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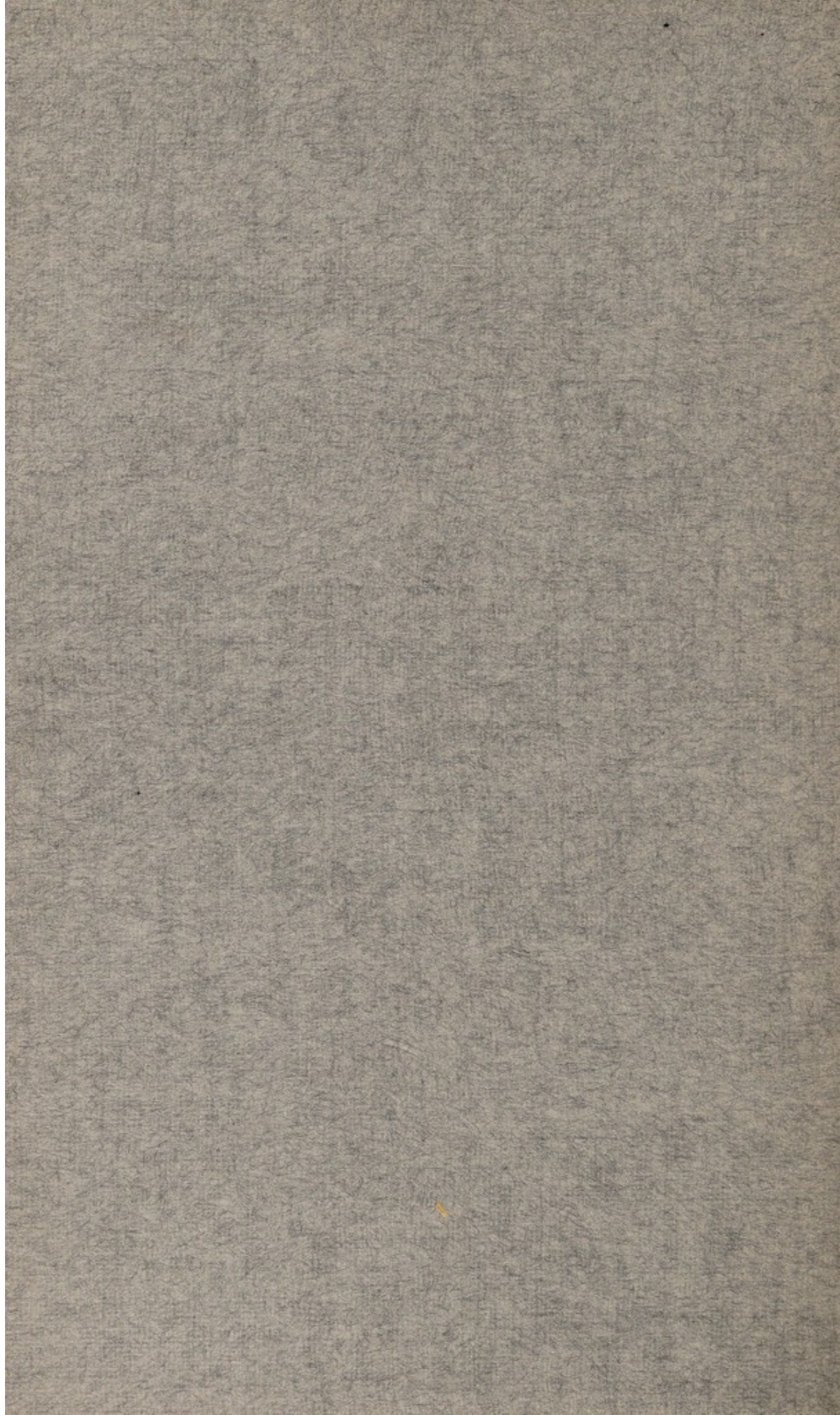
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BOROUGH OF ROYAL LEAMINGTON SPA.



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1914.

H. GIBBONS WARD, M.D., Ch.B., D.P.H.

Leamington Spa :

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BOROUGH OF ROYAL LEAMINGTON SPA.

Health Committee.

Mr. Alderman MASON (Chairman).

Mr. Councillor BERRIDGE (Vice-Chairman).

The MAYOR (Mr. Councillor DONALD).

Mr. Alderman BAKER.

„ „ BENNETT.

„ „ FLAVEL.

„ „ HOLT.

„ „ THURSFIELD.

Mr. Councillor CASHMORE.

„ „ HEATLEY.

„ „ MOLESWORTH.

„ „ PRATT.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

INSPECTORS.

J. K. ANDERSON, A. M. HARRISON, E. RINGER, M.R.C.V.S.

HEALTH VISITOR.

LUCY E. PIERCE.

CLERKS.

G. H. HAMMOND.

ALICE M. WARD.

PUBLIC ANALYST.

A. BOSTOCK HILL, M.D., M.Sc., F.I.C.

**MEDICAL OFFICER OF HEALTH, SCHOOL MEDICAL OFFICER,
AND BACTERIOLOGIST.**

H. GIBBONS WARD, M.D., CH.B., D.P.H.

12, Hamilton Terrace,
Leamington Spa,
May, 1915.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH
COMMITTEE.

GENTLEMEN,

I beg to submit to you my third Annual Report on the Health of the Borough, being that for the year 1914.

I regret any delay there may have been in completing this Report, but owing to changes of staff entailed by the present crisis, and the illness of one of the Inspectors, there have been unusual difficulties to overcome.

Generally speaking, the Vital Statistics of the Borough may be considered as satisfactory. The Death-rate shows a decrease of .8 per thousand. The Birth-rate continues the downward tendency observed for some time. The Infantile Mortality provides the least pleasing feature, having risen considerably.

It is to be regretted that more considerable advance in the treatment of Tuberculosis cases cannot be reported. I believe, however, that every effort is being made to furnish the necessary facilities for such treatment.

Soon after the commencement of the present War, Mr. G. H. Hammond, the Clerk in this Department, joined the Royal Army Medical Corps, and is now on service abroad. His work is being ably continued by Miss Ward.

I am sorry to say that Mr. J. K. Anderson, the Sanitary Inspector for No. 1 District, has been seriously ill for some time. His services, which have always been unsparingly given to your Committee, have been greatly missed, and I hear, with relief, that he is now improving.

I would like to express my indebtedness to the Town Clerk and other officials of the Corporation for many kindnesses; also to my colleagues in this Department, whose assistance has at all times been so readily given.

The confidence which Members of the Health Committee have, I believe, reposed in their Medical Officer, has been much appreciated, and I hope that such confidence has been justified.

I am,

Your obedient Servant,

H. GIBBONS WARD.



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SUMMARY OF VITAL STATISTICS, &c.,

FOR THE YEAR 1914.

Estimated Population (Middle 1914) ...	26,652
Census Population, 1911	26,713
Natural Increase of Population, 1914 ...	82
Birth-rate	16.5 per 1,000
Death-rate (Crude)	13.4 „
Death-rate (Corrected for Age and Sex Constitution)	11.1 „
Infantile Mortality, per 1,000 Births ...	86.1
Zymotic Death-rate	.78 per 1,000
Pulmonary Tuberculosis Death-rate ...	.52 „
Other Tuberculosis Death-rate	.41 „
Cancer Death-rate	1.53 „
Average Age at Death	53.1 years.
Density of Population per Acre	9.5

PHYSICAL FEATURES AND GENERAL CHARACTER OF DISTRICT.

The Borough of Royal Leamington Spa is situated on the adjacent slopes of two hills, between which runs the river Leam. Generally speaking, the sub-soil is porous and is composed of Sand and Gravel ; there is Clay in places.

The Climate is equable and well suited for the purpose of a residential town and Spa, the prevailing wind is West. Further information as to the Meteorological Conditions is given at the end of this Report.

The town itself, especially the most modern part, is well planned and laid out, the numerous Forest Trees and Pleasure Grounds entitle it to the eminent position to which it has attained amongst Inland Watering Places.

SOCIAL CONDITIONS.

In accordance with the request of the Local Government Board, the following brief note is given respecting Social Conditions.

There are few industries in the Borough ; in fact, apart from two Factories, the population is mainly concerned in supplying the wants of Residents or Visitors. Roughly speaking, one may divide the population into the following classes :—

(1) Those who reside in the town because of its natural advantages, and who are in a position to reside in any other town should they consider it more desirable.

(2) Those who reside in Leamington Spa and travel daily to the neighbouring industrial centres of Coventry and Birming-



ham. The number of these is growing, and will no doubt continue to do so as the train service is extended and improved.

(3) Those who supply the wants of Inhabitants and Visitors to the Spa.

(4) Visitors who come to the Spa in search of health. The number of these fluctuates according to the time of the year, being greatest in the Spring and Autumn.

MEDICAL CHARITIES.

The Warneford Leamington and South Warwickshire General Hospital and Bathing Institution is the chief medical charity, and one notes from the last Report issued, that for 1913, that the number of In-Patients was 1,263, and the number of Out-Patients 5,945. The work of the above Hospital is supplemented by that of the Provident Dispensary; this Institution is, as its name implies, partly supported by the contributions of the Members.

The Midland Counties Home for Incurables draws patients from all parts of the country; its title indicates the nature of the work carried out.

The Borough is within the Warwick Union, and the Poor Law Hospital is situated at Warwick some two to three miles away.

POPULATION.

The Registrar-General estimates the population for the middle of 1914 at 26,652; this is 19 less than last year. From a consideration of the number of void houses, however, it would appear that this estimate is, if anything, too low. Since writing the above a further estimate has been received, viz., 26,669, thus bearing out the truth of the above remark.

The Natural Increase of Population, that is, the surplus of Births over Deaths, in the past year was 82.

The following Table (Table I.) gives certain particulars as to the number of Tenements and the Populations of the various Wards at the time of the 1911 Census:—

TABLE I.

CENSUS RETURN, 1911.								
Dwellings or Tenements.					Population.			Population of Borough.
DISTRICT.	Inhabited.	Uninhabited.	Building.	Buildings not used as Dwellings.	Males	Females	Persons	
North-East Ward ...	1461	113	1	102	2752	3469	6221	1901 — 26888
South-East Ward ...	1999	117	2	68	3670	5017	8687	1891 — 26930
West Ward ...	1578	119	—	131	2795	4410	7205	1881 — 22976
Lillington & Milverton	1129	129	10	21	1588	3012	4600	1871 — 20917
	6167	*478	13	322	10805	15908	26713	1861 — 17402
								1851 — 15723
								Area of Borough. Acres
								Leamington Priors 159
								New Milverton 69
								Lillington ... 53
								2810

* Estimated number of families away, 70 = 408 persons.

BIRTHS.

The nett number of Births belonging to the District in 1914 was 441, 4 having occurred in other districts. This number gives a Birth-rate of 16.5 per 1,000 of the population. Again one has to record a decrease in the Birth-rate, this time of .7 per 1,000; the Rate is, apart from that of the years 1908, 1909, 1910, when there were abnormally low figures, the lowest on record. Leamington Spa is in this way only showing a tendency which is common to the whole country; it must be remembered, however, that for some time, owing to the constitution of the population, our Rate has been lower than that for the country generally.

Tables II. and III. give the distribution of Births as to Wards and time of year.

There were 241 Male Births as compared with 200 Female ; this gives a ratio of 120 to 100. It is curious to note the complete reversal of this ratio since 1911, when it was 80 to 100. Since then it has changed a little each year, as the following figures will show. The Male ratio is put first in all cases.

1911.	1912.	1913.	1914.
80—100.	101—100.	105—100.	120—100.

TABLE II.

WARDS.	Births.	Birth-rates.	Estimated Population at middle of year
North-East	119	19·2	6,210
South-East	170	19·6	8,662
West	102	14·2	7,191
Milverton and Lillington	46	10·0	4,589
External	4	...	...
	441	16·5	26,652

TABLE III.

Quarters.	Males.	Females.	Totals.	Birth-rates.
1st	53	45	98	14·7
2nd	76	60	136	20·2
3rd	56	49	105	15·7
4th	52	46	98	14·7
External	4	...	4	...
	241	220	441	16·5

From Table II. it will be seen that the North-East and South-East Wards have practically the same Birth-rate, the one in the South-East being slightly the larger of the two. West Ward comes next, and Milverton and Lillington Ward is lowest with practically only half the Rate of the two highest. The obvious relationship of the Birth-rate to the social position of the population is again well-shown; this is the experience of other places as well as that of Leamington Spa.

