the Truro Waterworks Co. The area of the gathering ground of the supply is 2,577 acres, composed chiefly of grazing land, with a considerable amount of woodland and a small portion of arable land, and the inhabited houses on the watershed are few. There are two service reservoirs having a capacity of 825,000 gallons, and a clean water tank capable of holding 170,000 gallons. The supply per head per diem amounts to approximately 17 gallons. There are four filter beds. The scheme carried out by the County Filter Co. for the better purification of the water has been most successful in its results. The water is clear and free from all taste of

chlorine, and the bacteriological and chemical analyses have been quite satisfactory. The water from a public pump in Castle Street is of an unsatisfactory quality.

PENRYN (BOROUGH).

Supply from Falmouth Waterworks Company. Good and constant, with almost every house connected. By an analysis, it was reported as a good drinking water. Some curtailment necessary in very dry summers. Another supply to mains is from springs at Tremough; this is used for street watering and general cleansing purposes. A few private wells at the North end of the town—reported not under suspicion.

FALMOUTH (BOROUGH).

A great and much needed improvement in the water supply has taken place. The Company have largely increased the capacity of the gathering ground, and the quality of the filter beds has been much improved. The result of this is that, in spite of the dry season, the supply is not curtailed for any purpose, domestic, sanitary, or trade; a striking contrast to past seasons.

The supply is from large reservoirs at a high level outside the town.

HELSTON (BOROUGH).

Dr. Mark Taylor reports: "As stated in my report for 1911, the Helston and Porthleven Water Company were asked to provide adequate filtration for their water supply, which is the source of drinking water to a large proportion of the inhabitants; 271 houses being served by it. So far nothing has been done.

The Company replied that on the strength of the favourable Analyses (Chemical) of the water given by the County Analyst, they did not see the necessity of filtration. The Sanitary Authority accordingly had a bacteriological examination of the water made by the Laboratory of

Hygiene and Public Health, New Cavendish Street, W. This report showed that while the water supplied by the Company was of good quality, and suitable for drinking purposes, at the same time there was no safeguard provided, should any contamination of the gathering ground or reservoir occur, and the Company must be held liable if any pollution of the water should take place, as during the year they have taken no steps to prevent it, in spite of repeated warnings sent them by the Town Council."

"During the summer the water supplied by the Company became thick and unpleasant to the taste, while with the microscope I found a number of animalcules. These I sketched and sent to the Secretary of the Water Company."

A sample of the water was sent by the Rural District Council for chemical analysis by the County Analyst. The report was that the water might be safely used for drinking purposes, if the sediment of vegetable debris be allowed to settle out.

A bacteriological examination was made by the Laboratory of Pathology and Public Health on behalf of the Town Council. The report was that the water might be used for drinking purposes, but showed absence of precaution against surface contamination.

In reply to letters from the Town Council, the Water Company refused to take any steps toward providing filter beds, and reported that the contamination of the water was due to the shortage of supply necessitating the use of reservoir water, and at the same time preventing the proper flushing of the mains, while holes were found in the screens of the water tower.

The Company have lately tapped a fresh source of supply, which will, they hope, make them sure of plenty of water, no matter how dry the weather may be.

Analysis of three of the public supplies, "One Well," Cross Street pump," and "Wendron Street pump," showed these all to be good safe drinking waters.

ST. IVES (BOROUGH).

The public supply, owned by the Council, is derived from the New Reservoir at Bussow Moor. The supply has been ample for all requirements, and analyses have shown it to be of good quality. Another supply is Chyangwheal, derived from a disused mine working; and another from Penbeagle. Both these supplies are protected from contamination, and the water is also of good quality.

The water from these supplies is carried in mains to all parts of the town. The overflow is used to flush the bed of the Stennack River during dry weather in the summer.

Private Water Supplies.—This is chiefly from deep wells sunk in granite, averaging from 20 to 60 feet, and in connection with farm houses and cottages in the outlying parts of the district, and on higher ground than the public supply can be carried. These wells are inspected, and the supply of water is pure. In dry summers these supplies are generally ample. In some cases the water has to be carried some distance, but as it is usually for the small cottages, the occupants do not object.

PENZANCE (BOROUGH).

The waterworks are the property of the Corporation, and the water comes from two sources, viz.: (1) from a disused mine adit and moorland surface mixed, (2) and from a deep well; is conveyed to town by two trunk mains, and connected to them is about 13 miles of various size mains supplying shipping, railway station, 27 steam and other motor power engines, public lavatories, etc., and close on 14,000 people for whom, with the visiting public, 4,000 sanitary conveniences are in use, and 13,000 taps and other fittings.

All dwelling-houses are separately supplied with tap water, except in courts, where there is a common supply from taps fixed in convenient places for the tenants.

There was a continuous supply of water during the year. The water has no plumbo-solvent action.

During the year samples of water were taken from the well, also from mains at the highest and lowest lying parts of the town; these were chemically and bacteriologically analysed by the Borough Analyst, and he pronounced the samples to be satisfactory.

During the year the Council were granted the authority of the Local Government Board to borrow £2,033 for the extension of the water-works in connection with the Polteggan well.

PADSTOW (U.D.)

The Water Supply is reported by the M.O.H. as ample and of excellent quality; no complaints.

Moorland source—underground adits for six miles. No likelihood of contamination, and, according to the Clinical Research Report, it is of "extraordinary organic purity."

NEWQUAY (U.D.)

An ample supply of water has been maintained throughout the year. No complaints have been received as regards quality or deficiency of the supply.

The Town Water Supply is provided by the Newquay and District Water Company, and is derived from three separate sources, viz., (1) a main supply derived by gravitation from deep adits at Indian Queens and Ruthers, the water being conveyed by iron pipes to reservoirs at Quintrel Downs, and thence by 7in. pipes to Newquay; (2) a new main supply at Trewollak, the works in connection with which were completed in 1908; the water from this supply is obtained by pumping from a deep shaft the water afterwards being conveyed to an aeration and filtration plant in connection with a service tank and reservoir at Fairpark; (3) a supplementary supply at Mount Wise, Newquay, obtained from a deep shaft by pumping.

During the past year additional measures for purification of the water have been taken by the installation of mechanical filters (in duplicate) in Trenance Valley.

Plumbo-Solvent Action.—No cases of lead poisoning have been reported in connection with any of the water supplies, and the private wells in the town are all moderately hard waters, and have no plumbo-solvent action. All the pipes conveying the water from the source to the town are of galvanised iron, and the regulations of the Water Company prohibit the use of lead pipes in making connections from the mains to the houses supplied.

Analyses of the Town Water Supplies have been made throughout the year, and show that its quality is excellent.

ST. AUSTELL (U.D.)

The summer was a very dry one, the rainfall being much below the average for the summer months.

In spite of this, however, the water supply was maintained throughout the year without intermission on the high level supply, the low level being turned off at night for about three weeks at the end of August.

REDRUTH (U.D.)

Constant supply to all parts of the district. Quality good, as shown by an analysis taken during the year.

CAMBORNE (U.D.)

The town itself, and also the villages of Tuckingmill, Beacon, Kehelland, and Treswithian, are supplied with water provided by the Camborne Water Company. This supply is derived from two separate sources at Cargenwyn and Boswyn, the former in the Helston Rural district, and the latter in Camborne district, the water being in the main drawn from deep springs which come directly from the granite rock. The whole of the water passes through filter beds before entering the delivery pipes, and the service is

constant. During the year, new mains have been laid in Cadogan Terrace and Condurrow Road, and the Water Company have decided to continue the driving for further water at Carvolth, on the Boswyn watershed, to augment their present supplies for their summer requirements.

The village of Troon is supplied with an abundance of drinking water from a deep adit, the adjoining hamlet of Croft Common also obtaining water from this source. Knave-go-by, Penponds, and Reskadinnick are also supplied with drinking water from adits; Croft Mitchell and Barripper with water from deep wells; and Condurrow, Penregon, Brea, Roscroggan, and Bolenowe Moor with water from shallow wells.

PHILLACK (U.D.)

The district is now supplied with water of good quality, and the supply is abundant. The source of supply is from an adit, whence it is pumped to a reservoir on a hill, and then flows to the various parts of the district. There is no fear of the water becoming contaminated. Up to the present, 240 houses have been connected.

HAYLE (U.D.)

There is reported to be an abundant supply of good water, and every care is taken to prevent its contamination; even during the drought of 1911 there was no actual shortage.

MADRON (U.D.)

Heamoor has a good public supply from springs piped to a reservoir and thence to the houses; it is reported as not plumbosolvent, nor liable to contamination. Tolcarne has a plentiful supply provided by the District Council and derived from springs rising in the higher districts of Tregavara, and piped to two tanks and thence to a reservoir of 18,000 gallons, and thence to stand-pipes; some houses are connected.

Madron Churchtown has a Water Supply piped from springs in the vicinity of the Wishing Well to two pumps and a tap. Due to altitude there is insufficiency of supply for water closets, but a sewer exists in readiness for connecting up; this should be considered by the District Council.

Wherrytown and Chyandour have a piped supply from the Penzance Waterworks.

PAUL (U.D.)

The M.O.H. reports fully as follows: "There are two separate supplies for Newlyn, one, the 'Bellevue' supply, is from an adit, situated above the village, and piped to a reservoir having a 25,000 gallon capacity, from this point the water is laid on to stand pipes. The other, 'Jacob's Well,' is brought from another adit to a storage tank holding 15,000 gallons; this water is piped to stand pipes. In case of any shortage of these supplies, the Council has entered into an agreement with the Newlyn Ice Company for an augmented supply which is obtained from a deep well near Sheffield, this water is used during the dry season of the year. All these supplies have been analysed and found free from impurities, contamination, and plumbosolvent action. The Newlyn Harbour Commissioners have a good supply, brought from Trewidden, in the Parish of Madron, for Harbour, Shipping, and the Penlee Quarry.

A water scheme for a greater part of the district is in contemplation, the collecting area having been prospected, and the Engineer has the matter in hand. If this scheme is accomplished, a more constant supply will be given, and an individual house supply.

Mousehole has three 'shoots' for dwelling purposes, viz:—'Pedney Caunce,' 'School Shoot,' and 'Fox's Shoot'; these have been analysed and found pure. There are no stand pipes. There is a scheme in progress to obtain a

water supply from an area, the property of 'The Hutchen's Charity Trust,' situated above Mousehole.

A well has been sunk for the supply of houses at Bosava, there being no such supply previously."

LUDGVAN (U.D.)

There is a sufficient supply for the population. Ludgvan Churchtown is supplied from a spring that arises about a quarter of a mile to the north-west of the Churchtown. This spring never fails, and from this spot the water is carried in a covered trench to a "shoot." This water is pure and there is no fear of contamination.

Lower Quarter gets its supply from the "Farwell Shoot." This spring arises in Vellanoweth, and the water is brought in pipes to the "shoot." This supply is pure.

Newtown has a protected well which is far from any habitation, and is not subject to any animal pollution. The water is of good quality.

Long Rock gets its supply from Tremenheere. This supplies the joint property of Ludgvan and West Penwith Councils; it runs into a reservoir, which is piped to private houses and to stand-pipes. It is pure in quality, and has no plumbo-solvent action.

The Nancledra supply to twenty houses comes from a spring; the water is pure; but as the leat is an open one, there is danger of contamination. The area is sparsely populated, so there is little danger of sewage pollution. Animals have access to the stream at some parts. A piped supply to the "shoot" would overcome the danger.

At Canonstown, there are two supplies: one at the top of the hill the other at the bottom. The lower supply is piped to the "shoot"; there is plenty of water, this supply never running short. The "shoot" at the top of the hill is used by about twenty houses. There is a good flow of water coming from Cullurian, about a mile from the "shoot," and is brought by an open leat along the hedge-side. Cattle drink

from this stream, and there is danger of contamination for most of the distance. This water has always been used for drinking purposes, but the inmates of houses in the vicinity complain of the condition of the water during the dry weather; it should either be protected by pipes, or a notice placed near the "shoot" pointing out its unfitness for human consumption. There are other small "shoots" and wells in the district supplying the many houses scattered about.

ST. JUST (U.D.)

For very many years the question of a water supply has engaged the attention of the Urban District Council, but it is regrettable to find that no progress has been made, despite the repeated advice of their Medical Officer with regard to its urgency, and notwithstanding much correspondence with, and reporting by, the County Council and the Local Government Board. In October, 1904, Dr. J. Spencer Low, His Majesty's Inspector under the Local Government Board, reported that the town of St. Just was only supplied by wells, and that there was liability to pollution; the Green Lane pump fixed on an old mine shaft in a cultivated field was then said to have a diminished supply in summer, and was exposed to pollution; the Cape Cornwall Road pump was also described as connected with an old mine shaft, and the well at Carn Bosaverne was reported as shallow and also liable to pollution. Further, the well at Higher Boscaswell is not beyond suspicion of similar liability to pollution, on account of the privy-pits of a row of cottages being placed at a higher level than the well itself. In his Annual Report for 1911, the County Medical Officer advised that periodical analyses should be made of the public wells in the district. The village of Truthwall has still no water supply.

Part VIII.

CLEANSING AND SEWAGE DISPOSAL, and the POLLUTION OF STREAMS WITHIN THE COUNTY.

The above subjects are closely associated, and have a definite relationship, also, to the housing of the people. Combined, they indicate the vital points which have always to be seriously considered in our efforts to improve the general health and to banish disease. Cornwall is naturally a healthy county, continually swept as it is by the fresh sea-breezes, and sufficiently flushed with rain to assure a natural cleansing; unfortunately much of this advantage is lost by the pollution of both air and water from human and other sources. Ventilation is lacking in many dwellings, and failure to deal efficiently with the disposal of sewage is frequently responsible for the vitiation not only of the atmosphere, but also of some of the streams, and even at times, of the smaller water supplies.

Town scavenging and street cleansing should receive the greatest amount of attention in view of their importance for lowering the Zymotic Death-Rate, and diminishing the infant mortality. During periods of dry weather, the watering of the streets becomes an absolute necessity for cleansing the surfaces of roads, laying the dust, and flushing the gullies. In very large centres throughout the country, whole-time Cleansing Superintendents are appointed; these officials supervise the removal of night-soil and the cleansing and watering of the streets, and have charge of the large destructors for the disposal of refuse; much of the prevention of disease and preservation of health must certainly be due to them.

STRATTON (R.D.)

Sewage Disposal, etc. No sewage Disposal Plan for water carriage, except at Kilkhampton, where some improvements have been made.

Nuisances. Abated, 10 (premises), 2 overcrowding. Pools, etc, 10.

River Pollution. The case of the pollution of the stream below the Urban Council's Sewer Outfall at Howard again occurred during the hot dry weather. The river was in a terribly insanitary condition for some time, the water being absolutely undrinkable for the cattle.

This apparently recurs from time to time, disappearing after a heavy rainfall. On a recurrence I should advise formal complaint being made to the Authority concerned.