Table III. shows that by far the greatest proportion of the Births occurred within the 2nd quarter of the year. The number of Births in the 1st and 4th quarters was smaller than usual.

In considering all these figures it must be remembered that one is dealing with comparatively small numbers, a fact which must be remembered when making deductions from these Tables.

ILLEGITIMATE BIRTHS.

One has to record a slight increase in the number of Illegitimate Births, the figure being 27, as compared with 22 in 1913, giving an Illegitimate Birth-rate of 1.0 per 1,000, or 6.1 per cent. of the total number of Births. Below are given the Numbers, Rates, and Percentages for the past five years:—

Year.	Numbers.		Illegitimate		Percentage of All Births.
	All Births.	Illegitimate Births.	Birth- rate.		
1910 ...	414	18	0.66	...	4.3
1911 ...	463	31	1.16	...	6.7
1912 ...	477	31	1.16	...	6.5
1913 ...	459	22	0.82	...	4.7
1914 ...	441	27	1.0	...	6.1

Comparison of these figures with those of other towns or even of the whole country are impossible unless one could estimate the Rate in the way suggested by the Registrar-General, and described in my Report for 1913; the figures for this purpose are not, so far as I am aware, available.

DEATHS.

There were registered within the Borough, during 1914, 373 deaths. Of these, 44 were those of persons non-resident in the Borough, and were accordingly transferred to the appropriate district by the Registrar-General. On the other hand, 30 deaths of residents were registered outside the Borough, so were by the same means passed on to us. From these figures the total number of deaths belonging to the District has been found to be 359, giving a Death-rate of 13.4 per 1,000 of the Population, a figure less than that for 1913 by .8 per 1,000. This Rate is the lowest for 30 years, except in 1901, when the low Rate of 12.9 was experienced.

For England and Wales, during 1914, the Death-rate was 14.0 per 1,000.

Applying the Standardizing Factor supplied by the Registrar-General, namely, .8310, and thereby correcting for the Age and Sex constitution of the population, the Standardized Death-rate is found to be 11.1 per 1,000. The Rate for England and Wales corrected in the same way is given as 13.7 per 1,000.

AGE AT DEATH.

The Average Age at Death for 1914 was 53.1 years; this figure is just a little less than that for 1913.

It is interesting to note that of the 359 deaths of Residents of this Borough during 1914, 176 or 49 per cent. were of persons over the age of 65; for the whole country for 1914 the figure is given as 31 per cent. This comparatively high figure (49 per cent.) may be accounted for in at least two ways, firstly because the conditions of life in Leamington Spa are such as to be conducive to the attainment of a ripe old age, but secondly it must be recognised that elderly people in many cases come to Leamington Spa to live in retirement, therefore our population contains a greater proportion of elderly people than most towns.

An analysis of the deaths over 65 years of age gives the following interesting results:—

Age at Death : 65-75.	75-85.	85 and over.
83 ...	... 67 ...	... 26

TABLE IV.
POPULATION, BIRTH, AND DEATH-RATES
FROM 1884 TO 1914.

Year.	Estimated Population.	Birth-rate per 1000.	Death-rate per 1000.	Infantile Mortality	Zymotic Death-rate.
1884	23,646	25.4	18.3	156.7	2.50
1885	23,851	24.8	16.5	122.0	0.60
1886	24,053	25.3	16.9	109.8	0.99
1887	24,257	23.7	15.4	135.6	0.60
1888	24,461	23.9	18.3	161.8	1.60
1889	24,665	21.6	16.1	142.0	1.30
1890	24,871	21.1	16.8	156.1	0.40
1891	26,930	21.9	19.4	150.8	0.50
1892	27,016	21.1	18.3	124.3	0.80
1893	27,116	20.5	16.7	149.0	0.60
1894	27,220	20.0	13.6	142.8	0.30
1895	27,220	19.7	16.6	136.0	0.20
1896	27,320	19.9	15.1	127.0	0.40
1897	27,320	19.9	14.0	106.6	0.40
1898	27,520	19.0	15.4	145.3	0.90
1899	27,520	18.6	16.6	142.0	0.30
1900	27,700	18.1	15.8	131.3	0.30
1901	26,888	17.5	12.9	99.5	0.20
1902	26,967	18.6	13.9	113.3	0.40
1903	27,017	18.0	14.6	125.2	0.25
1904	27,060	18.1	14.8	123.9	0.18
1905	27,100	19.4	14.2	102.6	0.36
1906	27,140	17.5	14.3	126.0	0.51
1907	27,207	18.9	13.8	112.6	0.22
1908	27,217	15.7	15.0	84.1	0.33
1909	27,252	15.8	14.1	101.8	0.40
1910	27,360	15.1	14.7	74.9	0.44
1911	26,739	17.3	15.8	88.5	0.67
1912	26,690	17.8	14.9	73.3	0.07
1913	26,671	17.2	14.2	80.6	0.63
30 years' Average		19.7	15.5	121.5	0.58
1914	26,652	16.5	13.4	86.1	0.49

CAUSES OF DEATH.

Table XXIV., *i.e.* Table III. of the Local Government Board, shows the deaths from certain specified causes. Some of these items will be dealt with further on under their appropriate headings, but it might be of value to consider a few of the others at this stage.

Organic Heart Disease accounts for 52 deaths or 14.5 per cent. of the total number. This proportion is very large as compared with other areas, and probably is due to the somewhat large proportion of residents of an advanced age, since on reference to the Table one finds that 35 of these deaths were in persons over 65 years of age.

Appendicitis is stated to be the cause of only one death. This would seem to indicate, in view of the apparent increase latterly of this disease amongst the whole population of the country, either a very small incidence in the Borough, or early diagnosis with prompt operative treatment. I am inclined to believe that the latter is the main cause of the small number of deaths.

Alcoholism.—One death was registered; in my opinion this must be a gross understatement of the actual figures. It is obvious that until diseases the result of personal misconduct, such as Alcoholism or Syphilis, are confidentially notifiable, the number of deaths certified as being due to these causes will very inadequately represent the actual state of affairs.

Nephritis and Bright's Disease.—The proportion of deaths from this cause is large, as one would expect; it would be interesting, if possible, to ascertain the original causes of these conditions. The large proportion of cases of Chronic Nephritis can be judged from the fact that 21 of the 22 deaths occurred after the age of 45 years.

Violent Deaths and Suicides were 18 in number, and of these only 2 were adjudged to be the result of Suicide. There were 31 Inquests held within the Borough, and one on a Resident who died outside our Area. Altogether there were 24 Inquests held in respect of Residents.

Other Defined Diseases.—The 117 deaths classified under this heading may be roughly grouped as follows:—

Cerebral Hæmorrhage ...	...	...	33
Senile Decay ...	...	...	36
Gastric Diseases ...	...	...	7
Nervous Diseases ...	...	...	9
Miscellaneous ...	...	...	32

It is necessary to remember, when commenting on the large number of deaths from Cerebral Hæmorrhage, that this

lesion is after all a symptom of other disease or diseases. This undoubtedly accounts for the large number.

The number of deaths occurring from conditions arising through Senile Decay will naturally be high in a population such as that of the Borough.

EPIDEMIC DEATH-RATE.

The true Epidemic Death-rate, which is not shown in Table IV., includes the following diseases:—Small-pox, Measles, Enteric Fever, Scarlet Fever, Whooping Cough, Diphtheria, and Epidemic Diarrhœa. It was 0.78 per 1,000. This is again a progressive increase on the figures for the last four years, as will be seen by the following Table:—

	Five years' average.	1910.	1911.	1912.	1913.	1914.
Rate per 1,000	0.53	0.4	0.6	0.18	0.71	0.78

STILL-BIRTHS.

The Borough Treasurer, who is also Registrar of Cemeteries, informs me that there were 15 notices of interment received by him with reference to Still-born children. The prompt notification of these cases has enabled us to make enquiries as to the probable causes of death, and in this way has been of much value. Nine cases were certified by Medical Practitioners, and 6 by Midwives.

The causes of death, as far as one could ascertain, were as follows:—Difficult labour 1, Premature Birth 7, Abnormal Child 2, Accident to Mother 2, Miscellaneous 3.

INFANTILE MORTALITY.

The necessity for a somewhat minute consideration of this subject is well recognised. It is only by this consideration, accompanied by an effort to prevent such causes as are preventable, and to mitigate others which perhaps cannot be entirely removed, that it has been possible to reduce the enormous wastage of infant life even to its present size.

The wastage still continues to some extent. Even now 86 per 1,000 of all children born in the Borough in 1914 died before attaining the age of twelve months, the actual number of deaths being 38. This represents more than 10 per cent. of the total number of deaths at all ages in 1914.

As indicated above, the Infantile Mortality Rate for 1914 was 86.1 per 1,000 births. This Rate is, I regret to say, higher than that for 1913, and practically 13 per 1,000 higher than the figure for 1912. To some extent these figures somewhat exaggerate the position, since one is dealing with comparatively small numbers, and therefore an increase of one or two in the number of deaths is given undue prominence by the Annual Rate. The tendency to a low Infantile Mortality Rate as compared with other towns is well maintained, and the figures given below show that the position with regard to the whole country is not an unsatisfactory one.

TABLE V.
INFANTILE MORTALITY RATES.

Year.	Leamington Spa.			England and Wales.		
1895	...	...	136	...	...	161
1896	...	...	127	...	...	148
1897	...	...	106	...	...	156
1898	...	...	145	...	...	161
1899	...	...	142	...	...	163
1900	...	...	131	...	...	154
1901	...	...	99	...	...	151
1902	...	...	113	...	...	133
1903	...	...	125	...	...	132
1904	...	...	123	...	...	146
1905	...	...	102	...	...	128
1906	...	...	126	...	...	133
1907	...	...	112	...	...	118
1908	...	...	84	...	...	121
1909	...	...	101	...	...	109
1910	...	...	74	...	...	106
1911	...	...	88	...	...	128
1912	...	...	73	...	...	95
1913	...	...	80	...	...	109
1914	...	...	86	...	...	105

TABLE VI.
CAUSES OF INFANTILE MORTALITY, 1909-1914.

	1909.	1910.	1911.	1912.	1913.	1914.	Total Deaths 6 years	Rate per 1000 Births.
Marasmus	8	5	5	4	5	6	33	12.3
Premature Birth	5	8	8	10	9	7	47	17.5
Bronchitis	8	2	3	2	3	2	20	7.5
Pneumonia	4	5	2	6	4	2	23	8.6
Convulsions	4	2	...	...	7	1	14	5.3
Congenital Defects	2	4	...	4	2	1	13	4.8
Diarrhœal Diseases	3	...	13	2	2	7	27	10.2
Whooping-Cough	4	2	...	...	1	1	8	3.0
Overlaying	2	2	...	...	...	...	4	1.5
Measles	...	...	3	...	2	1	6	2.3
Non-Tuberculous Meningitis	...	...	...	...	...	1	1	0.3
Tuberculous Meningitis	...	1	1	...	...	...	2	0.6
Tuberculous Peritonitis	1	...	1	...	...	2	4	1.3
Syphilis	...	...	...	...	...	...	...	...
Erysipelas	1	...	...	1	...	...	2	0.6
Other Causes	1	...	5	6	2	7	21	7.9
Total Deaths below 1 year	43	31	41	35	37	38	225	—
Rate per 1000 Births ...	101.8	74.9	88.5	73.3	80.6	86.1	83.7	—

There is one unsatisfactory point in connection with the above Table, and that is the increase in the number of deaths from Diarrhœal Diseases. The number, 7, is the largest in the last five years, save in the year of highest temperature, 1911.

The deaths from Infantile Diarrhœa, arranged according to time of year, were as follows:—

1st Quarter	...	...	...	1
2nd „	...	...	...	0
3rd „	...	...	...	4
4th „	...	...	...	2

As one would expect, the largest number occurred in the hottest part of the year. It is difficult to find a reason for the increase in number over 1913, as the average temperature in the third quarter was slightly lower than in that year.

The decrease in the number of deaths certified as being due to Convulsions is satisfactory. As I stated last year, many of these deaths should be ascribed to the original cause and not merely to a symptom.

Other causes showing an increase are Marasmus and Tuberculous Diseases.

Further and more minute particulars are given in Table XXV. (L.G.B. IV.) on Page 66.

Illegitimate Children show a Death-rate of 55 per 1,000 births. This is contrary to what one would expect, as it is lower than the general Infantile Mortality Rate. The comparatively small numbers, however, must be taken into consideration.