Refuse Disposal. This is carried out from the house receptacles and disposed of by digging in the gardens, no nuisance arises.

LAUNCESTON (R.D.)

Sewage Disposal, etc. District not sewered. One-fourth of the houses have the old type of privy pit which is frequently filthy and thoroughly insanitary.

Nuisances. 4 overcrowding ; and a great number of houses cleansed.

River Pollution. None notified.

CALSTOCK (R.D.)

Sewage Disposal, etc. No new works have been carried out, but the existing sewers have been kept in good repair. The present arrangements for sewage disposal seem sufficient throughout the district, and it is not anticipated that any new sewers will be required during the coming year.

At Calstock the removal of house refuse by contract has been carried out satisfactorily. The street cleansing at Calstock and Gunnislake has also been satisfactory.

Nuisances. 33 nuisances re premises abated, pools 2, privies 2, drains 4, overcrowding 4.

River Pollution. None reported. Action is being taken concerning the risk of pollution at South Leat by cattle.

BOSCASTLE (R.D.)

Sewage Disposal, etc. District not sewered on account of its scattered nature. Cesspits prevail and pails in the cottages which are neglected in many instances. No public scavenging.

Nuisances. See Camelford following.

River Pollution. None according to M.O.H.

CAMELFORD (R.D.)

Sewage Disposal, etc. The sewerage of St. Teath has been improved, but a sewer is still needed at the north end of the village; this is reported to be now under consideration. The village of Medrose also needs draining. The sewage disposal works at Camelford are reported adequate, and no complaints have been made as to effluvia concerning them.

No arrangements are made by the Council for the removal of house refuse except at Camelford.

Nuisances. (Camelford with Boscastle). Premises 113 abated, pools 8, animals 6, drains 46, accumulations 15, overcrowding 2, others 25.

LISKEARD (R.D.)

Sewage Disposal, etc. Several of the towns and larger villages are drained by a system of sewers, by which the sewerage is either conveyed into the sea or is carried on to the land, and so disposed of by a method of irrigation. A considerable number of the cottages are provided with closets over small cesspits; several of them have been replaced by bucket closets, yet a number of them remain, and are, without doubt, the prevailing method of excrement disposal in the country parts of the District. Improvements have been

effected at Polruan, Bodinnick, Menheniot village and station during the year. Developments still needed at Pensilva, Golberdon, and Railway Terrace.

The scavenging is done by contract in the larger places, such as Polruan and Polperro, but in the smaller villages the occupiers dispose of the refuse in their own gardens. The scavengers remove the refuse thrice weekly, and the material is removed to depôts at some distance from the town, and is disposed of on the land.

Nuisances. Premises 84, animals 2, drains 28, accumulations 45, overcrowding 2, pools, etc., 2, all abated.

River Pollution. At Polperro.

ST. GERMANS (R.D.)

Sewage Disposal, etc. There were no special developments during the year, although they are needed, especially in St. Germans and Forder. The M.O.H. reports :—

Although the regular Sanitary Work and minor improvements by the owners and tenants of the houses show progress, the larger questions that can only be settled by the District Council have not received attention this year. The only Sanitary Sewerage work done has been an extension at Craffhole, and the laying of a short length at Pemberknowse Point. The serious question of the old masons' sewer in Kingsand is still in abeyance, although sewage finds its way out and forms soft places in the road.

Forder Village is in its same plight, and though a house has been closed there, it is not given the advantage of any Sewerage system, but has to continue the throwing of house slops and refuse on the beach of the creek, mostly above ordinary high tide. If this was not done, many houses in Forder would have to be closed.

St. Germans is badly in want of General Sewerage, as before mentioned.

St. Mellion Sewerage is defective. In some cases the drains discharge on to the roadside gullies.

These are all points in the District Sewerage which require the serious consideration of the Council.

The prevention of contamination of the Water Supply at Torpoint by the Cesspits at Craffthole has been attended to as far as to have Engineer's advice, and plans for carrying the Sewerage past the intake and reservoir prepared.

The last house in St. Stephens is now connected with the sewer.

Nuisances. Abated, houses, etc., 12, pools, etc., 7, drains 59, accumulations 7, overcrowding 4.

River Pollution. Nil.

BODMIN (R.D.).

Sewage Disposal, etc. There have been improvements in scavenging at Bridgend, Lanivet, and Port Isaac.

The drainage at Port Isaac is in the same condition. The remarks made in the Report for 1912 are repeated here:

PORT ISAAC.

“ There are drains at Port Isaac, but they fall far short of an efficient or complete system.

Formerly, about 30 years ago, a drain was laid beginning at the lower Bridge and reaching up Fore Street as far as the old Post Office, taking in branches from three or four small properties around that immediate neighbourhood. Gradually other connections have been made. One beginning at the Dolphin Hotel, coming down the road towards the pump, and entering the original drain just mentioned. Another drain enters the river from the Methodist Chapel. Another drain commences near the dust shoot up the Trewetha Road as far as Dr. George's old house, laid partly with 9-in. and partly with 6-in. pipes, a little branch taking in property opposite the Church two closets and Liberal Club. A slop and water drain runs up first and last hill. Another drain with its exit in the cliff 30 feet below the top extends upwards to the rocket apparatus.

All this drainage has been done more or less in piecemeal during the last 30 years. With the exception of the drain discharging on the cliff, all the others empty eventually into the stream."

Nuisances. Watercourse 12, overcrowding 3.

Rivers and Streams. The Fowey River is polluted with mine and china clay refuse. The Camel River with china clay refuse.

Port Isaac River is still polluted with sewage from several closets emptying directly into it, and from emptying chamber utensils. It is kept much cleaner than formerly, but still the pollution exists. Some closets also discharge into the Port Gaverne stream.

ST. COLUMB MAJOR (R.D.)

Sewage Disposal, etc. The M.O.H. reports: "St. Columb Town.—The Sewerage system in operation in St. Columb Town does not continue to act satisfactorily. Since my last Annual Report, the Scheme designed by Mr. R. Hansford Worth, C.E., in connection with the under draining and levelling of the Sewage Farm has been completed, and, in my opinion, the system which he inaugurated could not have failed to have had beneficent results if this gentleman's instructions as to the management of the Farm had been properly carried out. But it would appear that a lamentable lack of knowledge of the scientific principles of the Scheme on the part of those engaged in supervising the works has so completely altered the *modus operandi* of the irrigation grounds, that the system has now veritably become a chaotic muddle, and fails entirely to effect the purpose for which it was intended.

Complaints are now rife that the sewage from the Town finds its way into the Mawgan River, and gives many unpleasant manifestations of its presence, and has converted this erstwhile crystal brook into a Stygian stream. This is a matter that calls for the immediate attention of the Council.

The Irrigation Grounds require constant supervision, and I would strongly urge upon your Council the necessity for permanently engaging a man for that purpose."

Nuisances. Abated—premises 92, animals 5, accumulations 8, overcrowding 3.

River Pollution. Mawgan River.

ST. AUSTELL (R.D.).

During the year the Poltair Estate was sewered.

The M.O.H. reports that developments are needed :—

- Drainage Schemes**—1. At Watering Lane Sewage Farm.
 2. At St. Dennis.
 3. At Nanpean.
 4. At Roche.
 5. At Bugle and Stenalees.
 6. At St. Blazey, Par and Tywardeth.
 7. At Pentewan.
 8. At Mevagissey.
 9. At St. Stephens Churchtown.

Mevagissey.—Drainage. Many houses are not supplied with sanitary conveniences, and owing to their situation—built near the cliff with no backyard or garden and limited in the accommodation—it is not practicable to supply many of the houses with closets. To obviate this difficulty, public sanitary conveniences are provided on these quays. Where possible, houses have slop or water closets connected with sewers, and these sewers discharge into the stream which flows into the inner harbour. This is not the best arrangement. It would be better to disconnect the sewers from this leat and lead the undiluted sewage to below low water mark. Scavenging and street cleaning is well performed by the public scavenger. The refuse collected is taken inland to farms.

Roche. Pit and pail systems prevail, but in the Church town there are sewers and water closets. The sewage pollutes the stream, being discharged into it

untreated, but treatment is under consideration by the District Council. **Slades, Mount Charles, Polkyth, and Charlestown** have a modern system of sewerage and drainage. Part of the sewage discharges into the sea at Charlestown, and part flows over the sewage farm at Watering Lane. A committee of the Council is considering the question of connecting up the sewage farm to the main Charlestown sewer, so that all the sewage may pass out to sea. Stenalees and Bugle have no drainage system, and, if these districts continue to increase it will shortly be necessary to sewer the main road between these places and provide for the treatment of the sewage on the far side of Bugle. Sanitation here has not kept abreast with the increasing population.

St. Blazey. Drainage of the town passes unpurified into streams, causing a dangerous nuisance. The Council are considering a scheme for sewerage the town and precincts. There are many offensive privies.

St. Dennis. Drainage is urgently needed. Pits and pails abound.

Tywardreath. Drainage. The drainage of Tywardreath passes into an open drain which empties into a stream at Par Station. This condition has come under the consideration of the Council, who are preparing a drainage scheme for St. Blazey and Tywardreath.

Nuisances. Abated, premises 73, pools, etc., 23, animals 9, drains, etc., 25, accumulations 4, overcrowding 4, others 76.

River Pollutions. Many, especially at Par and in the Pentewan Valley.

TRURO (R.D.)

Sewage Disposal etc. The M.O.H. reports:—"The public drainage schemes are, for the most part, satisfactory. That at Grampound Road has given a little trouble. I fear that an improvement is necessary at Chacewater.

The village of Chacewater lies low and several of the houses are situated lower than the gardens behind, and those which have any drains at all possess mostly rough channels connected to the old stone sewers, which discharge into the leat.

The leat itself is so blocked up with mud and rubbish that the sewage cannot get away properly."

In view of the recurrent epidemics of Diphtheria in this village, the sanitary conditions certainly need attention.

Nuisances. Abated (houses 238), pools 17, animals 12, drains 52, accumulations 36, overcrowding 10, other insanitary conditions 24.

Rivers and Streams. The Fal is contaminated with refuse from the china clay industry, and some of the small streams are beginning to be polluted with the same material. No action can be taken, I am informed, to stop this contamination.

REDRUTH (R.D.)

Sewage Disposal, etc. The condition of this populous Rural District is distinctly bad. The County M.O.H. made a special report on a main drainage scheme in 1911, but so far little progress has been made. A combined scheme with the Urban Authority is under consideration.

Pool and Illogan Highway. No satisfactory outfall at Pool and no sewerage system at Highway and Barncoose Terrace.

Illogan Churchtown. The sewer laid at Robartes' Terrace has provided for that particular group of houses, but the main part of the village still remains as before.

Portreath. As reported by the County M.O.H. last year, the dock still receives sewage: the Conjoint Scheme with a sea outfall will effectively deal with this and may, at the same time, deal with the diversion of the Red River also, which would appear very advantageous.

St. Day. This village should be overhauled as soon as possible, as its drains are old and its system faulty, especially with regard to an outfall, but all depends on the provision of a water supply which is extremely urgent.

Lanner. A scheme is now under consideration, and negotiations have taken place for securing land for outfall purposes.

Carharrack may be dealt with as an adjunct to the Lanner Scheme.

Tuckingmill. A crowded neighbourhood like this (for a Rural District), should have proper treatment at the outfall, when w.c.'s could be substituted for the old privies.

Generally speaking, there is a tendency in the more Rural parts of this district to put up all kinds of cheap flimsy and inadequate structures to serve as privies, which soak the ground and are a dangerous nuisance. An educated and enlightened people ought not to allow what instinct would hardly tolerate.

Nuisances The following were abated: Pools 7, drains 9, accumulations 10, overcrowding 8, animals, etc., 8.

River Pollution. The Red River by the outfall of the Redruth Urban Sewage Works; also the leat at Pool.

EAST KERRIER (R.D.).

Sewage Disposal, etc. During the year 5 new midden privies have been provided, 24 repaired, 12 have been converted into pail closets, 11 new pail closets have been provided, 17 new water closets, 12 ashpits converted to ashbins, and 12 new ashbins provided.

At Flushing, the Pail system, as recommended by the County Medical Officer, is fast replacing the deep insanitary privies, and a waggon, provided by the District Council, removes these and the dry ashbins twice a week. The M.O.H. reports that: "Even now the village must be minus tons of filth which formerly was allowed to rot and decompose

in its midst, to say nothing of the periodical floating out of the same by high spring tides, to settle once more in the soil when these subsided."

"But although the evil notoriety associated with the closet accommodation of Flushing is now happily materially lessened, there are other villages in the district which can show closets and pits not one whit better than some of those which once existed in Flushing, but which are now rendered so much more sanitary by being converted into pail closets. It often comes as a shock to one, after going through a house in which everything is sweet and as clean as a pin, to see the filthy and dilapidated closet in the yard behind. Owing, however, to these being in villages in which the houses are less crowded together than in Flushing, and not exposed to other conditions peculiar to that place, they do not constitute the same danger to health, though none the less objectionable otherwise. The success of the pail system in Flushing, worked as it is by this Council, makes one think that the same system, similarly worked, might with much advantage be extended to one or more of our important villages. At present in such villages, where no systematic attention is paid to the pits, some pits are not emptied more than twice a year. It is very evident that a properly worked pail system would at any rate do away with the enormous accumulations of filth, which in some cases stand month after month in the closest relations to inhabited houses. In many instances, where good-sized gardens exist, the pail contents could with advantage be disposed of in the soil.

The whole question of what to do to prevent the pollution of the foreshores of both Penryn and Falmouth harbours teems with difficulties, and, when tackled, necessitates concerted action by one and all; for it will be useless for one Council to take action without the others doing so at the same time, as a partial attempt would scarcely be better than none at all."

In each village in the district a man is appointed to scavenge regularly, and to disinfect when required. In Budock (Penryn) and in Flushing the scavenging is done by contract. For dealing with the sewage tanks at Chard and Glasney Terraces, in the parish of Budock, a sewage pump and a sewage cart have been acquired, which will prevent any recurrence of a condition of things which in the past created not only an objectionable nuisance, but constituted a danger to health.

Nuisances. Pools 1, animals 1, drains 17, accumulations 4, overcrowding 2, premises 38.

River Pollution. Budock River, by sewage, but at point of discharge into Penryn Harbour.

HELSTON (R.D.).

Sewage Disposal, etc. The sewer at the Lizard has been partly re-laid. Drainage is needed for Four Lanes.

The Council have now contracted for the regular removal of house refuse at Four Lanes and at Gwealangears, and continue the scavenging of Porthleven and Coverack.

Nuisances....Abated: Pools 5, animals 2, drains many, accumulations 4, overcrowding 3.

River Pollution. None of importance.

WEST PENWITH (R.D.).

Sewage Disposal, etc. In Marazion all houses are connected to the sewer, emptying into the sea below low water mark, with the exception of four, which are drained into cesspit being out of the reach of the sewer.

Gulval Cross slop water discharges into the Ponsandane stream.

Gulval Churchtown is piped about 650 yards into a trench, in a field away from the houses.

Lelant discharges by sewer into the Hayle Estuary, between high and low water mark.

St. Erth Churchtown.—One sewer empties into the Hayle River, and the other into a ditch in a field away from dwellings.

Longrock is drained for the most part with a land drain, and thence to the sea between high and low water mark, but one or two houses are drained into the Tremenheere brook. It is suggested that Ludgvan Urban Council should be approached to provide a proper sewer jointly with this Council.

Goldsithney drained into a sewer, emptying in a field some distance away.

Perranuthnoe and St. Buryan discharge on the land, where it is dealt with by the farmers, but there are a few houses at St. Buryan that have no drainage.

Porthcurno discharges into the sea.

Sennen Churchtown on the land, where it is satisfactorily dealt with.

Sennen Cove to outfalls, one discharging above high water mark, the other, which has been increased in length, between high and low water mark; also a number of slop drains discharging on the rocks.

Carbis Bay is unsatisfactory, and cannot be dealt with until the water scheme, now under consideration, is completed.

Drift and Zennor into a pit, thence to a stream; Morvah to a field; and Land's End over the cliff side.

House drainage exists in a small part of the District, principally in Marazion. Water closets exist in a few parts.

The usual methods of disposal are by privies, dry earth or pail closets. Improvements are needed at Carbis Bay and Sennen Cove.

Refuse is disposed of in ash pits, which are emptied by the householders, usually on their gardens. The dumping over the cliff at Sennen Cove and Marazion has very greatly decreased. The Council have erected Notice Boards at

Sennen Cove and Marazion, cautioning the people against depositing refuse over the cliff, which seem to have had the desired effect. A cart has been engaged at Marazion to collect refuse twice a week, the arrangements so far working fairly satisfactorily. Some such arrangement should be arranged at Sennen Cove, most particularly during the summer months.

Nuisances. Abated—Pools 6, drains 23, accumulations 16, and overcrowding 1.

River Pollution. None reported.

CALLINGTON (U.D.)

Sewage Disposal, etc. No structural changes or extension of the sewers were necessary.

The removal of House Refuse is done by contract, the scavenger fulfilling the various duties in a very satisfactory manner. The system consists of sweeping the streets on Tuesday, Thursday, and Saturday of each week, emptying the ashbins once a week, and collecting broken glass, earthenware, etc., once a month. A matter of importance is the adoption of a better ashbin, which should be an iron receptacle for dry ashes, and provided with a cover to exclude rain; very few of these are to be found, most are rickety, old wooden boxes, without covers, and many might rightly be regarded and treated as nuisances.

Nuisances. Abated—Pools 1, overcrowding 1, offensive accumulations 5, premises 5.

River Pollution. Nil.

STRATTON AND BUDE (U.D.).

Sewage Disposal, etc. The M.O.H. reports: "The sewage of Bude is excellent and well looked after, but the sewage of Stratton caused a nuisance, partly owing to the dry weather, and partly because it was not well attended to, but I am afraid the whole system is wrong, and it will

always be causing a nuisance. This fact I have reported for the past two or three years, but it has never been so bad as it was in the summer of this year, when it was polluting the River Strat to the extent that a great many fish died in the pools, and the cows from two dairies which help to supply Bude with milk were drinking the water. This may be a most serious thing, and I think steps should be taken to have the whole of the Stratton sewage put on a sanitary basis. It is a difficult matter, and the cost would be great, but I think the best plan is to connect the Stratton Sewage with the Bude one.

The sewage of some houses near Bude ought to be connected with the main sewerage scheme, and not allowed to have private cesspits. Particularly I would draw attention to the sewage of 'King's Hill,' 'Upton,' and 'Lynstone.'

Nuisances. Abated—Accumulations 9, overcrowding, 1.

River Pollution. At Stratton.

LAUNCESTON (BOROUGH).

Sewage Disposal, etc. The County Medical Officer and recently the L.G.B. Inspector have visited, and the former reported adversely on the present sewage disposal arrangements (see Annual Report, 1911).

Both the filter beds and the land treatment system at the sewage works require complete overhauling; in the former, amongst other things, the sprinkling (distributing) apparatus is inefficient, and in the latter there is too much stagnation, and the ground is not made use of to the best advantage, both contributing to the production of an unsatisfactory effluent.

House refuse is collected twice weekly by the Corporation. Suitable sanitary dustbins should be adopted.

Nuisances. Abated—Premises 34, animals, etc., 3, offensive accumulations 7, overcrowding 1.

River Pollution. Tamar alleged to be polluted. (Tamar Conservators).

LISKEARD (BOROUGH).

Sewage Disposal, etc. The town portion of the district is well sewered on the combined system, the sewage being conveyed either into water courses, or on to the land and so disposed of by a method of irrigation. The older sewers are constructed of brick, and the newer ones of socketed pipes. In the higher parts of the town the sewers are ventilated by upcast shafts. The sewers are self-cleansing, and have properly constructed manholes at points of change of direction. The rural parts of the district drain for the most part into cesspits. The water carriage system for the disposal of excrement has been adopted practically throughout the whole of the town.

The house refuse is collected weekly by the public scavengers, in movable receptacles, and the contents are removed by the contractor to agricultural land, and used as manure. This arrangement is reported by the M.O.H. to work quite satisfactorily, but better ashbins are needed, and suitable covers.

Nuisances. Abated—Animals 8, drains 36, pools 6, premises 35, accumulations 21, over-crowding 1.

River Pollution. The only streams in the district are the small ones which run down the valleys and join the Looe River, and into these streams a portion of the sewage of the town discharges.

TORPOINT (U.D.).

Sewage Disposal, etc. Most of the sewers were laid down in 1886, the system being extended from time to time to meet the growth of the town.

The drains have been re-laid during the year at the back of Wellington Street, Waterloo Street, and Cambridge Terrace; also a storm water overflow sewer was laid in Ferry Street. The outfall at Muxey Rock is unsatisfactory, and is to be re-laid.

Some few years ago the M.O.H. advised the erection of vent shafts on account of the complaints about the road man-hole covers. One only of these have been objected to, namely, the one near Greenbank, which was erected on account of the complaints of former residents of Rock House.

In consequence of a complaint by residents, which was sent to the Local Government Board, a special report was asked for. In reply to this report, no objection to the shaft was received by the Urban Council from the Local Government Board.

Scavenging. This is done by a contractor, who engages to visit each house twice weekly. The refuse is deposited in a tip within the Urban District, but at a sufficient distance from inhabited houses.

The substitution of movable ashbins with proper coverings for make-shift boxes or fixed receptacles is taking place slowly. The Urban Council do not at present act upon the advice of their Sanitary Officers and enforce it.

Nuisances. Abated—Animals 12, drains 46, accumulations 1, premises 64, pool 1.

Rivers and Streams. The drainage is discharged into the Hamoaze, but owing to the great width of this, and the proximity to the sea, no nuisance is created.

LOOE (U.D.).

Sewage Disposal, etc. The M.O.H. reports: "The water carriage system of drainage at intervals into the river is the best that can be devised, I think, in this town. Every house in the district, except two, which still retain a cesspool system, contrary to the ruling of your Authority, is drained in this way. The new buildings at Bridge End, West Looe, and in St. Martin's and Sandplace Roads, have been connected with new sewers. Your attention is again called to the want of sanitary accommodation in the Church Schools. These premises are used by the public for entertain-

ments, dancing classes, and particular classes. Unless this building is put into a sanitary condition, the use of these premises should be prohibited.

The arrangements for the removal of house refuse have been efficient. The collection has been regularly made twice weekly. As far as I know, the two cesspools before referred to have not been cleaned during the year. Arrangements for the regular cleaning of these should be made, if they are to be allowed to still exist.

River Pollution. None recorded.

SALTASH (BOROUGH).

Sewage Disposal, etc. Sewerage and drainage and Closet Accommodation are reported as adequate and efficient; ventilation of sewers is well provided for. There still remain a few houses which, owing to distance from the sewers, are dependent on earth closets or cesspits; no nuisance has arisen.

Removal of house refuse and scavenging are reported efficiently carried out by a contractor.

The Sanitary Inspection of the district is carried on continuously, some very minor defects having been found and remedied, on suggestion by the Sanitary Inspector.

Nuisances. Abated—Drains 80, accumulations 3, overcrowding 1, premises 70.

River Pollution. None, except the Tamar Estuary, which receives the sewage.

BODMIN (BOROUGH).

Sewage Disposal, etc. The M.O.H. reports: "The town is provided with an excellent sewerage system and drainage for surface water. The sewage and a considerable portion of the storm water is carried by gravitation to the Disposal Works at Scarlett's Well, which lies about half a mile to the N.W. of the town, where it is treated on the Septic Tank system with percolating filters and finally

by irrigation over the land. The effluent is well clarified and percolates into a natural stream, which forms a tributary to the River Camel, and no complaints have been received during the year as to any undue pollution of the stream or river.

The sewerage system has been extended during the year in both the east and west ends of the town; that in the latter has opened up a very large area for building purposes, and has dispensed with the temporary method of treating the sewage by irrigation over the land which at times became very objectionable, owing to its nearness to the town. Practically the whole of the town is now provided with a sewerage system, and only three cesspits are in use in the town.

Nuisances. Abated.—Animals 10, drains 4, accumulations 3, premises 16.

River Pollution. There is only one stream actually within the district, but two other streams form the boundary for a considerable distance, and no evidence of pollution has been traced in either stream.

LOSTWITHIEL (BOROUGH).

Sewage Disposal, etc. The drainage of the recently-built houses is reported as excellent, but not so with the older houses, which, in many cases, leave much to be desired.

The M.O.H. reports that a sewer in South Street is needed.

Nuisances. Abated.—Drains 4, houses 4.

River Pollution. Outfall of sewage from the town and Bridgend discharges into the river opposite the town.

WADEBRIDGE (U.D.).

Sewage Disposal, etc. The sewage empties into the River Camel and the Pormorla stream by numerous openings. The sewers opening into the Pormorla stream should be

carried lower down, or, better still, be made to empty into the Camel.

Nuisances. Abated.—Drains 20, accumulations 7.

River Pollution. The Camel, by the district's sewage.

TRURO (CITY).

Sewage Disposal, etc. The M.O.H. reports: "The whole of the sewerage and storm water is conveyed by sewers to the Rivers Allen and Kenwyn, where it is discharged at various parts in a crude state. The Sanitary Committee will at their next meeting consider alternative schemes for the disposal of the sewage of the city, prepared by the City Surveyor on the lines mentioned in my report of last year. During the year the Council decided to extend their main sewer in Chapel Hill to connect with a combined drain laid at the expense of the owners of 17 houses in Treyew Road to receive the drainage of these houses. Each house was formerly drained into a cesspit, and this work, which is now nearing completion, should prove of great advantage. The owner of one house refused to contribute toward the cost of the work, and these premises will continue to drain as before.

Special attention has been given to the condition of house drains and w.c. accommodation during the year, and any defects found have been remedied. Improvements in the way of providing flushing cisterns and water supply to w.c.'s where insanitary conditions exist, and of ensuring that drain ends are properly trapped, are constantly being effected.

Collection and Disposal of Refuse. A daily collection of refuse has been made throughout the year in the main streets, and the bi-weekly collection at every house in the city has been continued, and this was undoubtedly a step in the right direction by the Council. Gradually also ashpits, which often contain several week's accumulation of refuse, are being replaced by covered ashbins regularly collected

by the Council's workmen (it would be a good thing if this were universally adopted). The main streets are swept daily, the others twice a week, and the scavenging and flushing of sewers are satisfactorily carried out. The refuse is deposited on land reclaimed from the foreshore a mile outside the city. Twenty-three acres of foreshore have been purchased for this purpose, which, when it is filled and settled down to the right level is covered with soil and being converted into a public park.

Nuisances. Abated.—Animals 10, drains 58, accumulations 5, over-crowding 6, premises 150.

River Pollution. The Allen and Kenwyn (tidal), by the City sewage, but it is most satisfactory to note that the City Council mean to carry to a successful issue their important scheme for treating the sewage, thus supplying a solution to a difficulty which has hampered the City for a very considerable time.

PENRYN (BOROUGH).

Sewage Disposal, etc. No special drainage work has been carried out during the year under review. The sewers in Commercial Road and in Summercourt, the one on the north and the other on the south are reported to have insufficient fall, and occasionally silt up. The sewers are ventilated by shafts. Main outfall at the quay, where crude sewage collects on the foreshore. The Budock river sewer from the South side discharges also on the foreshore. Mussels taken from this locality have been in the past associated with outbreaks of Enteric Fever, and oyster-layings beyond may still be in danger.

Nuisances. Abated—Pools 2, drains 32, accumulations 3, over-crowding 1, premises 58.

River Pollution. Nil reported, except foreshore mentioned above.

FALMOUTH (BOROUGH).

Sewage Disposal, etc. The new Gyllyngvase outfall is now working well, practically the whole of the sludge being dissolved by the septic action in the tanks. Sixty-five houses have been added to this system during the past year. There are still many complaints by the public in regard to the outfalls into the harbour. The foreshores were periodically scavenged and a total of 280 tons of sludge removed by barge.

The main sewers were flushed during the summer months.

Sewerage development is still needed on the harbour side.

Nuisances. Abated.—Animals 2, accumulations 30, drains, etc., 140.

River Pollution. Nil.

HELSTON (BOROUGH).

Sewage Disposal, etc. The sewers receive the discharges of about 40 w.c.'s, and also the effluents from the Workhouse and County School plants. The w.c.'s of about 25 houses discharge into cesspools. There are two Public Urinals and one Public W.C., all kept clean and in good condition. Dr. Wheaton, of the Local Government Board, inspected the Sanitary Condition of the Borough in the early summer; as a result the Town Council have been instructed to, without any delay, consider the question of providing a proper system of Sewage Disposal. As in Truro City, so in Helston, there are channels of running water in the street gutters.

Number of fixed ash pits in combination with privies 130

Number of fixed ash pits not in combination with
privies 15

Number of moveable receptacles of galvanised iron
with proper covers 20

Number moveable receptacles 275

(Open top oval galvanized Sanitary Pails).

Scavenging is performed by the Council's own men and by Contractor daily (except Sundays). The refuse is collected in a covered dust cart.

The Council undertakes the emptying of cesspools, which is done as often as required.

The refuse is sorted at the dépôt, combustible material being burnt.

All the refuse is conveyed in the Council's covered cart to the dépôt, which is about a mile from the town and outside the Borough.

Above two and a half miles above Helston, a "leet" is taken off from the Cober, and runs to the Eastern end of the town, where it is divided into different channels for supplying the "kennels" or paved water courses which run along each side of the main streets of the town. These streams catch a great deal of dust, and generally contribute to the cleanliness of the streets. For a long time now no sewage has been allowed to run into these channels.

Nuisances. Abated, houses 20, pools 2, drains 10, accumulations 26.