INFANT WELFARE WORK.

It is satisfactory to report that the provisions of the Notification of Births Act have been well observed during the past year. In nearly all instances the occurrence of a birth has been notified to us as required, and in comparatively few cases has it been necessary to write to parents reminding them of the obligations laid on them. I believe that in all these cases ignorance was the sole cause of the neglect to notify. The only unsatisfactory point was that the time within which notification should be made was occasionally exceeded; even in this regard, however, considerable improvement has been experienced of late.

Miss Pierce has continued her most excellent work. There is no doubt about the advantages of the supervision of a Health Visitor over the Infant Life in the poorer districts of the Borough.

During the year a visit was paid to the District by Dr. Lane-Claypon, a Medical Inspector of the Local Government Board, to investigate the work done by this Authority in respect to Infant Welfare. She seemed well satisfied with what was being done, but indicated that an extension of our work in two directions would be advantageous:—(1) By the employment of a whole-time Health Visitor, and (2) The Institution of a Baby Clinic or Infant Consultation in connection with the Infant Health Society, the same to be under Medical Supervision.

The employment of a whole-time Health Visitor is an undoubted necessity. Our work has expanded in a way that

would hardly have been thought possible at the time of Miss Pierce's appointment, so that it is now quite impossible for her to do it; as it is, in order to carry on the limited amount of work that we are now doing, it is necessary for her to work till late in the evening and all Saturday as well, and even then there is the feeling that much has been left undone. I am glad to say that at the time of writing the Committee have seen their way to recommend the appointment of a whole-time Health Visitor.

I have no doubt that if our present half-time Health Visitor is able in the future to devote her whole time to the work, we shall be able to much more efficiently supervise the Infant Welfare in Leamington Spa, and so do our share to secure that which is so important at the present crisis, namely, a healthy rising generation. Moreover, we shall be able to deal thoroughly with other health work which is at present, perforce, being somewhat superficially carried out.

In the early part of the year leaflets dealing with Flies were purchased and distributed. These were of considerable value in bringing to the notice of such inhabitants as were not already aware of the danger, the necessity of dealing with the Fly Nuisance at its commencement, and not leaving it to a later date, when the damage had already commenced and the difficulties were immensely increased.

THE INFANT HEALTH SOCIETY.

As before, one can report very favourably on the work of the Infant Health Society. In some ways the methods pursued by this Society are different to those officially adopted, in so far as the Mothers are encouraged to bring their infants to a centre where they can enjoy a cup of tea and a gossip, relaxations which are so dear to them. Whilst this is going on the Nurse is able to pass amongst them, give advice to such as need it, and moreover keep a watchful eye on the infants.

From the Annual Report of the Society I note that in spite of all calls on the time of the workers that the present crisis has

entailed, special endeavours have been made to bring the Mothers to the meetings, especially those whose husbands are away. In all over 6,000 pints of New Milk were distributed, and also large quantities of Glaxo, a dried milk preparation.

Babies in attendance at the two centres numbered 199, and these were seen 1,972 times.

Expectant Mothers are invited to attend, and it is, I believe, hoped to increase this branch of the work.

I am informed that there has been difficulty at times in getting the Parents to allow their infants to be weighed without clothes. This is a pity, because the value of these weighings depends entirely on their accuracy, and this accuracy must be affected considerably by changes in clothing. It is to be hoped that the helpers will be able to influence the Parents in this direction.

INFECTIOUS DISEASE IN 1914.

There was in 1914 a smaller number of cases of Notifiable Infectious Diseases than in the previous year, the numbers respectively being 155 and 191. The reason for this was a decrease of 34 cases of Scarlet Fever.

Non-notifiable Infectious Diseases, however, show an increase over the number in 1913, there having been 929 as compared with 551. The increase was mainly due to cases of Mumps, of which there was an extensive and widespread epidemic of 592 cases, as against 5 in 1913.

The policy of making uniform enquiries into all cases of Notifiable Infectious Disease has continued, and I am of opinion that if one could arrange the work accordingly, it would be a great advantage to extend this system to Measles, if not to other Non-notifiable Infectious Diseases.

Table XXIII. (L.G.B. Table II.), in which the Infectious Disease Return is analysed according to Age and Ward, is worthy of study, and shows that the major portion of the cases occurred in the South-East and West Wards.

TABLE VII.
CASES OF COMMONER INFECTIOUS DISEASES
NOTIFIED FROM 1894 TO 1914 (21 YEARS).

Year.	Smallpox.	Scarlatina.	Diphtheria and Memb. Group.	Enteric Fever.	Puerperal F.	Erysipelas.	Tuberculosis.	TOTALS.
1894	4	119	23	6	...	13	...	165
1895	...	206	12	8	..	19	...	245
1896	...	70	14	10	2	19	...	115
1897	...	54	16	4	...	11	...	85
1898	...	105	16	13	1	25	...	160
1899	...	47	27	8	...	25	...	107
1900	...	40	16	12	...	33	...	101
1901	1	113	5	14	1	41	...	175
1902	...	96	15	8	...	43	22	184
1903	1	80	16	2	...	47	9	155
1904	...	75	7	4	1	25	5	117
1905	...	22	11	6	...	24	1	64
1906	...	91	28	2	1	24	1	147
1907	...	83	24	4	...	21	1	133
1908	...	79	38	1	...	21	1	140
1909	...	24	73	2	1	24	1	125
1910	...	18	31	...	...	18	1	68
1911	...	34	3	1	1	12	23	74
1912	...	19	7	1	...	10	37	74
1913	...	92	33	2	...	9	55	191
1914	...	58	32	3	...	4	58	155

TABLE VIII.
CASES OF NOTIFIABLE INFECTIOUS DISEASE
REPORTED IN EACH MONTH OF THE YEAR 1914.

	Smallpox.	Scarlatina.	Diphtheria.	Enteric F.	Puerperal F.	Erysipelas.	Tuberculosis.	Acute Ant. Polio Myelitis.	TOTALS.
January ...	...	4	4	...	...	1	6	...	15
February ...	...	11	4	...	..	...	4	...	19
March ...	...	2	1	...	...	1	8	...	12
April ...	...	4	3	1	...	...	6	...	14
May ...	...	11	...	...	...	...	6	...	17
June ...	...	1	2	...	...	...	3	...	6
July ...	...	3	3	1	...	...	6	...	13
August ...	...	4	...	...	...	...	3	...	7
September ...	...	4	2	1	...	1	4	...	12
October ...	...	3	1	...	...	1	4	...	9
November ...	...	8	1	...	...	...	5	...	14
December ...	...	3	11	...	...	...	3	...	17
	...	58	32	3	...	4	58	...	155

TABLE IX.
CASES OF NON-NOTIFIABLE INFECTIOUS DISEASE
REPORTED IN EACH MONTH OF THE YEAR 1914.

	Measles.	Whooping-Cough.	Chickenpox.	Mumps.	Ringworm.	Impetigo.	Scabies.	TOTALS.
January ...	...	...	2	...	1	9	...	12
February ...	...	5	1	...	6	8	1	21
March ..	...	7	...	...	8	13	7	35
April ...	...	7	...	...	2	6	...	15
May ...	1	3	...	2	8	10	1	25
June ...	...	2	12	68	7	8	5	102
July ...	1	9	37	219	9	7	...	282
August ...	...	..	...	...	...	...	...	—
September ...	...	10	2	118	4	16	...	150
October ...	...	...	1	95	4	14	...	114
November ...	6	5	10	71	6	15	...	113
December ...	29	...	5	19	3	4	...	60
	37	48	70	592	58	110	14	929

TABLE X.

DEATHS FROM INFECTIOUS DISEASES, 1885-1914.

YEAR.	Enteric Fever.	Measles.	Scarlatina.	Whooping Cough.	Diphtheria and Membr. Croup.	Pulmonary Tuberculosis.	Other Tuberculous Diseases.	Cancer.
1885	1	1	—	4	1	44		—
1886	1	13	—	2	1	54		—
1887	1	—	1	2	2	35		—
1888	1	19	—	13	5	57		—
1889	3	2	—	3	10	37		—
1890	1	—	—	—	4	30		—
1891	—	—	—	10	2	35		—
1892	2	7	—	1	4	26		—
1893	3	—	—	3	2	30		—
1894	—	—	—	3	3	25		—
1895	1	1	—	2	2	29		—
1896	2	1	—	8	2	30		—
1897	1	—	—	1	3	26		—
1898	—	2	3	—	6	22		—
1899	1	—	—	1	2	48		—
1900	1	—	—	4	3	28		28
1901	2	—	2	—	—	20		26
1902	—	—	1	3	1	17		22
1903	—	—	—	4	1	16		29
1904	1	—	1	1	—	26		30
1905	—	3	—	5	1	18		32
1906	—	1	—	3	2	13		26
1907	—	—	1	1	3	20	—	39
1908	—	2	—	3	5	21	—	35
1909	—	—	—	7	2	20	—	39
1910	—	2	—	7	2	24	—	34
1911	—	16	—	2	—	14	—	51
1912	—	2	—	—	—	15	—	47
1913	1	9	3	2	2	16	7	38
1914	—	5	1	4	3	14	11	41

SMALL-POX.

There were no cases in the Borough during 1914. There was, however, one case in the vicinity, and as the sufferer had stayed at a Common Lodging-house in the Borough, whilst incubating the disease, it was found advisable to isolate the immediate contacts and have them vaccinated. Fortunately, no further cases developed.

The question of Vaccination is still in the same unsatisfactory position. Exemptions would seem to be easily obtained, and it appears that until the danger of an outbreak of Small-pox, apparently so far away, and yet at no time so likely as the present, is realised, the same attitude of leaving things to chance will continue.

SCARLATINA.

There was a marked decrease in the number of cases of Scarlet Fever, as compared with 1913, the respective numbers being 58 and 92. The cases were fairly well distributed throughout the year, February showing the greatest number. Of the 11 cases in February, 8 were in the Shrubland Street district, where it may be remembered there was an epidemic in 1913. Three were from the same family; there was ample opportunity of contact between the various cases, and in most a history of this could be obtained.

The local distribution of the cases was as follows:—

Ward.			Number of Cases.			Incidence per 1,000 of Population.
North-East	...	...	9	...	...	1.4
South-East	...	...	17	...	...	1.9
West	...	...	16	...	...	2.2
Milverton and Lillington...			16	...	...	3.5

The Incidence Rate shows a marked decrease in all Wards save Milverton and Lillington, where there was a large increase of incidence from .22 in 1913 to 3.5 in 1914.

The great majority of the cases in the Milverton and Lillington Ward occurred in that portion of the Ward nearest to the town, just off Clarendon Street. There was in this dis-

strict what one might call a small epidemic; three cases occurred in one house, the last case after the other two had returned from Hospital, but so long after as to render it unlikely to be a "Return" case. In another instance, however, a case occurred within six days of the discharge of a member of the same family from the Heathcote Hospital, and from the results of enquiries made one is forced to the conclusion that this was a "Return" case.

Of the 58 cases, 54 were removed to the Isolation Hospital; the remaining 4 were treated at home, after it had been ascertained that facilities for isolation and proper nursing had been provided.

There was one death from Scarlet Fever; this occurred in the Heathcote Hospital.

DIPHTHERIA.

32 cases of Diphtheria were notified during 1914, or one less than in 1913. This gives an Incidence Rate of 1.2 per 1,000. 24 cases were at once removed to the Heathcote Hospital, two died before removal could be carried out, and the remaining 6 were satisfactorily isolated at home. From one of the cases that died another case arose and was removed to Hospital. A further child was found to have Diphtheria Bacilli in the throat, though apparently quite well, and was treated at home till found free from infection by further swabbing.

In another instance there were five cases which arose in one district, apparently from a School Infection. A later case which occurred was removed to Heathcote Hospital, and there were no further notifications. It is possible that this last case was a Carrier, since it was only by very prolonged treatment that the throat was freed from the causative organism.

As in past years, the throats of all Contacts of a case of Diphtheria, either at home or at school, have been swabbed, and the swabs examined for the presence of the Diphtheria Bacillus.

The distribution and Incidence Rate of the Disease was as follows :—

Ward.	Number of Cases.		Incidence Rate per 1,000 of Population.	
North-East	...	7	...	1.1
South-East	...	13	...	1.5
West	...	10	...	1.4
Milverton and Lillington...	2	...	...	0.4

One case occurred in the Warneford Hospital.