River Pollution. Owing to the formation of a Company for working the slimes and alluvial deposits in the Loe Valley below the Porthleven Road, a large plant has been erected on the Castle Wary side of the Valley, and a great deal of labour is being employed. The valley above Helston is now being worked for the same purpose.

ST. IVES (BOROUGH).

Sewage Disposal, etc. M.O.H. reports that no developments took place during the year, that none are needed, and that there is no inadequacy of sewage disposal and no complaints. Plans approved and powers obtained from the Local Government Board for extending sewers, etc., at an estimated cost of £1,400. Refuse still thrown into the streams, a fact which is under consideration.

House refuse is disposed of on tips at an annual cost of £200.

100 new w.c.'s were erected to old houses.

Nuisances. Abated—Premises 22, pools, etc., 3, drains 14, accumulations 8.

River Pollution. None reported, in addition to the Stennack stream, which has always been polluted.

PENZANCE (BOROUGH).

Sewage Disposal, etc. The sewerage of the Borough is on the water-carriage system to the sea, where the contents of the sewers are discharged; the drains are in good condition, and the sewers well ventilated. House drains are in good order. In all new houses the drains are tested before occupation of the premises.

In cases of suspected drains these are tested by means of the smoke test.

The main sewers are extended to meet the requirements of new streets and buildings.

Sixty-seven house drains were repaired during the year.

All houses are supplied by the Corporation with covered receptacles for the removal and disposal of house refuse, and refuse is removed under contract twice a week in the summer, and three times a fortnight in the winter months, in covered carts; Corporation employees assist in the removal.

Nuisances. Abated—Premises 326, animals 3, drains 67, overcrowding 8, others 100.

River Pollution. Nil.

PADSTOW (U.D.)

Sewage Disposal, etc. Into Fairway of the River Camel.

House refuse removed daily by scavenger (contract) in carts to fields in the Rural Area.

Nuisances. All Abated, number not stated.

River Pollution. River Camel as above.

NEWQUAY (U.D.)

The M.O.H. reports on the new drainage scheme :—

“ The work in connection with this Scheme, which was commenced in March, 1911, has been steadily proceeded with. The amount expended during the year has been £1,342, bringing the total expenditure on the scheme to the end of the year 1913, to £9,115. The first contract consisting of 206 yards of sewer laid in tunnel under the Beacon, is complete, and has been in use during the year.

The second contract, consisting of about $1\frac{1}{2}$ miles of pipe sewer of 15in. to 21in. diameter, together with the necessary manholes and flushing stations, is also complete and in use.

The third contract, which consists of about $\frac{3}{4}$ mile of 6ft. x 4ft. sewer laid in tunnel, is making steady progress, about 157 yards of tunnelling remaining unfinished.

It has been found necessary to extend the time limit for the completion of the works included in the contract on account of the hardness of the rock met with, which has been chiefly of an elvan nature, with heavy veining of felspar. The presence of water has also hindered the progress of the work to some extent.

Whilst the hardness of the ground met with has considerably retarded the completion of the works, it is in all respects conducive to the success of the scheme, and also to the economy with which the work is being carried out.

Nuisances. Abated—Animals 2, drains 17, smoke 3, accumulations 37, overcrowding 2, premises 66, others 5.

River Pollution. The Gannel by drainage : now being remedied.

ST. AUSTELL (U.D.)

Sewage Disposal, etc. The main drainage scheme for the western part of the town, the greater part of which was done in 1912, was completed during the year and the whole system is working well.

The whole of house refuse has continued to be carted to the depôt at Menagwins, off the Pentewan Road. The work is carried on by the Council's carts and employés.

The total number of loads hauled to the depôt during the year was approximately 2,700.

Nuisances. Abated—Drains 28, accumulations 12, overcrowding 2, premises 111, others 31.

River Pollution. Sewage into the White (Clay) River.

REDRUTH (U.D.)

Sewage Disposal, etc. Excrement disposal by drains to Sewage Farm at Tolgus. During 1913 no complaint of any nuisance.

The Redruth Urban and Rural Councils have formed a Joint Committee to consider the drainage disposal and take it to the sea.

The Council carry out the scavenging.

Number of houses	...	...	2,765
Number of fresh and waste water closets			1,255
Number of privies with fixed receptacles			1,578
Houses supplied with water	...		2,164

Number of conversions from privies to water closets, during the years 1908, 1909, 1910, 1911, 1912, and 1913—32, 16, 23, 20, 23, 38.

The Council permit the erection of Sanitary conveniences other than Water Closets in new buildings in the outlying districts.

Nuisances. No. report.

River Pollution. Nil.

CAMBORNE (U.D.)

Sewage Disposal, etc. The drains of 18 houses have been connected with the main sewers during the year, and the drains of 17 others have been repaired and put in order, and 355 choked sewers or drains have been cleared. The main drains have been periodically flushed, and this is done mainly by means of automatic flushing tanks, they have also been occasionally disinfected with Izal. Unfortunately no further progress has been made towards the drainage of Beacon, Wheal Gerry, Hughville Street, North Roskear, and portions of Roskear Row, Mount Pleasant Road and Pengegon, and these parts of the district are in great need of efficient drainage.

The midden pits and ash-pits in the town itself, and also at Tuckingmill, Pengegon, Wheal Gerry, Beacon, Troon, Knave-go-by and Treswithian have been systematically attended to by the Authority. Five scavenging carts are permanently employed, and 7,128 loads of manure and refuse have been removed during the year from the vicinity of dwellings. There are 4,098 houses, 2,416 of which are provided with middens with fixed receptacles, 90 with middens with movable receptacles, and the remainder with water closets. During the year eight middens have been converted into water closets, and 19 new water closets have been provided for private dwellings. Six middens and four water closets have been repaired, and eight new middens have been provided, and these latter have only been sanctioned in those parts of the district where there is no system of drainage or no water available for flushing purposes. Sixteen middens and ash-pits have been reconstructed and covered. Unfortunately there still exist many large and uncovered midden pits in the district, and the remedying of this nuisance should be systematically carried out, and the whole of the middens reconstructed in strict accordance with the bye-laws.

Application has been made to the Local Government Board for sanction to borrow the sum of £25,000 for works

of sewage in the district. A public enquiry was held by one of their Inspectors in April last, and later the sanction of the Local Government Board was granted. Application is now before the Public Works Loan Board to make the necessary advance of a loan.

Nuisances. Abated.—Animals 1, drains 397, overcrowding 8, premises 14, pool 1, accumulations 1.

River Pollution. Nil.

PHILLACK (U.D.)

Sewage Disposal, etc. Parts of the district have been drained, and arrangements are being made to drain Clifton Terrace, Bodriggy Villas, Phillack, and Under Cliff.

The scavenging of the district is reported by the M.O.H. as satisfactory, the method of disposal being by "tips," and by being taken over by farmers; removal, twice a week.

Nuisances. Abated.—Pools 3, drains 12, overcrowding 4.

River Pollution. Nil.

HAYLE (U.D.)

Sewage Disposal, etc. Mainly W.C.'s and cisterns; few middens and earth closets, which are gradually being converted to W.C.'s. Four new W.C.'s have been provided during the year. The Sanitary Inspector supervises the scavenging, which takes place twice a week.

Nuisances. Abated—Drains 9, overcrowding 1.

River Pollution. Nil.

MADRON (U.D.)

Sewage Disposal, etc. The Churchtown system is reported satisfactory, as it is connected with the Heamoor system and thence to the sea. The deficient water supply precludes the installation of a W.C. system generally; pails

and earth privies are mostly in use. Slop-closets are recommended by the M.O.H., but these have long since passed into complete disfavour, as they are liable to become quite insanitary on account of the concentration of the sewage and the bad effect of soap waste. The Heamoor main sewer discharges into the sea at Chyandour; all houses at Heamoor have W.C. accommodation. The Sewerage of Tolcarne is still a matter of some urgency. A joint scheme with the Paul Urban District Council is recommended. Scavenging of Madron and Heamoor is carried out weekly, and Tolcarne and Wherrytown twice a week, in covered carts. The Council have also this year undertaken the scavenging of Chyandour.

Nuisances. Abated.—Pools 8, drains 8, accumulations 1, premises 18, animals, etc., 18.

River Pollution. Four sewers open into the Tolcarne River near its mouth, which assist in the causation of the nuisance so evident in the summer.

PAUL (U.D.).

Sewage Disposal, etc. At Street-an-nowan (Eastern part of Newlyn) the main sewer discharges outside the harbour, and an additional sewer has been laid at the foot of Paul Hill. The Sanatogen sewer is now carried to the sea, receiving other connections. More facilities are required for dealing with storm water, as the lower houses on the Strand are occasionally flooded during high tides. The state of affairs at Newlyn is indescribably bad, and the nuisances of the very worst kind. Very few houses have closets at Mousehole and Newlyn. A drainage system for Newlyn Town ought to be the most urgent subject to occupy the minds of the District Council. The dumping of excreta and house refuse on the foreshore at the South of Newlyn must cease. A drainage system is required at Sheffield.

Nuisances. Abated.—Drains 30, overcrowding 3, premises 42.

River Pollution. Tolcarne and Mousehole Streams.

LUDGVAN (U.D.).

Sewage Disposal, etc. The district is not sewered, and house refuse is disposed of, mixed with manure and seaweed, on the soil; nothing in the way of scavenging is undertaken by the District Council; movable ashbins and a weekly collection by the Local Authority are certainly required. At Long Rock a water carriage system is needed.

Nuisances. Abated.—Pools 4, premises 23, accumulations 1, overcrowding 1, others 14.

River Pollution. Nil reported.

ST. JUST (U.D.).

Sewage Disposal, etc. See special report by the County Medical Officer of Health, reprinted under "Infectious Diseases."

The system is by bolts, and includes in it a large septic tank; it is quite inadequate, but nothing can be satisfactorily done until the question of a proper water supply has been settled. Many nuisances occur on account of defective drainage.

Nuisances. Abated.—Pools 4, drains 12, premises 33.

River Pollution. The stream in Bosorne Valley is polluted by sewage from the south side of the town; this has given good reason for complaints by the people at Bosorne; the stream which flows through Nancherrow is also reported to be polluted, and a notice board should be erected by the District Council warning people against the throwing of refuse into the river.

Part IX.

ADMINISTRATION OF THE MIDWIVES' ACT, 1902.

Inspector's Report for the Year 1913.

The number of Midwives who notified their intention to practise during 1913 was 197.

These Midwives may be grouped into the following classes:—

I. Trained Midwives.

(a) With Midwifery training only	10
(b) With less than one year's district training including Midwifery (Holt Ockley system)	30
(c) With one year's district training, including Midwifery " Village Nurses "	75
(d) With 3 years' Hospital Certificate, and Midwifery training	32
(e) With 3 years' Certificate from a recognised Training School, 6 months' special district training, and 4 months' Midwifery " Queen's Nurses "	13
	<hr/> 160

II. Bona Fide (i.e., those who, though unqualified, were practising prior to the passing of the Act)	37
	<hr/> 197

Trained Midwives.

These form two groups :—

I. Midwives working under Committees,	
(a) Under County Nursing Association	116
(b) Under independent Committees	33
II. Midwives working on own account	11
	<hr/> 160

Of the 116 who notified and are under the County Nursing Association, 40 resigned. Of these 40, 13 were employed temporarily for holiday work, 7 left for posts of promotion, 6 to be married, 2 for hospital training, 2 died, 1 for health reasons, 1 to go abroad, and 8 for other appointments.

Of the 33 working under independent Committees, 14 left the county, leaving about 19 usually at work.

The Midwives working under independent Committees attended 134 cases as midwives, and 95 as Maternity Nurses.

Of the 11 Midwives working on their own account, 1 died, 1 left the county, leaving 9 at work.

The following table shows the Midwifery and Monthly Cases of the Midwives working on their own account :—

	Monthly.	Midwifery.
2 had no cases	—	—
1 had Monthly Cases only	2	—
1 had over 60 cases	18	45
2 had over 40 cases	21	63
3 had over 20 cases	43	59
2 had under 20 cases	6	15
—	—	—
Total 11	90	182

Bona-Fide Midwives.

Of the 37 bona-fide midwives who notified 1 died during the year, leaving 36 at work.

Analysis of Cases of Bona-Fide Midwives.

	Monthly.	Midwifery.
1 had over 100 cases	108	10
1 had over 60 cases	61	—
6 had over 20 cases	166	22
26 had under 20 cases ...	167	91
3 had no cases	—	—
—	—	—
37	502	123

There is a decrease of 12 Bona-Fide Midwives. Of the 49 who notified last year 12 gave up work on account of age and failing health.

Midwives between ages 40 and 60	...	...	12
Midwives between ages 60 and 70	...	...	14
Midwives over 70 years of age	...	...	10
Midwives over 80 years of age	...	...	1

No prosecution of uncertified women practising as Midwives have been undertaken during the year, although it is evident there are a good many such persons; a number of cases have been investigated. The difficulty is to obtain proof that they are attending women in child-birth "habitually and for gain" other than under the direction of a qualified medical practitioner.

Summary of Work Done by all the Midwives During the Year.

	Trained.	Bona-fide.	Total.
Cases attended as midwives	1465	379	1844
Cases attended as maternity nurses	1029	123	1152
Doctors sent for on account of mother	136	13	149
Doctors sent for on account of child	49	5	54
Still births as midwives	46	12	58
Still births as maternity nurse	79	9	88
Deaths of mothers	5	—	5
Deaths of infants	62	8	70
" Record of having laid out the dead "			
(a) own patient	75	3	78
(b) in emergency	36	22	58

There is an increase in the total number of cases taken by all Midwives; in some parts of the county there has been a marked decrease in Midwifery and a marked increase in Monthly Nursing. This was caused by a misunderstanding at the beginning of the year, the people believed they were not entitled to the "Maternity Benefit" unless a Doctor was engaged.

During the year 564 inspections were made to trained Midwives, and 146 to Bona-Fide, representing an average of from 4 to 5 visits to each trained and 4 visits to each Bona-Fide Midwife at work in this county, reckoning 126 Trained and 36 Bona-Fide usually at work.

The number of Certified Midwives for the years 1912-1913 is as follows :—

	1912.		1913.
Trained	137	.....	160
Bona-Fide	49	.....	37
	<hr/>		<hr/>
*Total	186	.....	197

This table shows an increase in the trained and a considerable diminution in the Bona-Fide Midwives.

A trained Midwife is now at work at Helston, also one in Redruth. On account of home duties, the latter is unable to manage all the Maternity work of the town, which still necessitates the employment of the "handy woman."

The regulations as to keeping pulse and temperature records, which came into force July, 1911, by directing attention to dangerous symptoms, should have resulted in a medical man being more frequently sent for by the Bona-Fide Midwives. But there is no evidence that this has been the case. There has been general carelessness in sending in the prescribed form "of sending for Medical Help." The early return of this form has been of great value, as it has made it possible for prompt attention and instruction to be given when disinfection, etc., was necessary.