ENTERIC FEVER.

It is satisfactory to note that our number of cases of Enteric Fever still remains low. There were 3 during 1914, giving an Incidence Rate of .18.

The blood of all these cases was tested in our Bacteriological Laboratory, with positive results.

In only one instance could the probable source of the infection be found, the patient having consumed some water-cress gathered from a ditch just outside the Borough, which was presumably contaminated with sewage matter.

It is interesting to note that 14 specimens of blood from suspicious cases were submitted for examination.

ERYSIPELAS.

It seems doubtful whether at the present time the compulsory notification of this disease is of any or much value. During the time one has been in Leamington Spa there has not been one case of this disease notified which would seem at all serious, and certainly no ill effects have arisen from the somewhat perfunctory isolation of these cases.

During 1914 there were 4 notifications. All the cases were very slight; none were isolated in Hospital.

MEASLES.

Reference to Table IX. will show that the number of cases of Measles was much less in 1914 than in 1913. Another fact, however, which is brought out by this Table is that, of the 37 cases, 29 occurred in December, indicating that another

epidemic was commencing ; this has since proved to be the case, as there have been a large number of children suffering from Measles in the first two months of 1915. On the whole, however, it may be said that in 1914 the Borough was fairly free from this disease.

There were during the year 5 deaths from Measles and its sequelæ, and this in itself surely indicates the danger of the disease. Efforts are never spared to impress on the parents the necessity of taking precautions, if possible, to see that their children are not exposed to the infection, and should the disease unfortunately be contracted, the advisability of preventing its spread to others.

In nearly all instances one finds that the doctor has not been called in until the child is *in extremis* and the result a foregone conclusion, so that we endeavour to persuade the parents to obtain medical advice whenever possible.

Number of Cases.		Incidence per 1,000 Population.		Death-rate per 1,000 Population.		Death-rate per 1,000 cases.
37	...	1.4	...	.18	...	135.

Since Measles is not a notifiable disease, we have probably not received information of some cases. The above figures can, of course, only refer to the information we receive.

WHOOPING COUGH.

The larger proportion of the 48 cases of Whooping Cough occurred within the first 7 months of the year, only 15 coming to our notice during the last 5 months.

4 deaths were certified as being due to Whooping Cough, giving a Death-rate of .15 per 1,000, and a Case Death-rate of 83 per 1,000. The same care must be taken when considering these figures as in Measles, since we undoubtedly do not hear of all the cases.

OPHTHALMIA NEONATORUM.

It is rather surprising that there have been no cases of this disease notified, especially when one considers the rather wide definition given to it in the Order of the Local Government Board. One has reason to believe that this absence of notifications is due to some extent to forgetfulness on the part

of those in attendance. From what has recently occurred, however, I believe that the necessity for the notification of this disease is being more fully realised.

ACUTE ANTERIOR POLIOMYELITIS.

No cases were notified during the year under review.

MUMPS.

The past year was notable with respect to an extensive epidemic of Mumps, which affected school attendance greatly. There were in all 592 cases, of which 432 occurred in July, August, September, and October. There were no fatal cases, and as far as one could gather the only ill-effect was interruption of the education of the children affected, and in a few cases a somewhat chronic Glandular Enlargement.

CANCER.

In 1914 there were 41 deaths from Cancer in various forms, representing a Death-rate of 1.57 per 1,000 of the population, Corrected for Age and Sex constitution with the Factor supplied by the Registrar-General, this gives a Death-rate of 1.27 per 1,000. The number of deaths represents 11.4 per cent. of the total number registered in 1914.

These figures show that there is undoubtedly a greater incidence of Cancer in Leamington Spa than in the country generally, but on the other hand it must be realised that this high incidence is also common to other Health Resorts of a similar character to Leamington Spa, and cannot be ascribed, as far as one can judge, to the existence of any local condition.

For the past ten years the number of deaths have been as follows:—

1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
32	30	29	22	26	28	51	47	38	41

Average for past 10 years—34.

From these figures it will be seen that the number of deaths in 1914, though well below the abnormal figure of 1911, is yet above the average, and higher than the figures for any years save 1911 and 1912.

20 of the deaths, or nearly 50 per cent., were in persons over the age of 65 years, and of these 8 were over 75 years of age.

There were 13 deaths in Males and 28 in Females, giving Death-rates of 1.2 and 1.8 per 1,000 respectively, the preponderance in Females is evident and to be expected.

The following Tables XI. and XII. show the number of deaths at various ages, and also deaths tabulated according to the Sex and Site of the disease.

TABLE XI.

AGES AT DEATH FROM CANCER, 1914.

Age.			Male.			Female.		Total.
27	...	...	1	...	—	...	...	1
33	...	...	—	...	1	...	...	1
53	...	...	—	...	1	...	...	1
54	...	...	—	...	2	...	...	2
55	...	...	1	...	—	...	...	1
56	...	...	3	...	1	...	...	4
58	...	...	—	...	1	...	...	1
59	...	...	1	...	2	...	...	3
60	...	...	—	...	2	...	...	2
62	...	...	—	...	1	...	...	1
63	...	...	1	...	—	...	...	1
64	...	...	—	...	3	...	...	3
65	...	...	1	...	2	...	...	3
66	...	...	—	...	1	...	...	1
68	...	...	1	...	—	...	...	1
69	...	...	1	...	—	...	...	1
70	...	...	1	...	—	...	...	1
71	...	...	—	...	1	...	...	1
72	...	...	—	...	1	...	...	1
73	...	...	1	...	2	...	...	3
76	...	...	—	...	2	...	...	2
77	...	...	1	...	—	...	...	1
79	...	...	—	...	1	...	...	1
82	...	...	—	...	1	...	...	1
83	...	...	—	...	1	...	...	1
84	...	...	—	...	2	...	...	2
			—		—			—
			13	...	28	...		41
			—		—			—

TABLE XII.

DEATHS FROM CANCER.

TABULATED ACCORDING TO SITE AND SEX.					
Site of Disease.			Males.		Females.
Stomach	...	...	3	...	3
Large Intestine	...	...	1	...	4
Rectum	...	...	3	...	2
Œsophagus	...	...	2	...	—
Liver	...	...	1	...	2
Bladder	...	...	1	...	—
Rodent Ulcer (Face)	...	...	—	...	2
Uterus	...	...	—	...	6
Breast	...	...	—	...	5
Site not stated	...	...	3	...	2

Since Cancer but rarely occurs primarily in the Liver, probably the cases certified as due to Malignant Disease of the Liver should more properly be referred to a Primary Focus elsewhere.

TUBERCULOSIS.

Number of Notifications:—

1911	...	...	...	...	28
1912	...	...	...	...	39
1913	...	...	...	...	55
1914	...	...	...	...	58

Dealing solely with the figures for 1914 and 1913, they may be analysed as below:—

	Males.		Females.		Total.	
Pulmonary	...	21 (12)	...	12 (17)	...	33 (29)
Non-Pulmonary	...	8 (10)	...	17 (16)	...	25 (26)
	—	—	—	—	—	—
Totals	...	29 (22)	...	29 (33)	...	58 (55)
	—	—	—	—	—	—

N.B.—The numbers in brackets refer to 1913.

It will be seen from the above statement that the number of cases again shows a progressive increase, though naturally not as great as in 1913, when notification of all cases was initiated. The increase is mainly due to Pulmonary Tuberculosis, and in this connection it is satisfactory to note that more advantage is being taken of the facilities provided by the

Authority for the examination of Sputum as an aid to diagnosis, 82 specimens having been examined, as against 64 in 1913. The increase may be due to the emphasis which one has laid on the expectation of the Authority that advantage should be taken of the free bacteriological examination provided, to confirm any diagnosis of Pulmonary Tuberculosis.

The following were the sources from which Primary Notifications were received:—

Private Practitioners.	Panel Practitioners.	Hospital.	Provident Dispensary.	Poor Law.
21	17	10	7	3

WARD DISTRIBUTION.

Ward.	Cases notified.	Deaths.
South-East ...	16	9
North-East ...	13	5
West ...	22	8
Milverton & Lillington	7	3

In 1913 the South-East Ward had the unenviable record of more notifications and more deaths than any of the other three wards. This place has been taken now by the West Ward, which has by far the greatest number of notified cases for the year, but one less death than the South-East. It is impossible, therefore, at present to show which Ward has the greatest incidence of Tuberculosis; this can only be done when the figures for several years are available.

During the past year, as the number of cases in Males and Females were the same, and the Female population is much greater than the Male, it is obvious that the incidence of Tuberculosis was considerably greater amongst Males than Females, roughly in the proportion 1.5 to 1.0; this differs from the incidence in 1913, which was approximately equal in both sexes.

OCCUPATIONS OF NOTIFIED CASES.

Labourers ...	3	Tailor ...	1
Housewives ...	5	Butcher ...	1
Gardener ...	1	Drayman ...	1
Factory Workers ...	5	Clerk ...	1
Domestics ...	7	Painter ...	1
Laundress ...	1	Publican ...	2
Shop Assistant ...	1	School Children ...	9
Carriage Proprietor ...	1	Other Children ...	4
Cart Repairer ...	1	No Occupation ...	6
Nurses ...	3	Occupation not known	3
Printer ...	1		

SITES OF DISEASE.

Lungs	33	Kidney	1
Bones and Joints ...	8	Cerebellum	1
Peritoneum	5	Mesenteric Glands ...	2
Meninges	2	Larynx	1
Cervical Glands ...	2	Generalized	3

One cannot help but be struck when reading the above Table by the fact that the number of cases suffering from Tuberculous Cervical Glands is so small.

DURATION OF THE DISEASE.

Out of the 22 cases who died during 1914, the approximate duration of the disease was ascertained in 10 of the Pulmonary cases. As one would expect, it varied very much, from 9 years to 6 weeks. The actual figures were as follows:—9 years, $4\frac{1}{2}$ years, 2 years, $1\frac{1}{2}$ years, 11 months, 9 months, 9 months, 3 months, 2 months, and 6 weeks.

In making our enquiries, stress has always been laid on the fact that the statistical returns obtained are of use only in so far as they can be devoted to the elucidation of the problem of the cause of the disease and its incidence in various parts of the town. Our main efforts are devoted to giving advice where necessary, so that the sufferer may be enabled to improve his own condition and surroundings, and moreover prevent the spread of the disease to others of his household, and to members of the general public with whom he comes in contact. In some ways the work is a little disheartening, when one finds, for instance, that a man cannot be made to see the danger of infection, and though offered treatment at a Sanatorium, refuses to accept the same. The problem also of the Advanced Case is one of considerable urgency; beyond the Workhouse Infirmary, to which many cases refuse to go, there would seem no means of dealing with such cases.

When requested by the Medical Practitioner in charge of a case not to visit, if the request is coupled by the assurance that the patient is under constant supervision, and is taking all precautions, no visits are paid. As a result of this some of our records are incomplete, only 40 cases being investigated during 1914.

PREDISPOSING CAUSES.

Of the 40 cases of which we have detailed information, 29 gave an opinion as to the predisposing causes of their illness:—

Previous Case of Tuberculosis in Family ...	15	Injury ...	...	...	1
Pneumonia ...	2	Tuberculous Joints in	...	...	3
Bronchitis ...	1	Infancy ...	...	...	1
Influenza ...	1	Overwork ...	...	...	2
Asthma ...	1	Colds ...	...	...	2
		Always Delicate	...	...	2

HOUSING CONDITIONS.

Miss Pierce reports as follows as to the conditions of the cases notified:—

Three-roomed House ...	...	...	2
Four-roomed House ...	...	...	16
Five-roomed House ...	...	...	17
Six-roomed House ...	...	...	9
Eight and over Rooms ...	...	...	7
Institutions ...	...	...	4
Houses let in Lodgings ...	...	...	3

Two houses were Back-to-back, and so through ventilation was impossible. One house was extremely dirty; this, however, was the result of the habits of the tenants. Two dwellings showed marked evidence of dampness; the Sanitary Inspector has since had these put into a more satisfactory condition.

WINDOWS—VENTILATION.

Of the 40 cases investigated, it is satisfactory to note that 36 were in the habit of keeping windows wide open, and so securing as free a circulation of air as possible. Of the remaining four cases, two died almost immediately after notification, and the remaining two have since followed instructions given to them by the Health Visitor.

SLEEPING ACCOMMODATION.