There are still large areas in the County where no Midwife, either trained or Bona-Fide, is available for women who need one, and as the Bona-Fide Midwives die or cease practising, this difficulty will be increased unless Nursing Associations can be started employing "Nurse Midwives."

The lectures given under the Midwives' Association have been well attended in the Eastern Division of the County;

many more trained than Bona-Fide have attended. The lectures would be of more value if simple ones were given to the Bona-Fide and post graduate ones to the trained midwives.

The Camelford and Delabole Midwives only notified their intention to practise at the beginning of this year, on being asked following a visit to this district. Up to this date no notification has been received from any trained Midwife from the town of Launceston.

(Signed) C. A. TAIT MCKAY,
Inspector of Midwives.

Part X.

THE MILK SUPPLY.

From the reports one must conclude that, speaking generally, the cowsheds of Cornwall are not up to the standard attained in many counties ; it must be remembered, however, that the climate of Cornwall is so mild that the animals do not require so much housing as in other places. The question of air-space in cowsheds does not apply to cowsheds whose cows are habitually grazed during the major part of the year, and when not being grazed are habitually turned out during a portion of each day. See Circular Letter of Local Government Board, March 11th, 1899. Of much more importance, then, is the matter of cleanliness as compared with the question of air-space ; there is much to be desired in this respect, particularly with respect to farm premises, disposal of manure, drainage, etc. These items are of importance if we are to make the Milk Supply safe from dirt and contamination ; fortunately on account of the outdoor life of Cornish cattle, the county is comparatively free from Bovine Tuberculosis. Cases of this disease do occur, and the risk of tuberculous meat becoming exposed for sale is considerable, as there is no routine meat inspection carried out ; to bring in the Medical Officer of Health only when meat already exposed for sale is inspected is entirely insufficient. For this, and other important reasons, the County Council would be well advised to appoint a County Sanitary Inspector with a meat inspector's certificate. Such an officer would be invaluable, not only for securing the proper carrying out of all that is concerned in the Orders, but would be able to give his attention to general sanitary matters.

From the reports of the Medical Officers of Health, it is obvious that many of the Local Authorities are not complying with the Dairies, Cowsheds, and Milkshops

Orders ; in certain districts, dairies, etc., are reported as not registered.

The Dairies, Cowsheds, and Milkshops Order of 1885 was made by the Privy Council ; the D.C. and M. Amendment Order of 1886 substituted the Local Government Board for the Privy Council ; the D.C. and M. Order of 1899 amended the two previous Orders by including Tuberculosis in the infective diseases, on the occurrence of which milk should not be sold under S. 15.

The three Orders throw upon every Sanitary Authority the supervision of the milk trade in their district, and the carrying out of Regulations prescribed by the Orders ; any Sanitary Authority may assume further powers by making Regulations under S. 13, having the force of bye-laws.

Summary of the Chief Provisions of the Orders :

Section 6. (1) It shall not be lawful for any person to carry on . . . the trade of cowkeeper, dairyman, or purveyor of milk unless he is registered as below. (2) Every S.A. shall keep a register of such persons and shall from time to time revise and correct the register. (3) The S.A. shall register every such person, but registration shall not be deemed to authorise such person to occupy as a dairy or cowshed any particular building or preclude proceedings. (4) The S.A. shall from time to time give public notice of registration being required, and of the mode of registration. (5) A person who carries on the trade of cowkeeper or dairyman for the purpose only of making or selling butter or cheese, or both, and who is not also a purveyor of milk, need not be registered. (6) A person who sells milk of his own cows in small quantities to his workmen or neighbours for their accommodation, need not, by reason thereof, be registered.

Section 7. (1) It shall not be lawful to begin to occupy as a dairy or cowshed any building not so occupied at the commencement of this Order until provision is made, to the reasonable satisfaction of the S.A., for the lighting and

ventilation, including air-space, and the cleansing, drainage, and water supply ; or (2) without first giving one month's notice in writing to the S.A.

Section 8. It shall not be lawful to occupy as a dairy or cowshed any building—whether so occupied at the commencement of this Order or not—if . . . the lighting and ventilation, including air-space, and the cleansing, drainage, and water supply thereof, are not such as are necessary or proper (a) for the health and good condition of the cattle therein ; (b) for the cleanliness of milk-vessels used therein for containing milk for sale ; and (c) for the protection of the milk therein against infection or contamination.

Section 9. It shall not be lawful for any . . . cowkeeper, or dairyman, or purveyor of milk, or occupier of a milkshop (a) to allow any person suffering from a dangerous infectious disorder, or having recently been in contact with a person so suffering, to milk cows or to handle vessels used for containing milk for sale, or in any way to take part or assist in the conduct of the trade . . . so far as regards the production, distribution, or storage of milk ; or (b) if himself so suffering, or having recently been in contact as aforesaid, to milk cows or handle vessels containing milk for sale, or in any way to take part in the conduct of his trade as far as regards the production, distribution, or storage of milk ; until, in each case all danger therefrom of the communication of infection to the milk or its contamination has ceased.

Section 10. It shall not be lawful for any . . . cowkeeper, dairyman, or purveyor of milk, or . . . occupier of a milk-store or milkshop, after the receipt of notice of not less than one month from the Local Authority calling attention to the provisions of this article, to permit any water closet, earth closet, privy, cesspool, or urinal, to be within, communicate directly with, or ventilate into, any dairy or any room used as a milk-store or milkshop.

Section 11. It shall not be lawful for any cowkeeper, or dairyman, or purveyor of milk, or occupier of a milk-store or milkshop, to use a milk-store or milkshop in his occupation, or permit the same to be used, as a sleeping apartment, or for any purpose incompatible with the proper preservation of the cleanliness of the milk-store or milkshop and of the milk vessels and milk therein, or in any manner likely to cause contamination of the milk therein.

Section 12. It shall not be lawful for any cowkeeper, or dairyman, or purveyor of milk to keep any swine in any building used by him for keeping cows, or in any milk-store or other place used by him for keeping milk for sale.

Section 13. Any S.A. may make regulations (a) for the inspection of cattle in dairies ; (b) for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cowsheds ; (c) for securing the cleanliness of milk-stores, milkshops, and milk vessels used for containing milk for sale ; and (d) for prescribing precautions to be taken by purveyors of milk, and persons selling milk by retail, against infection or contamination.

Section 14. The following provisions shall apply to regulations made by any S.A. under this Order : (1) Every regulation shall be published by advertisement in a newspaper circulating in the district ; (2) The S.A. shall send to the L.G.B. a copy of every regulation at least a month before the date of operation ; (3) The L.G.B. may at any time revoke any regulation, if satisfied, on inquiry, that it is too restrictive, or otherwise objectionable.

Section 15. The milk of the cow suffering from cattle-plague, pleuro-pneumonia, or foot-and-mouth disease (a) shall not be mixed with other milk ; (b) shall not be sold or used for human food ; and (c) shall not be sold or used for food of animals unless it has been boiled. Tuberculosis is now included in this section under the D.C. and M.O. of 1899.

STRATTON (R.D.).

The dairies in this District are still unregistered. I hope this will soon be done. They are as a rule well kept. Some of the cowsheds are not kept as clean as they might be. More attention should be paid to the cleanliness of the hands of the milker and to the udders of the cow.

Six dairymen in the district.

There is no veterinary inspection of cows for the detection of Tuberculosis.

Twenty-four inspections made.

Regulations under the D.C. and M.O. adopted.

Slight deficiency reported in November and December.

LAUNCESTON (R.D.).

The milk sold in the District is of good quality, but it is often difficult to obtain, except in small quantity, for nearly all the milk produced is reserved for butter-making. As regards the protection of the milk from pollution during the process of milking, the M.O.H. thinks there is often serious defect, and great improvement would result from greater attention to the cleanness of the animals before they are milked, and the cleanliness and better construction of cowsheds.

Regulations have been adopted under the D.C. and M. Orders, but there seem to be no dairymen in the District.

CALSTOCK (R.D.).

Regulations adopted	...	...	...	Yes.
Milk Sellers in District	...	...	...	11.
Registered	...	...	...	11.
Inspections	...	...	...	35.
Premises requiring cleaning	...	...	...	1.

BOSCASTLE (R.D.).

No registered dairymen; many private sellers in small quantity. No complaints. No Regulations have been adopted under the D.C. and M. Orders. The report should

contain information as to the condition of cowsheds, etc., *re* cleanliness.

CAMELFORD (R.D.).

The M.O.H. reports that no Regulations have been adopted under the D.C. and M. Orders, that the milk supply is sufficient, and none has been under suspicion; the same remarks, however, apply here as have been made with regard to the Camelford sub-district, Boscastle. No milk is reported to be supplied to outside districts.

LISKEARD (R.D.).

100 dairymen in the district. Their premises have been inspected. Regulations have been adopted; there were 12 contraventions found. 25 premises were found to require cleansing.

ST. GERMANS (R.D.).

Dairies and Cowsheds, to the number of 90, as registered, have been inspected, and, with four exceptions, found satisfactory. The four defects were corrected. No samples of milk were taken for the detection of tubercle.

Regulations have been adopted under the D.C. and M. Order, and two sets of premises have been structurally altered.

BODMIN (R.D.).

Cowsheds, etc. (28), regularly inspected.

ST. COLUMB MAJOR (R.D.).

Regulations adopted under the D.C. and M. Orders. 38 registered dairymen. Premises visited quarterly.

ST. AUSTELL (R.D.).

D.C. and M. Regulations adopted. Generally, the condition of the Cowhouses and Dairies is satisfactory; but a few gross offences have been noted.

There are 109 registered dairymen.

Number of inspections of their premises, 38.

Number of inspections during milking time, 17.

Number of contraventions of Regulations found, 22.

Number of premises found to require:

(a) Cleansing, 15. All were remedied.

(b) Structural improvements, 7. Of these, 6 were improved.

TRURO (R.D.)

30 registered dairymen in the district. 75 inspections of their premises made, of which 30 were during milking time. 4 premises required cleansing, all of which have been carried out. Regulations adopted.

REDRUTH (R.D.)

Regulations under D.C. and M. Order adopted. There are 150 dairymen in the district, 117 being registered. Their premises have been inspected, 36 were found to require cleansing, and 86 needed some structural improvements. The M.O.H. reports that: "Both as regards storage of milk and housing of cattle, existing conditions are often not up to the standard which will have to be insisted upon. In particular this is the case as regards cowsheds, which are, in various instances, badly lit and imperfectly ventilated. The yards, also, are often not properly paved, and littered with objectionable rubbish."

EAST KERRIER (R.D.)

Regulations adopted. No Veterinary Inspector has been appointed, though on any doubtful point one would be called in, if required. There are 91 dairymen, milk-sellers, etc., all of whom are registered; 182 inspections of their premises, and 19 inspections during milking time, have been made. All the premises are clean and well kept.

HELSTON (R.D.)

63 registered dairymen. Premises inspected. There are still unregistered persons supplying milk in the district. Regulations adopted. Several premises have been structurally improved.

WEST PENWITH (R.D.)

Regulations adopted. 80 registered dairymen in the district. Premises inspected, 3 were found to require cleansing, and 3 structural improvements. All were remedied.

CALLINGTON (U.D.)

6 registered dairymen in the district. All premises inspected. Regulations adopted. Three premises needed cleansing, and one structural improvement but none were remedied.

STRATTON & BUDE (U.D.)

Regulations under the D.C. and M. Order have not been adopted. There are 19 dairymen in the district, and 38 inspections were made.

LAUNCESTON (BOROUGH)

23 registered dairymen in the district. Their premises were inspected 4 times during the year, 3 during milking time. 22 premises are registered. Regulations adopted.

LISKEARD (BOROUGH)

Regulations adopted. 14 dairymen in the district. All premises registered. 17 inspections were made.

TORPOINT (U.D.)

8 registered dairymen in the district. Frequent inspections were made of premises. Regulations have been adopted.

LOOE (U.D.)

Premises (15, registered) inspected by M.O.H. Regulations adopted.

SALTASH (BOROUGH)

The M.O.H. reports the milk supply as excellent, coming from the neighbouring farms, which have all been brought up to modern requirements under the action of the St. Germans District Sanitary Authority. There are no dairies nor cowsheds in the town. A Veterinary Inspector has been appointed.

The 11 purveyors of milk are registered, and the milkshops are subject to quarterly inspections, during which they have all been found clean and in good sanitary condition.

Bacteriological examinations of samples of milk taken at irregular intervals from the carts on their rounds have been, without exception, quite satisfactory.

BODMIN (BOROUGH.)

No Regulations have been adopted under the D.C. and M. Order. Out of 26 dairymen in the district, 18 are registered. 36 inspections were made.

LOSTWITHIEL (BOROUGH).

9 registered dairymen in the district; 16 inspections were made of their premises, 12 being during milking time. Regulations have been adopted.

WADEBRIDGE (U.D.)

13 dairymen in the district. Premises (10 registered) inspected quarterly. Regulations adopted.

TRURO CITY.

All the dairies, cowsheds, and milkshops in the area have been regularly inspected, and in the opinion of the M.O.H. their condition is satisfactory. In one or two cases certain requirements were asked for.

There are 30 registered dairymen in the district, and 24 dairies; 16 cowsheds and 5 milkshops are registered. 40 inspections of premises were made, and 2 contraventions of the Regulations found.

PENRYN (BOROUGH).

Regulations adopted. No Veterinary Inspector has been appointed, though one would, if required, be called in. There are 7 dairymen, milk-sellers, etc., all of whom are registered. 28 inspections of their premises were made. There are 10 cowsheds, and of these, 43 inspections were made, and 8 inspections during milking time. There were 2 contraventions of the Regulations. 2 of the premises were found to require either cleansing or sanitary improvements, and in all cases the requirements were carried out.

FALMOUTH (BOROUGH).

54 inspections were made of the premises of the 34 registered dairymen in the district. Only 7 cowsheds remain in the Borough, and 12 inspections were made of these. Regulations have been adopted.

HELSTON (BOROUGH).

14 dairymen in the district are registered. All the premises are inspected quarterly. Regulations adopted.

ST. IVES (BOROUGH).

The M.O.H. reports that all the premises are regularly and frequently visited, and generally found clean, and lime-washed frequently. Some of the milkshops are being improved to meet modern requirements. Regulations adopted.

There are 11 registered dairymen. An attempt is being made to improve the general condition of the cowsheds.

PENZANCE (BOROUGH).

Regulations have been adopted. A Veterinary Inspector has been appointed. The milkshops (25 in number) are registered, regularly inspected, and satisfactorily kept.

There are 65 registered milk sellers, exclusive of those employed in milk shops.

52 inspections of the premises were made during the year.

There are two cow-sheds in the Borough ; 9 visits were paid during milking time.

24 samples of milk were taken during the year and submitted to the Borough Analyst ; no adulteration was found.

PADSTOW (U.D.)

11 dairymen in the district (none registered.) Their premises have been inspected. Regulations adopted.