Separate Bed and Bedroom	27
*Separate Bed, but not Bedroom	10
†No separate Bed	12
Doubtful or not known	9

*One had separate bedroom at second visit.

†Two cases had separate bedroom and one separate bed at second visit.

CONDITION OF CASES AT END OF 1914.

At the end of the year 9 patients were considered to have recovered. 18 were still under treatment, 2 were in Warwick Infirmary, 3 had left the district, and the condition of 4 was not known. 22 of the cases died during the year.

TOTAL TUBERCULOSIS IN THE BOROUGH.

Altogether there have been 180 cases notified during the past four years. As far as one can ascertain, the present state of affairs is as follows:—

Dead	72
Apparently recovered	20
Still under treatment	49
Warwick Infirmary	6
Left District	12
Cannot be traced	12
Transmitted to other Authorities	9

THE CONTROL OF TUBERCULOSIS.

Our work in connection with Tuberculosis still continues to be almost entirely administrative in character. Sputum Flasks are supplied as before, also Disinfectant on application. The disinfection of premises is carried out whenever a patient dies or removes to another house. Apart from these measures, which are preventive in character, together with the maintenance of three open-air shelters which were bought for the Warwickshire Insurance Committee, nothing further has been done.

The Health Visitor, Miss Pierce, has continued her invaluable work in visiting and advising cases, but has been

severely handicapped by lack of time, and for that reason has been unable to visit as much as would have been desirable. In the future, as she will be devoting her full time to the service of the Health Committee, this defect will be remedied, and visits at regular and frequent intervals will be possible.

The Tuberculosis Shelters have not been as much in use as in 1913. One has been almost constantly employed; the others have been stored till needed. The impression that one had, that the Shelters would, if not hired by the Insurance Committee, be taken advantage of by the local Medical Practitioners for such cases as did not come under the benefits of the Insurance Act, has not proved to be correct, probably because in the first place these facilities have not been realised locally, but chiefly because the Insurance Committee have extended the benefits to the dependants of Insured Persons as well as to the Insured Persons themselves.

TREATMENT.

Of the 58 cases notified in 1914, 16 have been sent to Sanatoria.

11 cases have been treated in the Warneford Hospital, and one in the Home for Incurables.

One is glad to note that the Warneford Hospital has been recognized by the Local Government Board as an approved Sanatorium for the treatment of cases of Surgical Tuberculosis. The question of the erection of a Sanatorium in the County for the treatment of cases of Tuberculosis has been considered, and I understand that some progress is being made; the opening of such an institution will be a great advantage. A Tuberculosis Officer has been appointed, and I believe that a Dispensary is being established in this Borough. One hears of these latter activities by rumour, and supposes that information will be supplied later as to what has actually taken place. If one might venture to make a suggestion with respect to such an apparently satisfactory scheme as the County Authority are arranging, it would be that Local Authorities should be informed where it is proposed to establish Dispensaries in their district. In several instances the Health Visitor has gone to visit a patient within the Borough, only to be informed that he

or she has been sent to a Sanatorium. It would seem as if some scheme might have been arranged whereby the case should not be removed without the Local Authority being informed, when they could make arrangements accordingly.

THE MUNICIPAL LABORATORY.

Even a casual inspection of Table XIII. will show that there has been again a considerable increase in the work of the Laboratory. The increase will be seen to have been in all branches of the work save the examination of Hair for Ring-worm.

As in former years, the investigation of Swabs taken from the throats of suspected cases of Diphtheria has constituted the bulk of the work, some 585 specimens having been examined, of which number 62 or 10.5 per cent. were found to contain the Klebs Loeffler Bacillus. The procedure is so simple and obvious in such cases as these that one rather makes a point of a swab being taken to confirm the diagnosis in all save cases which are clinically well marked. It may be said that in practically all instances advantage is taken of the facilities offered.

82 specimens of Sputum were examined during the year, and of these 21, or roughly 25 per cent., were found to contain the Tubercle Bacillus. These numbers are the largest experienced since the institution of the Municipal Laboratory.

Under the heading Other Examinations are included the Bacteriological Examination of the Town Water Supply, and the various investigations necessary to ensure the continued purity of the Bulgarian Health Milk supplied at the Pump Rooms.

The continued and increased use made by the Medical Practitioners of the Borough of the modern methods of diagnosis thus provided by the Authority is a source of gratification. The existence of a Laboratory such as this close at hand enables them to get reports as to the conditions found, in a much shorter time than would be the case had the specimens to be sent outside the Borough.

TABLE XIII.
THE WORK OF THE MUNICIPAL LABORATORY
FOR 1914.

		1913	1914
SWABS, from Throats, examined for Diphtheria			
Positive	...	49	62
Negative	...	515	522
Doubtful	...	3	1
SPUTA, examined for Tubercle.			
Positive	...	9	21
Negative	...	55	61
Doubtful	...	—	—
Pus, Urine, etc., examined for Tubercle.			
Positive	...	—	1
Negative	...	4	4
Doubtful	...	—	—
Blood, examined for Typhoid.			
Positive	...	1	3
Negative	...	10	11
Doubtful	...	—	—
Hair, Skin, etc., examined for Ringworm.			
Positive	...	28	18
Negative	...	5	10
Other examinations and preparations		75	91
		754	805

WATER SUPPLY.

PUBLIC SUPPLY.—The Water Supply of Leamington Spa has remained the same as during former years. It is derived from the New Red Sandstone, and though hard, it is of a high standard of purity, which is well maintained.

As instructed by the Water and Sewage Committee, I have taken Samples personally each quarter, and the same have been submitted to both Bacteriological and Chemical Analysis. The results of the most recent analyses are shown below.

Apart from a breakdown in the machinery at Lillington, which entailed working a smaller pump, both wells have given an uninterrupted supply, a total quantity of 261,240,156 gallons having been pumped. This gives an average daily consumption per head of population of 26.8 gallons; this is much the same as in 1913.

At the commencement of the War it was deemed advisable to lock or seal all openings to the reservoirs at both stations. A guard has also been kept over the reservoirs.

Summarised, the following were the results of the examination of the Water made at the beginning of December, 1914. The Bacteriological examinations were carried out by Prof. Delépine, of Manchester, and the Chemical by Messrs. Bostock Hill and Rigby, of Birmingham.

BACTERIOLOGICAL EXAMINATION.

The results of 3 investigations:—

CAMPION TERRACE.

Number of Organisms per 1 c.c. ...	...	...	6
Number of Bacteria associated with Sewage			
Pollution per 100 c.c. ...	...	...	0

LILLINGTON.

Number of Organisms per 1 c.c. ...	...	...	0
Number of Bacteria associated with Sewage			
Pollution per 100 c.c. ...	...	...	0

Both these results are eminently satisfactory; it is evident that the Water is free from any pollution.

CHEMICAL EXAMINATION.

Results of analysis expressed as parts per 100,000:—

CAMPION TERRACE. LILLINGTON.

Free and Saline Ammonia ...	...	0.001	...	0.0
Organic Ammonia ...	...	0.003	...	0.001
Chlorine as Chlorides ...	...	3.15	...	1.55
Nitrogen in Nitrates and Nitrites...	0.0	...	...	Trace.
Oxygen absorbed in 4 hours at 80° F.	0.019	...	...	0.012
Total Solids ...	...	63.0	...	35.0

Hardness by Clarke's Method:—

Temporary	...	9.4	...	5.3
Permanent	...	36.6	...	16.3

In reference to the above results, Dr. Bostock Hill remarks: "I am pleased to be able to report that both the samples are satisfactory in purity, of good quality, and quite normal."

PRIVATE SUPPLIES.—A special investigation was undertaken during 1914 into the quality of the Water Supplies from Private Wells, where the supply was the one in use for potable purposes. There were at the commencement of the year 13 Wells in the Borough used for this purpose.

Samples were taken to the number of 12 and submitted to Dr. Bostock Hill, and as the result of this 9 were found to be unfit for drinking purposes; the other three, though somewhat unsatisfactory, could not be condemned. In five instances the Wells were closed and Town Water was laid on.

There still remain, therefore, 8 dwellings in the Borough which are dependent on Surface Well Water alone for their supplies.

The remainder of the Wells, the water of which was condemned, belong to houses situated at some distance from the Public Supply, and in these instances the wells have been thoroughly cleaned out.

TABLE XIV.

GALLONS OF WATER.

PUMPED FROM 1ST JANUARY TO 31ST DECEMBER, 1914.
CAMPION TERRACE AND LILLINGTON WELLS.

	CAMPION TERRACE.	LILLINGTON.
January (5 weeks) ...	16,128,567 gallons.	9,749,850 gallons.
February	12,725,605 „	7,577,200 „
March	12,746,808 „	6,456,200 „
April	12,438,485 „	7,407,200 „
May (5 weeks) ...	15,366,289 „	10,108,950 „
June	11,912,012 „	8,589,900 „
July	12,514,654 „	9,194,100 „
August (5 weeks) ...	15,038,085 „	10,435,750 „
September	11,835,561 „	8,648,800 „
October (5 weeks) ...	14,085,677 „	10,385,850 „
November	12,181,416 „	6,713,650 „
December	12,820,747 „	6,178,800 „
	159,793,906 „	101,446,250

TABLE XV.

GALLONS OF SEWAGE.

PUMPED FROM 1ST JANUARY TO 31ST DECEMBER, 1914.

January (5 weeks)	31,711,760 gallons.
February	25,703,390 „
March	28,601,270 „
April	27,553,800 „
May (5 weeks)	31,992,960 „
June	26,075,410 „
July	26,396,320 „
August (5 weeks)	30,972,280 „
September	24,875,560 „
October (5 weeks)	30,347,560 „
November	26,305,880 „
December	28,228,300 „

Total Number of Gallons 338,764,490 „

NUMBER OF LOADS OF HOUSE REFUSE DESTROYED.

January	...	...	806	July	...	...	738
February	...	...	681	August	...	...	683
March	...	...	694	September	...	...	711
April	...	...	728	October	...	...	692
May	...	...	706	November	...	...	680
June	...	...	691	December	...	...	687
							8,497

SANITARY WORK OF THE YEAR 1914.

143 complaints were received during the past year, 58 being from No. 1 District and 85 from No. 2.

171 notices were served in District 1, and 195 in District 2. Of these notices 6 were statutory, 1 in No. 1 District and 5 in No. 2.

373 notices were complied with during the year, and 42 are still outstanding. Some of the notices complied with were standing over at the end of 1913.

SUMMARY OF WORK EXECUTED IN No. 1 DISTRICT.

Houses inspected under "Housing (Inspection of Districts) Regulations, 1910"	...	...	...	...	175
Complaints received	...	...	...	...	58
Inspection of Work in progress	...	...	...	...	561
Re-inspections in relation to Nuisances under notice	...	...	...	...	399
Visits in relation to Notifiable Infectious Diseases	...	...	...	...	66
Visits in relation to Non-Notifiable Infectious Diseases...	...	...	...	...	20
Patients removed to Heathcote Hospital	...	...	...	...	36
House Fumigations	...	...	...	...	83
Steam Disinfections	...	...	...	...	73
Notices to Librarian of Infected Houses	...	...	...	...	41
Visits to Tents, Sheds, Vans, &c.	...	...	...	...	448
Inspections of Factories and Workshops	...	...	...	...	98
„ „ Bakehouses	...	...	...	...	77
„ „ Laundries	...	...	...	...	59
„ „ Outworkers' Premises	...	...	...	...	18

Inspections of Common Lodging-houses	174
„ „ Slaughterhouses	394
„ „ Cowsheds and Milkshops	357
„ „ Foodshops and Premises	354
Visits to Offensive Trade Premises	69
Smoke Tests	44
Water Tests	78
Samples of Foods and Drugs taken for Analysis	90
„ „ Well Water „ „ „ „ „ ..	6
Drains Cleansed	33
„ Repaired	18
„ Re-constructed	43
New Drain Ventilators fixed	1
New Soil-pipes and Ventilators	20
Soil-pipe Ventilators repaired or renewed	5
Intercepting Traps fixed	35
Inspection Chambers built	25
Fresh Air Inlets provided	35
New Gullies fixed	164
New W.C. Pans and Traps fixed	50
W.C. Pans cleansed	15
Flushing Cisterns provided	36
W.C.'s repaired (Floors, Walls, Ceilings, and Roofs) and cleansed	39
New Glazed Sinks fixed	32
Sinks repaired and new Waste Pipes	1
Bath Wastes disconnected	4
Houses repaired (Walls, Ceilings, Floors, and Roofs) ...	42
Houses cleansed (Walls and Ceilings)	53
House Spouting renewed	19
House Spouting disconnected	2
House Overcrowding Nuisances abated	1
Sculleries and Washhouses repaired	36
Soft Water Cisterns cleansed	27
Sanitary Receptacles provided	44
Boundary Walls repaired	4
Yards re-paved or repaired	40
Nuisances from Animals abated	7
Nuisances, Accumulations of Manure, &c., abated ...	17
Workshops cleansed	12
Bakehouses cleansed	19
Laundries cleansed	15

SUMMARY OF WORK EXECUTED IN No. 2 DISTRICT.