NEWQUAY (U.D.)

Regulations adopted. 21 registered dairymen in district, 4 having dairies within district ; 43 visits made to premises, 15 during milking time. 5 of the premises were found to require cleansing, and all were remedied.

ST. AUSTELL (U.D.)

15 registered dairymen, 12 inspections made. Regulations adopted.

REDRUTH (U.D.)

Regulations have been adopted. All dairies registered and found clean and conforming to Bye-laws.

CAMBORNE (U.D.)

There are 45 registered dairies, etc., in the district, and all of these have been inspected at least twice during the year. Regulations adopted.

PHILLACK (U.D.)

Regulations adopted. 19 dairymen in the district, all registered. Frequent inspections have been made of their premises. 7 required cleansing, and 4 structural or sanitary improvements. All of these requirements have been carried out.

HAYLE (U.D.)

4 dairies registered, all frequently inspected. Regulations adopted.

MADRON (U.D.)

There are 17 dairymen (milk sellers) in the district, and 39 butter makers. These have been regularly inspected; in 3 cases the floors were found defective and were put in order. Regulations adopted.

PAUL (U.D.)

46 registered dairymen and 8 butter makers in the district. Their premises have been inspected; 1 was found to require cleansing. This has been done. Regulations have been adopted.

LUDGVAN (U.D.)

Regulations adopted. 25 inspections were made of the premises of the 13 milk sellers (6 registered).

ST. JUST (U.D.)

No Regulations have been adopted under the D.C. and M. Order. The M.O.H. again recommends that these Regulations should be adopted. There are 7 dairymen in the district (none registered), and 10 inspections were made of their premises during the year.

Part XI.

SALE OF FOOD AND DRUGS ACT, 1875 TO 1907.

Abstract of Work in the Administrative County of Cornwall for the Year 1913

Name of Article.	Number of Samples taken.	Genu- ine.	Adul- terated.	Remarks.
Milk	59	53	6	Several of poor quality.
Skim or Scald Milk ..	11	10	1	13·8% added water.
Condensed Milk ...	1	1	...	
Condensed Skim Milk ...	1	1	...	
Butter	28	24	4	16·7% and 19·5% water. 100% (2 cases) margarine.
Cream	3	3	...	
Cheese	11	11	...	
Margarine	15	15	...	
Lard	16	16	...	
Tea	8	8	...	
Coffee	1	1	...	
Camp Coffee	1	1	...	
Coffee and Chicory ...	1	1	...	
Cocoa	1	1	...	
Sugar	3	3	...	
Sweets	8	8	...	
Pepper	7	7	...	
Rice	6	6	...	
Flaked Rice ..	1	1	...	
Ground Rice ...	1	1	...	
Yeast	3	3	...	
Mustard	2	2	...	
Baking Powder ...	4	4	...	
Bun Powder ...	1	1	...	
Peas	1	1	...	
Chocolate	1	1	...	
Saffron	13	13	...	
Jam	2	2	...	
Custard Powder ...	1	1	...	
Egg Substitute ...	1	1	...	
Egg Powder ...	1	1	...	
Green Peas ...	1	1	...	
Sherbet	1	1	...	
Sauce	1	1	...	
Vinegar	15	12	3	3·35% and 3·72% acetic acid 1 swarming with vinegar eels
Corned Beef ...	1	1	...	
Pickles	1	1	...	
Bifti	1	1	...	

SALE OF FOOD AND DRUGS ACT, 1875 to 1907.—Contd.

Name of Article.	Number of Samples taken.	Genu- ine.	Adul- terated.	Remarks.
Soup	1	1	...	
Mixed Spice	1	1	...	
Hogs' Pudding	1	1	...	
Cordial	1	1	...	
Ginger Brandy	1	1	...	
Cake Powder	1	1	...	
Whisky	25	23	2	27·2 degrees and 27·59 degrees under proof.
Brandy	10	8	2	26·76 degrees and 26·95 degrees under proof.
British Brandy	6	5	1	31·08 degrees under proof.
Gin	17	17	...	
Rum	2	2	...	
Total	300	281	19	

TABLE 1—VITAL STATISTICS FOR THE YEAR 1913.

RURAL DISTRICTS.

DISTRICT.	Population (estimated to middle of 1913).	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.			TRANSFERABLE DEATHS. [†]			NET DEATHS BELONGING TO THE DISTRICT.		
		Unrecorded number.	Net.		Number.	Rate.	Rate.	Non-residents registered in the District.	of Residents registered in the District.	Under 1 yr. of age.	Rate per 1,000.	Number.	Rate.
			Number.	Rate.									
1	4,904	108	111	22.63	60	12.23	1	3	5	45.04	62	12.64	
2	7,484	138	139	18.57	93	12.42	1	10	15	107.91	102	13.62	
3	4,644	67	72	15.50	64	13.78	1	6	3	41.66	69	14.85	
4	2,319	42	42	18.11	26	11.21	3	1	2	47.61	24	10.34	
5	5,112	103	103	20.14	63	12.32	2	1	Nil	..	62	12.12	
6	15,272	280	284	18.59	186	12.18	..	19	28	98.59	205	13.42	
7	12,283	221	228	19.37	115	9.77	..	10	19	83.33	125	10.62	
8	10,349	182	184	17.77	119	11.49	2	19	12	65.21	136	13.14	
9	11,385	208	205	18.40	127	11.15	..	10	21	101.94	137	12.03	
10	33,452	714	723	21.61	428	12.79	5	30	64	88.52	453	13.54	
11	20,145	360	359	17.82	306	15.19	..	18	31	86.35	324	16.08	
12	17,914	414	403	22.50	317	17.69	23	13	46	114.14	307	17.14	
13	7,966	129	129	16.19	95	11.92	9	5	8	62.01	91	11.42	
14	17,074	334	335	19.62	218	12.77	..	17	33	98.50	235	13.76	
15	West Penwith	204	204	18.32	127	11.41	..	19	22	107.84	146	13.11	
16	Scilly Isles	24	24	11.44	18	8.58	..	1	Nil	..	19	9.05	
TOTALS	183,535	3,528	3,546	19.37	2,362	12.90	47	182	309	87.14	2,497	13.64	

URBAN DISTRICTS.

DISTRICT.	Population (estimated to middle of 1913).	Unrecorded number.	Net.		Number.	Rate.	Rate.	Non-residents in the District.	Registered in the District.	of Residents not registered in the District.	Under 1 yr. of age.	Rate per 1,000.	At all ages.											
			Number.	Rate.																				
														Number.	Rate.									
																Number.	Rate.							
17 Callington ..	1,713	22	22	12.84	19	11.09	..	2	2	90.90	21	12.25												
18 Stratton & Bude ..	3,139	63	63	20.06	43	13.69	7	1	2	31.74	37	11.78												
19 Launceston ..	4,132	67	65	15.73	46	11.13	4	1	4	61.53	43	10.40												
20 Liskeard ..	4,437	67	63	14.13	73	16.87	15	2	8	126.98	60	13.46												
21 Torpoint ..	4,493	115	112	24.92	60	13.35	5	1	9	80.35	56	12.46												
22 Looe ..	2,758	37	37	13.41	34	12.32	..	2	3	81.08	36	13.05												
23 Saltash ..	4,315	67	67	15.52	35	8.11	1	11	3	44.77	45	10.42												
24 Bodmin (including Old and New Towns, and Aylesham).	5,675	86	86	21.15	182	32.06	120	2	6	69.76	64	15.74												
25 Lostwithiel ..	1,383	29	29	20.96	23	16.63	..	1	3	103.44	24	17.35												
26 Wadebridge ..	2,375	49	49	20.63	28	11.78	..	7	4	81.63	35	14.73												
27 Truro City ..	11,269	227	229	20.31	150	13.30	19	23	24	104.80	154	13.65												
28 Penryn ..	3,069	69	70	22.80	51	16.61	1	3	9	128.57	53	17.26												
29 Falmouth ..	13,458	234	235	17.46	177	13.15	10	16	22	93.61	183	13.60												
30 Helston ..	2,903	61	61	21.01	50	17.22	8	2	11	131.14	44	15.15												
31 St. Ives ..	7,294	160	160	21.93	86	11.79	1	1	8	68.75	86	11.79												
32 Penzance ..	13,572	241	245	18.05	201	14.81	16	21	30	122.44	206	15.18												
33 Poldow ..	2,699	46	46	17.04	37	13.70	5	4	6	130.43	36	13.33												
34 Newquay ..	4,466	71	72	16.19	55	12.31	4	..	3	41.66	51	11.41												
35 St. Austell ..	3,371	70	59	17.50	68	20.17	15	5	6	101.69	58	17.20												
36 Redruth ..	10,902	265	267	24.49	180	16.51	20	13	19	71.16	173	15.87												
37 Cam'orne ..	16,093	360	368	22.87	246	15.28	5	25	41	111.41	266	16.53												
38 Phillack ..	3,547	87	88	24.80	60	16.91	..	2	14	159.09	62	17.47												
39 Hayle ..	1,015	16	16	15.76	15	14.77	..	2	1	62.50	17	16.74												
40 Madron ..	3,755	83	71	18.91	63	16.77	26	5	5	70.42	42	11.18												
41 Paul ..	5,938	111	111	18.69	63	10.60	..	6	12	108.10	69	11.61												
42 Looe ..	2,199	50	51	23.19	31	14.09	..	4	5	98.03	35	15.91												
43 St. Just ..	5,778	152	152	26.30	110	19.03	..	5	22	144.73	115	19.90												
TOTALS ..	145,768	2,905	2,894	19.85	2,186	14.99	282	167	282	97.44	2,071	14.21												

TOTALS FOR THE COUNTY.

Rural	..	183,535	3,528	3,546	19.37	2,362	12.90	47	182	309	87.14	2,497	13.64
Urban	..	145,768	2,905	2,894	19.85	2,186	14.99	282	167	282	97.44	2,071	14.21
Whole County		329,303	6,433	6,440	19.55	4,548	13.81	329	349	591	91.77	4,568	13.87

Rates calculated per 1,000 of estimated population.

*The deaths included in column 5 of this table are the whole of those registered during the year as having actually occurred within the district. The deaths included in Column 11 are the number in Column 5, corrected by subtraction of the number in Column 7, and the addition of Column 8. Deaths in Column 9 are similarly corrected by subtraction of the deaths under one included in the number in Column 7, and the addition of Column 8.

†Transferable deaths are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

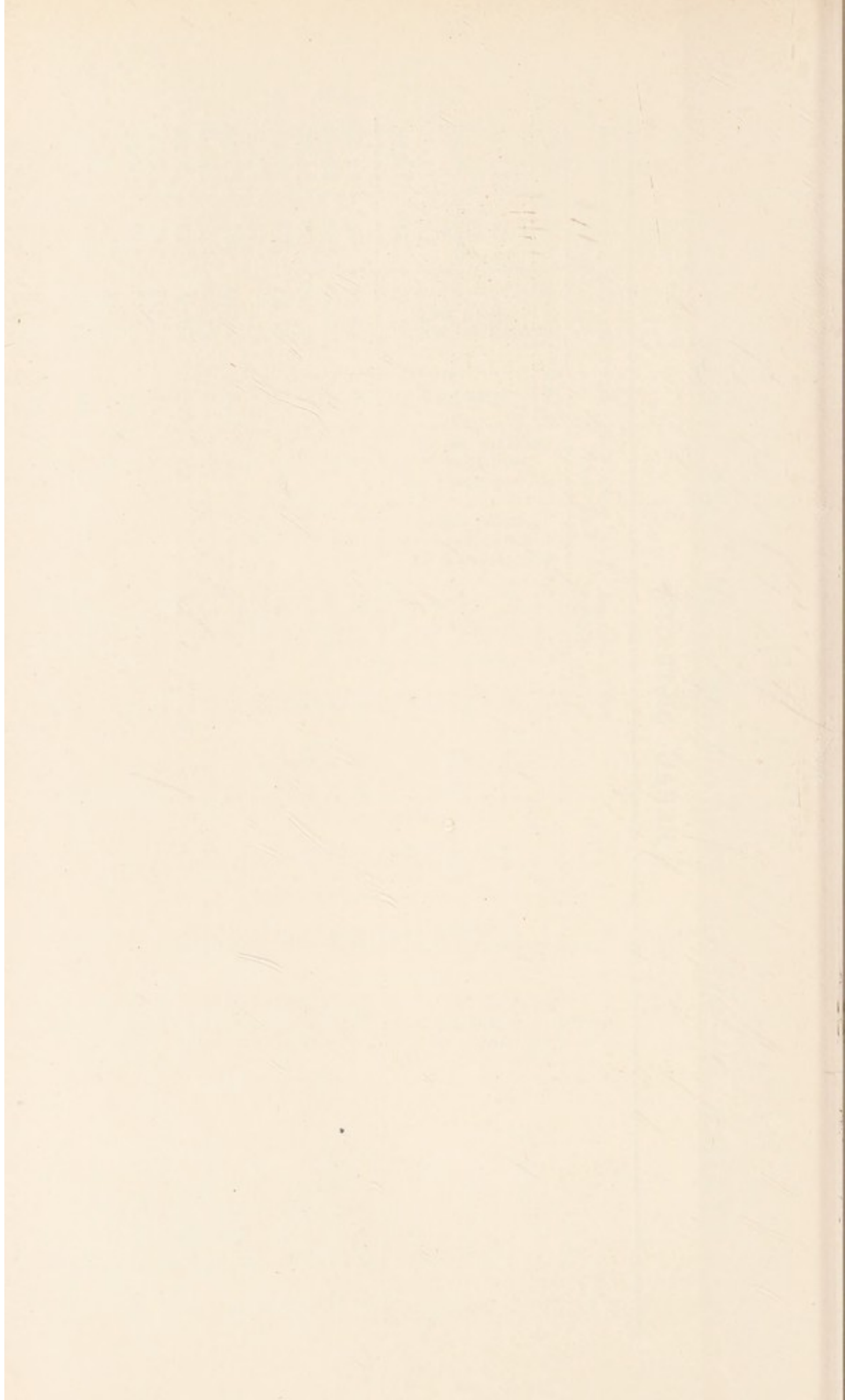


TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

RURAL DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Polio-myelitis	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Total
3.—CALSTOCK RURAL.	At Ages—Years	Under 1													
		1 to 5	..	3	..	2	..	..	..	..	..	..	..	..	5
		5 to 15	..	18	..	15	..	..	..	..	..	..	..	..	33
		15 to 25													
		25 to 45	..	3	..	..	..	..	..	..	..	..	..	..	3
		45 to 65	..	1	..	1	..	..	..	..	..	..	..	..	2
		65 & upwards													
	At all Ages Cases Removed to Hospital		..	25		18	..	..	..	..	..	..	..	..	43
4.—BOSCASTLE RURAL.	At Ages—Years	Under 1													
		1 to 5	..	..	..	3	..	..	..	..	..	1	..	..	4
		5 to 15	..	2	..	9	..	..	..	..	..	..	..	..	11
		15 to 25													
		25 to 45	..	2	1	1	..	..	..	..	..	..	..	..	4
		45 to 65													
		65 & upwards													
	At all Ages Cases Removed to Hospital		..	4	1	13	..	..	..	..	..	1	..	..	19

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

RURAL DISTRICTS.