Houses inspected under "Housing (Inspection of District) Regulations, 1910"	...	...	...	...	182
House to House Inspections under Public Health Act, 1875	...	...	...	...	61
Complaints received	...	...	...	...	85
Inspection of Work in progress	...	...	...	...	565
Re-inspections in relation to Nuisances under notice	...	...	...	...	664
Visits in relation to Notifiable Infectious Diseases	...	...	...	...	73
Visits in relation to Non-Notifiable Infectious Diseases	...	...	...	...	31
Patients removed to Heathcote Hospital	...	...	...	...	47
House Fumigations	...	...	...	...	98
Steam Disinfections	...	...	...	...	115
Notices to Librarian of Infected Houses	...	...	...	...	54
Visits to Tents, Vans, Sheds, &c.	...	...	...	...	547
Inspections of Factories and Workshops	...	...	...	...	74
,, ,, Bakehouses	...	...	...	...	28
,, ,, Laundries	...	...	...	...	33
,, ,, Outworkers' Premises	...	...	...	...	41
,, ,, Slaughterhouses	...	...	...	...	292
,, ,, Foodshops and Premises	...	...	...	...	532
,, ,, Canal Boats	...	...	...	...	45
Visits to Offensive Trade Premises	...	...	...	...	69
Smoke Tests	...	...	...	...	65
Water Tests	...	...	...	...	41
Vehicles disinfected (Swine Fever Order)	...	...	...	...	294
Drains cleansed	...	...	...	...	19
,, Repaired	...	...	...	...	43
,, Re-constructed	...	...	...	...	36
New Drain Ventilators fixed	...	...	...	...	11
New Soil-pipes and Ventilators	...	...	...	...	4
Soil-pipe Ventilators repaired or renewed	...	...	...	...	10
Intercepting Traps fixed	...	...	...	...	14
Inspection Chambers built	...	...	...	...	17
Fresh Air Inlets provided	...	...	...	...	13
New Gullies fixed	...	...	...	...	109
New W.C. Pans and Traps fixed	...	...	...	...	41
W.C. Pans cleansed	...	...	...	...	10
Flushing Cisterns provided	...	...	...	...	14
W.C.'s repaired (Floors, Walls, Ceilings, Roofs) and cleansed	...	...	...	...	30

New Glazed Sinks fixed	...	...	...	...	9
Sinks repaired, and new Waste Pipes fixed	...	...	...	...	21
Houses Repaired (Walls, Floors, Ceilings, and Roofs)	...	...	...	...	65
Houses cleansed (Walls and Ceilings)	...	...	...	...	19
House Spouting renewed	...	...	...	...	19
House Spouting Disconnected	...	...	...	...	18
House Overcrowding Nuisances abated	...	...	...	...	1
Sculleries and Washhouses repaired	...	...	...	...	25
Soft Water Cisterns cleansed	...	...	...	...	10
Sanitary Receptacles provided	...	...	...	...	43
Boundary Walls repaired	...	...	...	...	10
Yards re-paved or repaired	...	...	...	...	26
Nuisances from Animals abated	...	...	...	...	18
Nuisances, Accumulation of Manure, &c., abated	...	...	...	...	21
Workshops cleansed	...	...	...	...	9
Bakehouses cleansed	...	...	...	...	7
Laundries cleansed	...	...	...	...	6
Samples of Well Water taken for Analysis	...	...	...	...	6

COMMON LODGING-HOUSES.

All the Common Lodging-houses of the Borough are situated in Satchwell Street, and have remained the same as to ownership and extent of accommodation as in previous years. The buildings in one case are old and so arranged as to render supervision difficult; in the other they are somewhat more satisfactory.

Beds are provided for 97 persons, and one house is kept solely for married couples. 174 visits have been paid to these houses, chiefly at night, and four notices have been served and complied with, referring to repairs of roofs, spouts, windows, and floors.

There has been no reason to complain of the condition in which the houses have been kept, considering the class of person who frequents them.

As mentioned in an earlier part of this Report, a man stayed in one of these houses when incubating for Small-pox. The Keeper was seen, and readily complied with our request for the provision of a special room for the isolation of the immediate contacts; he was himself vaccinated at the same time. During the period of quarantine, visits were paid daily by the Medical Officer of Health.

INSPECTION OF CANAL BOATS.

Mr. Harrison reports as follows:—

No. of Boats on Register, December 31st, 1914	...	...	...	...	1
Inspected during 1914	...	...	...	...	45
Conforming to Acts and Regulations	...	...	...	...	41
Infringing Acts and Regulations	...	...	...	...	4
No. of persons for which Cabins were registered	...	...	...	...	161
No. of persons occupying Cabins:—					
Male Adults	...	...	...	...	51
Female Adults	...	...	...	...	43
Children over 5 years	...	...	...	...	26
Children under 5 years	...	...	...	...	28
					— 148

Details of Infringements found and remedied:—

Found.	Infringement.				Remedied.
—	...	Absence of Certificate	...	...	1*
—	...	Overcrowding	...	...	1*
1	...	Boats requiring Painting	...	...	1
3	...	Dilapidated	...	...	1
1	...	Females over 12 Improperly Occupying	...	...	1
—					—
5					5
—					—

* Defects Remedied in Boats Inspected late in 1913.

The above Table gives the statistics referring to Canal Boats. Generally speaking the Boats were found to be in good condition. No cases of Infectious Disease came to the notice of the Inspector.

Mr. Harrison remarks that the conditions found on board Canal Boats are not conducive to the good of children either physically or morally. Moreover, their education must suffer very considerably from the constant change of residence.

SLAUGHTERHOUSES.

There are 25 Slaughterhouses in the Borough, of which 6 are licensed and 19 registered. Their distribution is as follows:—

No. 1 District	...	1 Licensed.	12 Registered.
No. 2 District	...	5 „	7 „

One Registered Slaughterhouse in No. 1 District has been closed for the greater part of the year, and one in No. 2 District is seldom or never used. One Slaughterhouse has during the year been entirely re-modelled, and the alterations made in the Slaughterhouse and Fasting Pens have greatly improved the conditions.

Generally speaking, these places have been kept in as good a condition as the structure and position of the buildings would allow, but one cannot but realise that in many instances they are so situated that it is impossible for them to be suited to the purpose for which they are used. The only remedy for these conditions is a Public Abattoir. The provision of such a building would be of great advantage in connection with the inspection of meat. At present, though we have the aid of most of the Butchers in our endeavours to ensure that the food of the inhabitants of the Borough is sound and free from disease, yet one large building is much more easily kept under observation than a comparatively large number of small ones.

OFFENSIVE TRADES.

There are only 4 so-called Offensive Trade premises in the Borough: in No. 1 District 2 Tripe Dressing and 1 Gut Scraping, and in No. 2 District 1 Tripe Dressing. Frequent visits were paid to these premises and they were found to be in good condition.

Both Inspectors remark that the business of Marine Stores as carried on in the town must essentially be a source of some nuisance. The main cause of this trouble has been the collection of Bones and the storing of them; this storage continues until a certain quantity is secured, when the whole lot is despatched by rail. Every good will has been shown by the proprietors of these businesses to remove the bones speedily when specially requested, but in the hot weather the deposit of even a small number constitutes a source of flies and objectionable smells, and the question arises whether these trades could not be, with advantage, scheduled under the heading of Offensive Trades.

DISEASED AND UNSOUND FOOD.**SEIZED OR SURRENDERED.****DISTRICT NO. 1.**

- 1 Beast's Carcase.—Enteritis.
- 27 Rabbits.—Decomposition.
- 2 Pheasants.—Decomposition.
- 1 Forequarter of Beef.—Decomposition.
- Several pieces of Beef, Mutton, and Fish.—Decomposition.
- Sundry Fruit, Vegetables, and Tins of Condensed Milk.

No Magistrates' Order was necessary in any of the above cases, the whole being willingly surrendered on the representation of the Inspector.

DISTRICT NO. 2.

- 2 Sheep's Carcases and Offal.—Suffocation.
- 1 Sheep's Liver.—Fluke.
- 1 Sheep's Liver.—Echinococci.
- 1 Beast's Carcase and Offal.—Extensive Injuries.
- 1 Beast's Liver.—Abscesses.
- 1 Beast's Liver.—Decomposition.
- 1 Beast's Liver.—Fluke.

The Inspector reports that in the majority of the above cases his advice was sought before any attempt was made to offer the food for sale. Only in one instance was a seizure made, when a diseased Liver was found exposed for sale. The circumstances were reported to the Committee, who considered it sufficient to warn the offender as to his future conduct.

I think it is only just to say how much this Department and the Public generally are indebted to the majority of the Butchers of the Borough for the public-spirited way in which they promptly notify to us any doubtful carcases or parts of carcases which come into their possession. Without this assistance we should find it difficult, having regard to the way in which the Slaughterhouses are distributed throughout the town, to supervise with any approach to efficiency the meat supply of the Borough.

COWSHEDS, DAIRIES, AND MILKSHOPS.

There are 10 Cowsheds and 83 Dairies and Milkshops within the Borough; Mr. Anderson paid 357 visits to these.

The Veterinary Inspector inspects all Milch Cattle monthly, and during the past year, with one exception, has found all healthy. The one exception is referred to under paragraphs dealing with the Tuberculosis Order of the Board of Agriculture.

All Cattle are turned out to graze daily whenever possible.

Six notices were issued for cleansing and limewashing Cowsheds, and all were at once attended to.

Eight notices were served on Dairies and Milkshops for cleansing and limewashing; these were complied with.

ICE CREAM SHOPS.

As far as could be ascertained, these places were kept in a reasonably clean condition during the year. It must be remembered, however, that whenever there is a little warm weather all sorts of premises are used for this purpose. Having regard to the fact that Ice Cream forms such a suitable medium or food for the growth of micro-organisms, and has, in fact, been proved to have been the cause of a number of epidemics, it would be a great advantage if such places were registered. If this were done it would be possible to keep a closer watch on the activities of all vendors of Ice Cream, whether regular or only casual traders.

THE SALE OF FOOD AND DRUGS ACTS.

The following samples were taken and submitted for analysis during the past year:—

			Formal Samples.		Informal Samples.		Total.
Milk	...	...	61	...	3	...	64
Butter	...	...	1	...	5	...	6
Margarine	...	...	2	...	2	...	4
Cheese	...	...	—	...	3	...	3
Lard	...	...	1	...	7	...	8
Coffee	...	...	2	...	1	...	3
Beef Suet	...	...	—	...	1	...	1
Cane Sugar	...	...	—	...	1	...	1
			—		—		—
			67	...	23	...	90

All these samples save 5 were found on analysis to be of good quality. Of the five unsatisfactory samples referred to, 4 were of milk, and in three cases the Committee decided on a prosecution. These prosecutions resulted in a conviction and fine in each instance, as shown below :—

- (1) Milk. 14 per cent. deficiency in Fat. Fine of £2 2s., inclusive of Costs.
- (2) Milk. 18.5 per cent. added Water. Fine, 10s., inclusive of Costs.
- (3) Milk. 14.5 per cent. added Water. Fine, 6s. 6d., inclusive of Costs.

RAG FLOCK ACT, 1911.

In both Districts visits were made at intervals to Furniture and Upholsterer's premises; it was found, however, that the restrictions imposed by the Act had increased the cost of the manufacture of Rag Flocks to such an extent that Wool was being used in its place.

One sample taken was submitted for examination, and proved to be very dirty; it was taken from a mattress which had been sold by auction. The vendor was cautioned by your Committee.

AMERICAN GOOSEBERRY MILDEW ORDER.

During the Gooseberry season frequent examinations were made of all Nursery Gardens, Allotment Gardens, and Shops; Hawkers' Carts were also kept under observation.

There were no fresh cases of the disease discovered, but about 50 trees in one garden were found to be diseased; these, though not previously affected, were close to others which were diseased in 1912 and 1913. The outbreak was reported to the Inspector of the Board of Agriculture. Leaflets were distributed and warning notices posted in prominent places.

WART DISEASE OF POTATOES ORDER, 1914, AND CORKY SCAB OF POTATOES ORDER, 1914.

Two instances of the occurrence of Wart Disease in Potatoes were reported during 1914; in both the Seed Potatoes had been obtained from the same source. The matter was reported to the Board of Agriculture and an Inspector was sent down. Instructions were given by this Inspector personally to the Allotment Holders, and these were carried out under the supervision of the Sanitary Inspector.

No cases of Corky Scab were reported during the year.

Leaflets and posters supplied by the Board of Agriculture were distributed or posted in suitable places for the information of the Allotment Holders.

TUBERCULOSIS ORDER, 1913 (BOARD OF AGRICULTURE).

There were no cases coming under this Order in 1914. One beast was suspected, but died before being reported, and on examination proved not to be Tuberculous.

HOUSING AND TOWN PLANNING ACT, 1909.

HOUSING (INSPECTION OF DISTRICTS) REGULATIONS.

One can again report steady progress in the work of improving the housing conditions of the Working Classes. The progress, though steady, is perhaps slower than one could wish, but if there is a feeling that this be the case, it is essential to consider for a moment what the work implies. Firstly, it is necessary to inspect the houses, and to fill in the somewhat complicated forms required for the Records which must be kept; this work is protracted and arduous. As the result of these inspections, certain recommendations are made, and if passed by the Committee are sent to the owners of the properties inspected. If the owner is willing, the work proceeds straightway, provided a builder can be secured to carry it out in a reasonable time; this latter difficulty is not seldom met with. The Sanitary Inspector has then to be on the spot at intervals to see that repairs are carried out in such a way as to

remedy the evils found. It will be realised, therefore, that though progress may seem slow, yet in reality much work is being done to secure even that progress. The efforts made by the Inspectors are worthy of all praise; they have, of course, the satisfaction, when the work is completed, of seeing the great improvement in living conditions, yet every credit must be ascribed to Mr. Anderson and Mr. Harrison for the spade work necessary to produce these results.

Our Housing Problem still remains the same, as far as one can see. Owing to the illness of one of the Inspectors, it has been impossible to again take a Census of empty houses, but our experience goes to show that the number of these has not increased. There still remains a very considerable number of dwellings which must be dealt with as soon as possible, and it will be necessary for the Authority during the coming year to consider the advisability of closing them. I have hesitated somewhat during the present crisis to ask for Closing Orders with respect to many dwellings, but am of opinion that early action should be taken, even if the actual Closure is deferred to a later date, a procedure which I understand is being followed in some other districts.

At the beginning of the year the Health Committee submitted a scheme to the Council for the purchase of land, which was to be used for the erection of cottages for the Working Classes. This scheme was objected to and thrown out on the plea that it was too ambitious, and also that the site suggested was not suitable for the purpose. It was then proposed that a special Housing Committee should be appointed to consider the matter. This Committee held several meetings and came to the conclusion that no scheme that they could bring forward would be self-supporting, and further that it would be advisable, owing to the restrictions on expenditure imposed by the War, to defer the matter to a later date; it was also stated that it would be well to wait and see whether there would be a decreased demand for housing accommodation by workers from Coventry.

I am of the opinion, generally speaking, that the demand for houses at a rental ranging from 4s. 6d. to 5s. 6d. per week has by no means decreased, and it is to be hoped that the matter will be taken up again in earnest at a more appropriate time. The question as to whether or not a Housing Scheme of

this character can be made to pay is, of course, of considerable importance, and under normal conditions one feels that such a desirable end could be obtained, but even if the work were carried out at some slight loss to the Ratepayers, it would seem worth the doing. When one considers the undesirable conditions under which a considerable proportion of our population live, such conditions as inevitably increase the liability to sickness, not to mention the life-long physical defects entailed by such surroundings, one cannot help but feel that any small expenditure necessitated by a Housing Scheme would be returned with interest in the shape of the improved health of the inhabitants of the Borough.

It has been suggested that use should be made of sites from which buildings have been removed by Demolition Orders. It is necessary to remember, when considering such a suggestion, that in practically all instances where a Demolition Order has been made, the unsuitability of the site for a dwelling-house of any kind has been so manifest as to render any debate on such a question quite unnecessary.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS.

Number of Houses inspected for purposes of Section 17 of Act 1909.	Number of Houses found unfit for habitation.	Number of representations made to the Local Authority with a view to the making of Closing Orders.	Number of Closing Orders Made.	Number of Dwelling Houses, the defects in which were remedied without the making of Closing Orders.	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 defects found to exist.
357	—	—	—	255	—

SYNOPSIS OF INSPECTIONS.—Table XVI. shows in a condensed form the results of the inspections carried out during the past year. It will be seen that 357 houses were inspected after due notice had been given to the tenants.

GENERAL OBSERVATIONS.—No back-to-back houses were inspected. This is due to the fact that all such houses were dealt with during the first two years after the passing of the Housing and Town Planning Act, the idea being to deal with the worst houses first.

No houses were found without through ventilation; the reason for this is explained above.

STRUCTURAL CONDITIONS.—In 123 instances the walls were found to be in only a moderate condition; in 3 instances only was the condition such as to be described as bad.

There were 5 roofs in a really bad condition, and 133 were only in a moderate state.

WATER SUPPLY.—A special effort has been made during the year under review to ascertain which dwellings have only a supply of water from private wells, with a view to the elimination of those which are unfit for potable purposes. Reference has already been made to this subject in the section of this Report devoted to the discussion of the Water Supply.

From the Synopsis it will be seen that only two of the houses inspected were without a continuous supply of pure water derived from the public mains.

Since the public water supply is very hard in character, it is obviously a great advantage that each house should have some satisfactory method of collecting soft or rain water. In 26 instances it was necessary to ask for improvement in this respect.

CLOSET ACCOMMODATION.—There were 352 closets for the 357 houses inspected. These were all of the water carriage type, 92 were long hoppers; this unsatisfactory closet is being replaced by a more modern type as occasion occurs.

243 closets were hand flushed; the objectionable character of this system has been referred to in previous reports, and hardly needs further emphasis. In all instances where possible the provision of a flushing cistern is required.

The structural condition of Closet Buildings has required attention in 96 instances, the opinion of some owners apparently being that such buildings do not need much, if any, attention.

DRAINAGE.—The difference in the character of the property as inspected in 1914, as compared with that in earlier years, is well shown by the fact that there was only one instance of drains being laid beneath house premises; also that

TABLE XVI.

SYNOPSIS OF INSPECTION UNDER THE HOUSING (Inspection of Districts) REGULATIONS FOR YEAR 1914.

Situation of Houses.	Condition of Walls.		Condition of Roofs.		Water Supply.		Closet Accommodation.					Drainage.		Sinks.		Yard.		Out Houses.					Ash Pit Accommodation.		Dampness.				House Spout-ing.		Inmates.			General Conditions.																																				
	Good.	Moderate.	Bad.	Good.	Bad.	Tenn.	S. W. Cistern Satisfactory.	Pan.	Long Hopper.	Hand Flushed.	Cistern Flushed.	Structural Conditions.		Sanitary Fittings.	House.	Outside.	Intercepted and Not Intercepted or Ventilated.	Gullies.	Material.	Not Earthenware.	Trapped.	Not Disconnected.	Paving.		Material.	Condition.		Number of Animals Covered Sanitary Dust Bins.	Other Receptacles.	Damp Proof Course.	Walls.		Ground Floors.		Good.	Bad.	Total.	Males.	Females.	Children under 15.	Average per House.	Back to back.	No through Ventilation.	No through Ventilation.																										
												Good.	Moderate.										Bad.	Good.		Moderate.	Bad.				Good.	Moderate.	Bad.	Good.											Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.	Good.	Moderate.	Bad.
Court Street	55	55	...	49	6	...	55	40	5	24	28	45	7	42	8	2	36	9	7	49	...	55	...	55	...	55	...	55	73	23	59	5	9	20	2	1	74	26	...	4	20	...	17	38	...	52	3	...	50	5	244	79	81	84	4'3	...	...	55												
Charles Street	35	34	1	...	24	11	...	35	...	1	34	18	17	16	9	10	16	11	8	26	...	35	...	35	...	35	...	35	...	35	47	9	33	7	7	...	2	35	15	2	...	17	6	9	3	23	10	14	5	24	11	180	47	46	87	5'14	...	...	35											
Earl Grove	30	30	...	23	7	...	30	12	...	12	18	12	25	5	...	27	2	1	30	...	30	3	27	...	27	3	26	...	19	9	...	30	17	14	30	6	1	10	2	2	13	18	...	4	21	18	12	...	30	...	107	33	36	38	3'56	...	...	30												
Newbold Place	15	15	...	13	2	...	15	11	...	15	15	...	15	...	...	15	...	15	...	...	...	...	15	...	15	...	15	...	15	16	6	16	...	6	...	10	14	...	1	...	10	10	5	...	14	1	...	...	...	35	...	52	18	17	17	3'46	...	...	15											
Rushmore Place	22	22	...	18	4	...	22	20	...	22	3	19	13	7	2	17	4	1	22	...	22	...	22	...	22	...	22	...	22	28	3	21	7	...	3	...	3	20	...	1	11	18	4	...	22	...	22	...	90	25	28	37	4'09	...	...	22														
Ransleigh Street	2	2	...	2	...	...	2	...	...	1	1	2	...	...	2	1	...	1	2	...	2	...	2	...	2	...	2	...	2	...	...	...	...	4	...	...	...	...	...	2	...	2	...	2	...	2	...	6	1	2	3	3'00	...	...	2															
Wansford Place	16	16	...	14	2	...	16	...	...	1	15	16	...	5	4	7	11	4	15	...	16	...	16	...	11	5	15	...	10	5	...	16	17	6	6	4	7	3	...	3	...	4	5	1	...	1	5	10	1	15	1	...	16	...	81	21	21	39	5'06	...	...	...								
Wansford Terrace	7	7	...	7	...	7	3	...	...	5	2	3	4	1	...	4	1	...	7	...	7	...	7	...	2	5	...	7	...	5	...	7	8	1	8	...	1	...	1	...	1	...	1	2	4	1	7	...	...	38	8	9	21	5'43	...	...	7													
Earl Street	4	...	3	1	2	1	4	2	1	1	3	3	1	4	...	4	...	4	...	3	...	3	...	1	2	...	3	1	...	4	8	1	8	...	1	...	...	8	2	...	2	2	1	2	1	1	3	...	3	1	12	3	6	3	3'00	...	...	4												
Holly Street	13	4	8	1	5	8	...	13	3	2	9	4	13	...	8	4	1	9	1	3	13	...	13	...	13	...	3	7	1	9	...	6	5	2	13	26	2	18	8	...	1	1	...	7	...	5	...	13	7	6	...	10	...	3	11	2	39	11	19	9	3'00	...	...	13						
King Street	15	2	13	...	4	11	...	15	1	1	...	15	4	11	11	1	3	15	...	15	...	15	6	9	...	10	5	2	13	...	8	3	4	15	30	8	26	4	...	7	...	1	21	6	...	1	2	15	12	3	...	15	...	14	1	56	15	22	19	3'3	...	...	15							
Prison Street	18	14	4	...	13	5	...	17	15	2	5	13	8	10	18	...	17	1	...	18	...	18	...	10	8	...	18	...	18	...	11	7	15	38	12	37	1	...	12	...	...	7	1	2	8	18	18	...	17	...	1	18	...	55	19	25	11	3'95	...	...	18									
Queen Street	99	23	76	...	36	60	3	98	67	13	29	70	75	24	74	17	8	77	20	2	94	1	98	2	97	...	61	38	10	...	53	41	5	97	195	61	107	20	8	56	3	2135	56	4	14	23	86	58	33	8	81	16	2	93	6	426	138	138	150	4'30	...	...	97							
Thomas Street	9	2	7	...	1	7	1	9	...	1	8	5	4	8	...	1	5	4	...	9	...	9	...	9	...	5	4	...	9	...	8	1	...	9	15	1	13	2	...	1	...	...	7	...	2	8	2	5	2	5	4	...	7	2	31	9	9	13	3'44	...	...	9								
Vacant Street	17	7	9	1	11	6	...	17	13	2	8	9	16	1	13	3	1	16	...	1	17	...	17	...	17	...	7	10	1	16	...	12	1	4	17	34	11	32	1	1	11	...	18	1	...	1	6	12	12	2	3	10	4	3	15	2	63	23	21	19	3'70	...	...	17						
TOTALS	357	321	123	3	219	133	5	355	187	26	92	260	243	109	256	59	37	270	57	25	335	1	356	12	345	...	214	139	27	320	...	229	111	15	353	576	158	474	67	35	135	12	11	110	191	13	33	86	205	189	197	41	295	46	16	325	32	148	450	480	550	4'14	...	...	355					

there were no gullies situated within the houses. On the other hand one notes that there were 345 houses where the drainage system was neither intercepted from the sewer nor ventilated. The question of the provision of an Intercepting Trap is open to discussion, but there can be no doubt that the ventilation of a drainage system is a necessity.