[illegible]

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

RURAL DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Polionmyelitis	Pulmonary Tuberculosis	Other forms of Tuberculosis	Total
9.—ST. COLUMB RURAL.	At Ages—Years	Under 1													
		1 to 5													
		5 to 15	..	..	1	2	..	..	..	..	..	..	..	..	3
		15 to 25	..	1	..	..	..	..	..	..	..	..	4	..	5
		25 to 45	..	..	..	..	..	..	..	..	..	..	1	..	1
		45 to 65	..	..	1	..	..	..	..	..	..	..	1	..	2
		65 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..
	At all Ages Cases Removed to Hospital		..	1	2	2	..	..	..	..	..	..	6	..	11
10.—ST AUSTELL RURAL.	At Ages—Years	Under 1	..	..	1	..	..	..	..	..	..	..	..	1	2
		1 to 5	..	12	..	9	..	..	..	..	..	1	..	1	23
		5 to 15	..	56	1	68	..	..	..	..	..	..	4	4	133
		15 to 25	..	14	2	4	1	..	..	..	..	..	12	5	38
		25 to 45	..	7	9	4	1	..	..	..	..	..	31	3	55
		45 to 65	..	1	1	..	..	..	..	..	..	..	9	1	12
		65 & upwards	..	..	1	..	..	..	..	..	..	..	1	..	2
	At all Ages Cases Removed to Hospital		..	90	14	86	2	..	..	..	..	1	57	15	265

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

RURAL DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Poliomyelitis	Pulmonary Tuberculosis	Other forms of Tuberculosis	Total
11.—TRURO RURAL	At Ages—Years	Under 1													
		1 to 5	..	4	1	..	..	..	..	..	..	..	..	..	5
		5 to 15		17	..	9	..	..	..	..	..	..	3	4	33
		15 to 25	..	2	4	..	..	..	..	..	..	..	9	2	17
		25 to 45	..	1	4	..	..	..	..	..	..	..	10	2	17
		45 to 65	..	..	5	..	..	..	..	..	..	..	4	2	11
		65 & upwards	..	..	1	..	..	..	..	..	..	..	..	..	1
	At all Ages		..	24	15	9	..	..	..	..	..	..	26	10	84
	Cases Removed to Hospital		..												
12.—REDRUTH RURAL	At Ages—Years	Under 1													
		1 to 5	..	3	..	6	..	..	..	..	..	..	..	1	10
		5 to 15	..	35	..	47	1	..	..	..	..	..	2	2	87
		15 to 25	..	5	..	2	3	..	1	..	..	..	12	4	27
		25 to 45	..	5	2	2	..	..	1	..	..	..	24	2	36
		45 to 65	..	..	1	..	..	..	..	..	..	..	18	..	19
		65 & upwards	..	..	2	..	..	..	..	..	..	..	1	..	3
	At all Ages		..	48	5	55	6	..	1	1	..	..	57	9	182
	Cases Removed to Hospital		..	1	..	7	1	..	..	..	..	..	..	..	9

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

URBAN DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Group	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Poliomyelitis	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Total
33.—PADSTOW URBAN.	At Ages—Years	Under 1													
		1 to 5													
		5 to 15	...	...	...	...	1	...	...	...	...	...	...	...	1
		15 to 25													
		25 to 45	...	...	...	...	3	...	...	1	...	...	...	...	4
		45 to 65													
		65 & upwards													
	At all Ages Cases Removed to Hospital		...	...	...	...	4	...	...	1	...	...	...	...	5
34.—NEWQUAY URBAN.	At Ages—Years	Under 1													
		1 to 5													
		5 to 15	...	1	...	...	...	...	...	...	...	...	1	...	2
		15 to 25	...	...	...	...	...	...	...	...	...	...	2	...	2
		25 to 45	...	...	2	...	...	...	...	...	...	...	6	...	8
		45 to 65	...	...	...	...	...	...	...	...	...	...	1	...	1
		65 & upwards													
	At all Ages Cases Removed to Hospital		...	1	2	...	...	...	...	...	...	...	10	...	13

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

URBAN DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Poliomyelitis	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Total
35.—ST. AUSTELL URBAN.	At Ages—Years.	Under 1													
		1 to 5	..	..	..	5	..	..	..	..	..	..	..	..	5
		5 to 15	..	2	..	34	..	..	..	..	..	..	..	..	36
		15 to 25	..	1	..	5	..	..	..	..	..	..	5	..	11
		25 to 45	..	1	..	2	..	..	..	..	..	..	7	..	10
		45 to 65	..	..	5	..	..	..	..	..	..	..	3	1	9
		65 & upwards													
	At all Ages			4	5	46	..	..	..	..	..	..	15	1	71
	Cases Removed to Hospital														
36.—REDRUTH URBAN.	At Ages—Years	Under 1													
		1 to 5	...	2	...	2	...	...	...	...	...	...	...	...	4
		5 to 15	...	5	...	27	2	...	...	...	...	...	...	2	36
		15 to 25	...	...	...	3	8	...	...	...	...	...	10	1	22
		25 to 45	...	...	2	...	...	...	...	...	...	...	24	...	26
		45 to 65	...	...	1	...	...	...	...	...	...	...	...	...	1
		65 & upwards													
	At all Ages		...	7	3	32	10	...	...	...	...	...	34	3	89
Cases Removed to Hospital		...	...	...	...	1	...	...	...	...	...	...	...	1	

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

URBAN DISTRICTS.

Districts	NOTIFIABLE DISEASE		Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Polionyelitis	Pulmonary Tuberculosis	Other forms of Tuberculosis.	Total
	At Ages—Years														
43.—ST. JUST URBAN.	Under 1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1 to 5	..	..	..	..	..	..	..	..	..	..	..	..	3	3
	5 to 15	..	..	..	..	..	..	..	..	..	..	..	2	1	3
	15 to 25	..	..	..	..	..	..	..	..	..	..	..	5	1	6
	25 to 45	..	..	..	..	..	..	..	..	..	..	..	10	1	11
	45 to 65	..	..	..	..	..	..	..	..	..	..	..	7	..	7
	65 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	At all Ages	124	2	7	1	..	..	..	..	..	..	..	24	6	164
Cases removed to Hospital															
TOTALS—RURAL DISTRICTS.	Under 1	..	..	..	1	1	..	..	..	..	..	..	..	4	6
	1 to 5	..	30	1	41	..	..	..	..	..	5	..	5	5	82
	5 to 15	..	142	2	237	2	..	..	..	..	3	15	19	420	
	15 to 25	..	26	7	10	8	..	1	..	..	..	61	19	132	
	25 to 45	..	24	25	10	6	..	..	2	..	..	115	17	199	
	45 to 65	..	2	14	1	1	..	..	..	..	..	60	7	85	
	65 & upwards	..	..	10	..	..	..	..	..	..	..	8	4	22	
	At all Ages	..	224	59	300	18	..	1	2	..	8	259	75	946	
Cases removed to Hospital		..	1	7	1	..	..	..	..	..	..	5	..	14	

TABLE II.—Infectious Diseases notified, and number of cases removed to Hospital, during the year 1913.

TOTALS.

Districts	NOTIFIABLE DISEASE	Small-pox	Diphtheria, including Membranous Croup	Erysipelas	Scarlet Fever	Enteric Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Cerebro-Spinal Meningitis	Polio-myelitis	Pulmonary Tuberculosis	Other forms of Tuberculosis	Total
TOTALS—URBAN DISTRICTS.	At Ages—Years	Under 1	.. ..	1	3	.. ..	.. ..	.. ..	.. ..	.. ..	1	..	2	7
		1 to 5	.. 23	..	31	.. ..	.. ..	.. ..	.. ..	.. ..	3	2	11	70
		5 to 15	.. 56	..	193	8	..	5	.. ..	.. ..	1	23	39	325
		15 to 25	.. 12	3	20	14	..	..	1	..	2	89	38	179
		25 to 45	.. 9	12	6	9	..	1	1	.. ..	..	143	22	203
		45 to 65	.. 3	22	..	1	..	..	.. ..	.. ..	..	43	7	76
		65 & upwards	.. ..	8	..	..	..	..	.. ..	.. ..	..	7	1	16
	At all Ages		.. 234	56	261	36	..	6	5	..	7	319	120	1044
	Cases Removed to Hospital		.. 10	1	11	3	..	..	..	..	..	2	..	27
TOTALS—WHOLE COUNTY.	At Ages—Years	Under 1	.. ..	1	4	1	..	..	..	..	1	..	6	13
		1 to 5	.. 53	1	72	..	..	..	..	..	8	2	16	152
		5 to 15	.. 198	2	430	10	..	5	..	..	4	38	58	745
		15 to 25	.. 38	10	30	22	..	1	1	..	2	150	57	311
		25 to 45	.. 33	37	16	15	..	1	3	..	..	258	39	402
		45 to 65	.. 5	36	1	2	..	..	..	..	..	103	14	161
		65 & upwards	.. ..	18	..	..	..	..	..	..	..	15	5	38
	At all Ages		.. 458	115	561	54	..	7	7	..	15	578	195	1990
	Cases Removed to Hospital		.. 11	1	18	4	..	..	..	..	..	7	..	41

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

RURAL DISTRICTS.

Districts	Causes of Death.		All Causes																				Other Defined Diseases	Diseases ill-defined or unknown													
	At Ages—Years	Under 1	Certified	Uncertified	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs			Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide			
5—CAMELFORD RURAL	Under 1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5—CAMELFORD RURAL	25 and under 45	...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	...	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	...	62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths in Public Institutions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6—LISKEARD RURAL	Under 1	...	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6—LISKEARD RURAL	25 and under 45	...	21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	...	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	...	104	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	...	205	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths in Public Institutions

RURAL DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	Certified	Uncertified	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown			
7—ST. GERMANS RURAL	Under 1 ..	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	6	...	...	...	...	...	1	8	...	...	3	...	
	1 and under 2	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7—ST. GERMANS RURAL	25 and under 45	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	125	7	2	10	1	7	6	1	2	...	9	5	1	62	42	8	2	...
	Deaths in Public Institutions
8—BODMIN RURAL	Under 1 ..	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8—BODMIN RURAL	25 and under 45	26
	45 and under 65	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	136	...	...	...	...	...	...	...	...	...	14	2	1	...	...	12	...	22	8	6	4	...	2	1	1	3	2	7	4	3	20	...	...
	Deaths in Public Institutions

RURAL DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.		Certified																	Uncertified																	All Causes	
			Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown						
9-ST. COLUMB RURAL	At Ages—Years		21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	10	1	...	6	...
	Under 1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5 ...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15 ...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25 ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45 and under 65 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and upwards				
All Ages ...		137	6	6	...	...	...	2	...	11	...	2	...	12	...	15	6	10	1	3	...	...	...	...	...	7	...	11	2	...	33	...	16
Deaths in Public Institutions		7	1	1	2	3				
10-ST. AUSTELL RURAL	At Ages—Years		64	...	1	6	...	6	34	1	...	2	...	7				
	Under 1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45 and under 65 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and upwards				
All Ages ...		453	...	1	...	...	...	...	...	31	2	6	...	32	...	42	24	21	...	7	...	...	...	...	...	14	...	35	12	...	2171	...	30
Deaths in Public Institutions		1				

10—ST. AUSTELL RURAL

9—ST. COLUMB RURAL

RURAL DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913

Districts	Causes of Death.		Certified		Uncertified		All Causes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	At Ages—Years	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards	31	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmon- ary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhilitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility Malformation, Premature Birth	Violent Deaths excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
11—TRURO RURAL	31

RURAL DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

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TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.
At Ages—Years	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards
15—WEST PENWITH RURAL	All Ages ... Deaths in Public Institutions
16—SCILLY ISLES RURAL	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards
	All Ages ... Deaths in Public Institutions

RURAL DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	All Causes		Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Group	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility	Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown		
		Certified	Uncertified																																	
17—CALLINGTON URBAN.	At Ages—Years	Under 1 ...	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1 and under 2	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2 and under 5	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		5 and under 15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		15 and under 25	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17—CALLINGTON URBAN.		25 and under 45	6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		45 and under 65	10	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		65 and upwards	19	2	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	Deaths in Public Institutions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		
18—STRATTON & BUDE URBAN.	At Ages—Years	Under 1 ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1 and under 2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2 and under 5	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		5 and under 15	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		15 and under 25	3	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18—STRATTON & BUDE URBAN.		25 and under 45	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		45 and under 65	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		65 and upwards	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	Deaths in Public Institutions	37	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

TABLE III.—Causes of, and Ages at, Death during the Year 1913

[illegible]

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	Certified		Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmon- ary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		Uncertified	All causes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
29—FALMOUTH BOROUGH	At Ages—Years	Under 1 ...	22	1	1	8	2	4

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URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	All Causes		31—ST. IVES BOROUGH																								32—PENZANCE BOROUGH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Certified	Uncertified	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	At Ages—Years	Under 1 ...	11	1	2	1	1</

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TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	Certified		Uncertified		All Causes		Causes of Death.														Other Defined Diseases	Diseases ill-defined or unknown																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		At Ages—Years	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards	At Ages—Years	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards	At Ages—Years	Under 1 ... 1 and under 2 2 and under 5 5 and under 15 15 and under 25 25 and under 45 45 and under 65 65 and upwards	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis			Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
33—PADSTOW URBAN.	Deaths in Public Institutions	36	36	3	3	1

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.		All Causes		Causes of Death.																																
	At Ages—Years	Under 1 ...	Certified	Uncertified	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhilitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown			
35—ST. AUGUSTELL URBAN	Under 1 ...	...	...	6	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and upwards	...	...	32	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All Ages	...	...	58	...	...	...	...	...	...	1	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths in Public Institutions	
36—REDRUTH URBAN	Under 1	19
	1 and under 2	3	
	2 and under 5	4	
	5 and under 15	7	
	15 and under 25	12	
	25 and under 45	16	
	45 and under 65	44	
65 and upwards	...	...	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All Ages	173	
Deaths in Public Institutions

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.		All Causes																						Deaths in Public Institutions												
	At Ages—Years	Under 1	Certified	Uncertified	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown			
37—CAMBORNE URBAN.	Under 1	...	41	1	1	1	...	1	1	3	...	12	13	
	1 and under 2	...	8	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	1	2	...	1	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	...	5	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	...	6	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	...	10	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45	...	41	...	2	...	...	...	...	...	...	...	20	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	...	70	...	...	...	...	...	...	...	...	...	21	...	...	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	...	85	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	23	3	3	1	...	1	...	...	...	...	...	...	...	...	...	...
	All Ages	...	266	...	2	...	1	...	3	...	1	1	48	4	...	...	...	25	1	40	7	11	2	13	2	...	2	12	1	13	10	...	54	13	
	Deaths in Public Institutions	
38—PHILLACK URBAN.	Under 1	...	14	4
	1 and under 2	
	2 and under 5	...	3	
	5 and under 15	...	1	
	15 and under 25	...	10	
	25 and under 45	...	7	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	...	26	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	...	61	...	1	...	...	...	...	...	...	...	4	2	...	...	...	2	2	15	3	...	...	5	...	...	...	...	3	1	5	3	...	16	...
	Deaths in Public Institutions	

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

[illegible]

URBAN DISTRICTS.

TABLE III.—Causes of, and Ages at, Death during the Year 1913.

Districts	Causes of Death.	Certified		Uncertified		Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths, excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown		
41—PAUL URBAN	At Ages—Years	Under 1 ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		1 and under 2 ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2 and under 5 ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		5 and under 15 ...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		15 and under 25 ...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		25 and under 45 ...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65 ...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards ...	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages ...	69	...	...	...	1	...	3	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths in Public Institutions																																				
42—LUDGVAN URBAN	At Ages—Years	Under 1 ...	5
		1 and under 2 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		2 and under 5 ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		5 and under 15 ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		15 and under 25 ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		25 and under 45 ...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65 ...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards ...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages ...	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths in Public Institutions																																				

TABLE III.—Causes of, and Ages at, Death during the Year 1913

URBAN DISTRICTS.

Districts	Causes of Death.	All Causes		Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping-cough	Diphtheria and Croup	Influenza	Erysipelas	Phthisis (Pulmonary Tuberculosis)	Tuberculous Meningitis	Other Tuberculous Diseases	Rheumatic Fever	Cancer, Malignant disease	Meningitis	Organic Heart Disease	Bronchitis	Pneumonia (all forms)	Other Diseases of Respiratory organs	Diarrhoea and Enteritis	Appendicitis and Typhlitis	Alcoholism	Cirrhosis of Liver	Nephritis and Bright's Disease	Puerperal Fever	Other Accidents of Parturition	Congenital Debility, Malformation, Premature Birth	Violent Deaths excluding Suicide	Suicide	Other Defined Diseases	Diseases ill-defined or unknown			
		Certified	Uncertified																																	
43-ST. JUST URBAN	At Ages—Years	22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	Under 1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	8	1	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	15	...	...	...	...	...	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45	12	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	115	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths in Public Institutions	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS—RURAL DISTRICTS	At Ages—Years	309	1	1	5	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Under 1 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1 and under 2	53	3	...	2	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2 and under 5	38	3	1	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	5 and under 15	69	1	1	2	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	15 and under 25	88	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	25 and under 45	282	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	45 and under 65	488	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	65 and upwards	1147	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	All Ages	2493	4	3	9	3	10	17	26	2	212	17	30	6220	9	287	147	116	16	28	8	3	8	72	2	14	157	74	14	781	206	...	...	...	...
Deaths in Public Institutions	78	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE IV.

Infantile Mortality during the Year 1913.

Nett Deaths from Stated Causes at various ages under One Year of Age.

Districts.	CAUSES OF DEATH.	All Causes		Small-pox	Chicken-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria & Croup	Erysipelas	Tuberculous Meningitis	Abdominal Tuberculosis	Other Tuberculous Diseases	Meningitis (not Tuberculous)	Convulsions	Laryngitis	Bronchitis	Pneumonia (all forms)	Diarrhoea	Enteritis	Gastritis	Syphilis	Rickets	Suffocation, overlying.	Injury at Birth	Atelectasis	Congenital Malformations	Premature Birth	Atrophy, Debility, and Marasmus	Other Causes
		Certified	Uncertified																											
Totals—RURAL DISTRICTS.	Under 1 week	93	1												4							1	1	3	2	4	66	8	4	
	1—2 weeks	23													2			1			1	1				12	4			
	2—3 "	21												1			1			1		1		1		6	7			
	3—4 "	14													2			1		3					2	4				
	Total under 1 month	151												1	8	1	1	2	3	4	3		1	4	2	6	86	23	6	
	1—3 months	63					2	1						1	5		6	2	5	4	5		1		2	5	5	14	5	
	3—6 "	47										1	1	2	7		5	8	3	2	2				1	1	1	10	3	
	6—9 "	27					2								6		3	7	1	1	1				1			2		1
	9—12 "	21									1				3		4	10												3
	Total deaths under 1 year	309					1	4	1		1	1	1	4	29	19	28	11	9	12	3	2	2	4	6	12	92	49	18	

Nett Births in the year { Legitimate, 3,448 } 3,546
 { Illegitimate, 98 }

Nett Deaths in the year { Legitimate Infants } 309
 { Illegitimate " }

TABLE IV.

Infantile Mortality during the Year 1913.

Nett Deaths from Stated Causes at various ages under One Year of Age.

Districts.	All Causes.		CAUSES OF DEATH																				Totals—URBAN DISTRICTS.						
	Certified	Uncertified	Small-pox	Chicken-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria & Croup	Erysipelas	Tuberculous Meningitis	Abdominal Tuberculosis	Other Tuberculous Diseases	Meningitis (not Tuberculous)	Convulsions	Laryngitis	Bronchitis	Pneumonia (all forms)	Diarrhoea	Enteritis	Gastritis	Syphilis	Rickets	Suffocation (overlying)	Injury at Birth	Atelectasis	Congenital Malformations	Premature Birth	Atrophy, Debility, and Marasmus	Other Causes
Under 1 week	83	1	..	..	..	..	..	..	..	..	..	..	..	3	..	..	1	..	1	1	..	..	..	1	1	5	50	18	4
1—2 weeks	16	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	7	5	1
2—3 "	11	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	..	1	1	..	..	..	..	1	1	1	1	2
3—4 "	13	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	1	..	2	2	..	..	..	..	2	..	3	2	..
Total under 1 month	123	1	..	..	..	..	..	..	..	..	..	..	..	8	..	3	3	..	4	..	..	..	..	1	3	8	61	26	7
1—3 months	48	1	..	..	..	..	1	..	1	..	..	..	..	4	..	1	5	2	7	4	1	1	..	..	..	..	6	13	3
3—6 "	53	..	..	..	..	..	..	..	..	2	..	..	..	6	..	4	6	5	11	..	1	..	2	..	..	2	1	8	5
6—9 "	27	..	..	2	..	2	..	..	..	..	1	..	1	3	..	1	4	..	7	..	..	..	..	..	..	..	..	3	3
9—12 "	29	..	..	5	1	1	..	..	..	..	1	..	3	4	..	1	3	1	3	1	..	..	..	..	..	..	..	3	3
Total deaths under 1 year	280	2	..	7	4	4	1	2	1	2	1	1	4	25	..	10	21	8	32	5	2	1	2	1	3	10	68	53	21
Nett Births in the year		{ Legitimate, 2,787 Illegitimate, 107 }		2,894		Nett Deaths in the year		{ Legitimate Infants Illegitimate "		282																			

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TABLE IV.

Infantile Mortality during the Year 1913.

Nett Deaths from Stated Causes at various ages under One Year of Age.

CAUSES OF DEATH.	All Causes		Small-pox	Chickenpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria & Croup	Erysipelas	Tuberculous Meningitis	Abdominal Tuberculosis	Other Tuberculous Diseases	Meningitis (not Tuberculous)	Convulsions	Laryngitis	Bronchitis	Pneumonia (all forms)	Diarrhoea	Enteritis	Gastritis	Syphilis	Rickets	Suffocation, overlying	Injury at Birth	Atelectasis	Congenital Malformations	Premature Birth	Atrophy, Debility, and Marasmus	Other Causes	
	Certified	Uncertified																												
Under 1 week	176	1												7			1	1	1		1	1	1	4	3	9	116	26	8	
1-2 weeks	39													3			1	1	1		1					3	19	9	2	
2-3 "	32												1	2			3	1	1	2		1	1		2	7	8	3		
3-4 "	27													4			1	1	1	4	3				2	5	6			
Total under 1 month	274	1											1	16			4	4	2	7	4	3	1	5	5	14	147	49	13	
1-3 months	111	1				2	2		1				1	9			7	7	7	11	9	1	1		2	5	11	27	8	
3-6 "	100									2	1	1	2	13			9	14	8	13	2	1	2		1	3	2	18	8	
6-9 "	54				2	2	2			1	1		1	9			4	11	1	7	1	2			1			5	4	
9-12 "	50				6	1						1	3	7			5	13	1	3	1							3	6	
Total deaths under 1 year..	589	2			8	4	5		1	3	2	2	8	54			29	49	19	41	17	5	3	4	5	9	22	160	102	39

Totals—WHOLE COUNTY.

Nett Births in the year { Legitimate, 6,235 { 6,440

TABLE V.

1.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK

1.—*Inspection — Including Inspections made by Sanitary Inspectors or
Inspectors of Nuisances.*—1913.

RURAL DISTRICTS.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
FACTORIES ... (Including Factory Laundries)	21	...	Nil.
WORKSHOPS ... (Including Workshop Laundries)	472	7	
WORKPLACES ... (Other than Out-Workers' premises included in Part 3 of this Report)	19	...	
Total	512	7	Nil.

URBAN DISTRICTS.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
FACTORIES ... (Including Factory Laundries)	144	...	Nil.
WORKSHOPS ... (Including Workshop Laundries)	712	5	
WORKPLACES ... (Other than Out-Workers' premises included in Part 3 of this Report)	58	...	
Total	914	5	Nil.

WHOLE COUNTY.

Premises. (1)	Number of		
	Inspections. (2)	Written Notices. (3)	Prosecutions. (4)
FACTORIES ... (Including Factory Laundries)	165	...	Nil.
WORKSHOPS ... (Including Workshop Laundries)	1184	12	
WORKPLACES ... (Other than Out-Workers' premises included in Part 3 of this Report)	77	...	
Total	1426	12	Nil.

TABLE V—2.

DEFECTS FOUND

Particulars.	RURAL DISTRICTS.				URBAN DISTRICTS.				WHOLE COUNTY.			
	No. of Defects.			Number of Prosecutions.	No. of Defects.			Number of Prosecutions.	No. of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.		Found.	Remedied.	Referred to H.M. Inspector.		Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :—												
Want of Cleanliness ...	3	3	...	...	14	14	...	...	17	17	...	...
Want of Ventilation ...	...	...	...	...	2	1	...	...	2	2	...	...
Overcrowding ...	1	1	...	...	1	1	...	...	2	2	...	...
Want of Drainage of Floors ...	...	...	...	...	2	2	...	...	2	2	...	...
Other Nuisances ...	...	...	...	...	4	4	...	...	4	4	...	...
Insufficient ...	...	...	...	...	1	1	...	...	1	1	...	...
Unsuitable or Defective ...	...	...	...	...	...	...	...	...	...	...	...	...
Sanitary Accommodation { Not Separate for Sexes	4	4	...	...	4	4	...	...	8	8	...	...
Offences under the Factory and Workshops Act :—	1	1	...	...	...	—	...	...	1	1	...	...
Illegal Occupation of Underground Bakehouses, (S. 101) ...	...	...	...	...	...	...	...	...	...	...	...	...
Breach of Special Sanitary Requirements for Bakehouses (S.S. 97 to 100) ...	...	...	...	...	4	2	...	...	4	2	...	...
Excluding Offences relating to Outwork which are included in Part 3 of this Report ...	...	...	...	...	...	...	...	...	...	...	...	...
Other Offences {	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	9	9	None	None	32	30	None	None	41	39	None	None

TABLE V-3.

HOME WORK.

Nature of Work.	Out-Workers' Lists. Section 107.										Out-Work in Unwholesome Premises. Section 108.		Out-Work in Infected Premises. Sections 109-110.			
	Lists Received from Employer				Once in the Year.			Prosecutions.			Instances.	Notices served.	Prosecutions.	Instances.	Orders made. [Sec. 110]	Prosecutions. [Sections 109-110]
	Twice in the Year.		Outworkers.		Lists	Con-tractors	Work-men	Failing to keep or permit inspection of Lists.	Failing to send Lists							
	Lists†	Con-tractors	Work-men	Outworkers†												
										Con-tractors							Work-men
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

RURAL DISTRICTS.

[illegible]

URBAN DISTRICTS.

[illegible]

WHOLE COUNTY.

[illegible]

+ The figures required in Columns 2, 3, and 4 are the *Total* number of the Lists (received from Employers who sent them both in February and August as required by the Act) and of the entries of names of Out-Workers in those Lists. There are, therefore, double the number of such employers and (approximately) double the number of individual out-workers whose names are given, since in the February and August Lists of the same employer, the same out-workers' names will often be repeated.

TABLE V—4. REGISTERED WORKSHOPS.

Districts.	Number of Workshops on the Register (S. 131) at the end of the Year.
RURAL	478
URBAN	1000
WHOLE COUNTY	1478

TABLE V—5. OTHER MATTERS.

Class.	Rural Districts.	Urban Districts.	Whole County.
	Number (2)	Number (2)	Number (2)
Matters notified to H.M. Inspector of Factories:—			
Failure to affix Abstract of the Factory and Workshop Act (S.133, 1901) ...	...	...	...
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (S.5, 1901) ...	...	...	...
Notified by H.M. Inspector ...	1	11	12
Reports (of action taken) sent to H.M. Inspector ...	...	5	5
Other ... ..	...	
Underground Bakehouses (S.101):—			
Certificates granted during the year ...	...	
In use at the end of the year ...	...	
	1	16	17

Part XIII.

Local Government Board Enquiries held in Cornwall
during the Year 1913.

District.	Date.	Nature of Enquiry.	Result.
Rural.			
Camelford ...	7th Oct.	Loan of £809 for completion of Camelford Waterworks and for purposes of water supply }	Sanctioned.
Liskeard ...	8th May	To consider a proposed scheme of drainage for Pelynt }	Sanctioned.
St. Austell ...	27th Feb.	Loan of £7,000 for purposes of a water supply for the Parish of St. Austell Rural and Mount Charles and Charles-town Special Drainage District }	L.G.B. sanctioned the borrowing of £4,325 being the amount spent by the Council prior to receiving the Board's sanction.
Urban.			
Torpoint ...	—	Loan of £1,244 14s. 6d. for private street works }	Sanctioned.
St. Ives ...	2nd May	Loan of £470 for purchase of land for public walks }	Sanctioned.
	„	Loan of £250 for Fire Brigade Station }	Sanctioned.
Penzance ...	23rd Sep.	Loan of £9,330 for purchase of land and erection of working class dwellings }	Approved subject to the number of houses to be erected being reduced from 42 to 22.
St. Austell ...	8th Oct.	Loan of £466 for street improvements }	Sanctioned.
	4th Nov.	Loan of £5,076 for the erection of 22 houses }	Sanctioned.
Phillack ...	9th Oct.	Loan of £1,350 to complete the Council's water undertaking }	Unknown.

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