SINKS.—The two types of Sinks which one finds in the houses inspected are those of non-porous Earthenware and those constructed of Brick. The latter are, as a rule, unless very carefully cleaned, unsatisfactory, since after use the joints remain filled with foul matter which ferments and becomes a nuisance. 139 Sinks were of this form of construction.

YARDS.—Paving was bad in 15 and only moderate in 111 instances. The provision of good paving is an obvious necessity and prevents the introduction of much dirt into the houses.

Four houses only had no secondary means of access to the Yard; the removal of refuse is, therefore, generally speaking, well provided for.

OUTHOUSES.—Since these structures take up much room in a back-yard, which is usually none too spacious, it is necessary to supervise them carefully, especially when they are used for the keeping of animals.

There were 734 out-houses, of which 158 were constructed of wood.

All the Closet buildings and Wash-houses were constructed of brick. The remainder were Sheds or Cotes used for various purposes; 319 animals were kept in these Cotes.

ASH PIT ACCOMMODATION.—There were found 191 Covered Sanitary Dust-bins, and 132 receptacles of other kinds of a more or less unsatisfactory nature. Of these 132 receptacles, 86 were found to be in very bad condition, and 33 in only a moderate state.

DAMPNESS.—205 Houses were found to be constructed with damp-proof courses.

Walls were markedly damp in 41 instances, less so in 127.

Ground floors were found to be damp in 62 houses.

INMATES.—It is interesting to note that the average number of persons per house, namely, 4.14, is considerably greater than in the 1913 inspection, when it was found to be 3.88. This difference may be accounted for to some extent by the fact that the houses now being inspected are of a larger type than in the past.

WORK CARRIED OUT UNDER HOUSING (INSPECTION OF DISTRICTS) REGULATIONS.

DISTRICT NO. I.

No. of Houses Inspected during the year	...	...	175
„ „ Closed as Unfit for Habitation	...	...	0
„ „ Repaired and rendered habitable (including those outstanding from last year)	...	...	160
„ „ Now undergoing Repair	...	...	38
„ „ Repairs not yet in hand	...	...	54
House Roofs and Spouting repaired	...	...	60
„ Chimney Stacks repaired	...	...	33
„ Outside Walls repaired and re-pointed	...	...	42
„ Inside Walls repaired	...	...	53
„ Windows new or repaired	...	...	31
„ Windows made to open fully	...	...	54
„ Locks and Latches repaired	...	...	22
„ Fireplaces repaired	...	...	29
„ New Firegrates fixed	...	...	2
„ Staircases repaired	...	...	27
„ Floors new or repaired	...	...	101
„ Walls underpinned	...	...	73
„ Cellar Grids repaired	...	...	1
„ Doors new or repaired	...	...	10
„ Walls and Ceilings stripped and cleansed	...	...	82
„ New Glazed Sinks fixed and Waste Pipes	...	...	19
„ Water Taps fixed over Sinks	...	...	28
Washhouses new	...	...	—
„ cleansed and repaired	...	...	38
W.C.'s new	...	...	—
„ repaired	...	...	31
„ New Pans and Traps fixed	...	...	10
„ Flushing Cisterns fixed	...	...	65
Yards new or repaired	...	...	40

Boundary Walls repaired	2
S.W. Cisterns repaired and cleansed	3
Pumps new or repaired	7
Sanitary Dustbins provided	54
Miscellaneous	49

DISTRICT NO. 2.

No. of Houses Inspected during the year	182
„ „ Closed as Unfit for Human Habitation	0
„ „ Repaired and rendered habitable, including those outstanding from last year	158
„ „ now undergoing Repair	24
„ „ Repairs not yet in hand	51
House Roofs repaired	42
„ Chimney Stacks repaired	46
„ Walls repaired and pointed up	46
„ Inside Plaster Walls repaired	62
„ Windows new or repaired	59
„ Windows made to open with cords and weights	84
„ Locks and Latches renewed	52
„ Fireplaces repaired	69
„ new Firegrates fixed	18
„ Staircases repaired	37
„ Floors new or repaired	169
„ Underpinned with blue bricks	103
„ Bedrooms ventilated	92
„ Spouting renewed	46
„ Doors new or repaired	29
„ stripped and re-papered (in most cases throughout)	92
„ painted	16
„ new Glazed Sinks fixed	35
„ new Sink Wastepipes fixed	47
„ Walls above Sinks cemented	77
„ Town Water laid on to Sinks	28
Washhouses and Sculleries repaired	98
„ „ „ cleansed	26
Sculleries ventilated	35
W.C.'s new	2
„ repaired	53
„ new Pans and Traps	16
„ Pans cleansed	9

W.C.'s Flushing Cisterns fixed	...	...	...	...	54
Yards new or repaired	...	...	...	...	53
Yards Doors new or repaired	...	...	...	...	30
Boundary Walls repaired	...	...	...	...	32
Soft Water Cisterns repaired or cleansed	...	...	...	...	23
Pumps new or repaired	...	...	...	...	17
Sanitary Dust-bins provided	...	...	...	...	61
Miscellaneous	...	...	...	...	64

LOCAL ADMINISTRATION OF FACTORY AND WORKSHOPS ACTS.

There were on the Register at the end of 1914, 257 Workshops, a decrease of 3 on the figure for 1913. These consisted of Bakehouses, Laundries, Dressmaking, and other Workshops of various kinds.

The Table attached (Table XVII.) shows the number of inspections of these premises to have been 378, and the number of written notices served 30. There were no prosecutions under these Acts during the year.

The defects found numbered 32, and it is satisfactory to note that these were practically all attended to at once, only one being not remedied by the end of the year.

The number of Underground Bakehouses is still somewhat large, though of the five which remain, two are very seldom used, save in case of emergency.

HOMEWORK.

The lists of Outworkers are still received with some irregularity, so post cards have been again sent to employers twice during the year, at dates just prior to those mentioned in the Acts, warning them of the necessity of sending in their lists at the right time.

No case of Infectious Disease was notified to the Health Department as having occurred on the premises of an Outworker.

TABLE XVII.

I.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisance.

Premises.	Number of		
	Inspections	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	92	2	—
Workshops (Including Workshop Laundries)	272	28	—
Workplaces (Other than Outworkers' premises included in Part 3 of this Report)	14	—	—
Total	378	30	—

TABLE XVIII.

II.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	Number of Defects			Number of Prosecutions.
	Found	Remedied.	Referred to H.M. Inspector	
Nuisances under the Public Health Acts				
Want of cleanliness	4	4	—	—
Want of ventilation	4	4	—	—
Overcrowding	—	—	—	—
Want of Drainage of floors	2	2	—	—
Other nuisances	12	11	—	—
Sanitary Accommodation {insufficient	4	4	—	—
{unsuitable or defective	6	6	—	—
{not separate for sexes	—	—	—	—
Offences under the Factory & Workshop Act :—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	—	—	—	—
Other offences (Excluding offences relating to outwork which are included in Part 3 of this Report)	—	—	—	—
Total	32	31	—	—

TABLE XIX.
III.—HOME WORK.

NATURE OF WORK.	OUTWORKERS' LISTS, SECTION 107.										OUTWORK IN UNWHOLE SOME PREMISES, SECTION 108.			OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110.				
	Lists received from Employers					Prosecutions					Inspections of Outworkers premises.	Instances.	Notices served.	Prosecutions.	Instances.	Orders made (S. 110)	Prosecutions (Sections 109, 110)	
	Sending twice in the year.		Sending once in the year.		Lists	Notices served on Occupiers as to keeping or sending lists.		Failing to keep or permit inspection of lists.		Failing to send lists.								
	Outworkers		Lists	Outworkers		Con- tractors	Work- men	Con- tractors	Work- men									
	Lists	Con- tractors.		Work- men						Con- tractors.								Work- men
Wearing Apparel—																		
(1) making, &c. ...	36	*	96	3	3	—	3	40	—	—	—	—	—	—	—	—	—	
(2) cleaning and washing	—	*	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Furniture and upholstery ...	2	*	14	—	—	—	2	—	—	—	—	—	—	—	—	—	—	
Locks, latches and keys ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
TOTAL ...	38	—	114	3	3	—	42	—	—	—	—	—	—	—	—	—	—	

* If an occupier gives out work of more than one kind, the work is counted as many times as there are kinds.

* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list should be included among those in column 2 (or 5 as the case may be) against the principal class only, but the outworkers should be assigned in columns 3 and 4 (or 6 and 7) into their respective classes. A footnote should be added to show that this has been done.

TABLE XX.
IV.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number
Bakehouses	44
Laundries	31
Dressmaking, Tailoring and other Workshops ...	182
Total number of Workshops on Register ...	257

TABLE XXI.
V.—OTHER MATTERS

Class.	Number
Matters notified to H.M. Inspector of Factories—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	1
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) {	
Notified by H.M. Inspector ...	5
Reports (of action taken) sent to H.M. Inspector	5
Other	—
Underground Bakehouses (s. 101) :—	
In use at the end of the year	5

SHOPS ACT, 1912.

The Inspector, Mr. E. Jenkins, reports as follows:—

Number of Visits:

No. 1 District	...	...	...	618
No. 2 District	...	...	...	636
Casual or Street Traders	...	...	...	2
Total	...	...	...	1256

The results of these Visits were:

825 Routine Visits.	}	Everything satisfactory.
151 Special Visits.		
98 Shops.		Not all necessary Notices.
128 Shops.		Were exempt.

Infringements, apart from the above, were found in 39 instances. They were as follows:—

Serving after Closing Hours	...	...	...	12
Assistants at work after Closing Hours	...	...	...	11
Notice of Weekly Half Holiday not changed				
when Assistant had another day	...	...	...	5
Not exhibiting "Mixed Shop" notices	...	...	...	4
Miscellaneous	...	...	...	7
				39

The number of infringements of the provisions of this Act was considerably less in 1914 than the previous year; this is sufficient evidence of the vigilance of your Inspector. There was no necessity for proceedings under this Act during the year, a letter from the Medical Officer of Health usually having the desired effect.

One is glad to see that many shops are voluntarily closing earlier on the first three nights of the week; also that some of the Grocers are closing for the dinner hour.

TABLE XXII. (L.G.B. TABLE I.)
VITAL STATISTICS OF LEAMINGTON SPA DURING 1914 AND PREVIOUS YEARS.

YEAR.	Population estimated to middle of each year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Nett.			Uncorrected Number.	Number *	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year.		At all Ages.
		Number	Rate.	Number *						Rate per 1,000 Nett Births.		
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	27,252	...	432	15.8	407	15.0	63	42	43	99.5	386	14.1
1910	27,360	...	414	15.1	408	14.9	45	39	31	74.9	402	14.7
1911	26,739	453	463	17.3	409	15.2	55	69	41	88.5	423	15.8
1912	26,690	467	477	17.8	390	14.6	40	41	35	73.3	391	14.9
1913	26,671	450	459	17.2	378	14.1	47	51	37	80.6	382	14.2
1914	26,652	437	441	16.5	373	13.9	44	30	38	86.1	359	13.4

*In column 6 are included the whole of the deaths registered during the year as having actually occurred within the district. In column 12 is entered the number in column 6, corrected by subtraction of the number in column 8 and by addition of the number in column 9. Deaths in column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in column 8, and by addition of the deaths under 1 included in the number given in column 9.

Area of district in acres }
(exclusive of area } 2,816
covered by water) }
Total population at all ages } 26,713
Total families or separate }
occupiers..... 6,475

At Census of 1911.

The "Public Institutions" taken into account for the purposes of this Table are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums.

TABLE XXIII. (L.G.B. TABLE II.)

CASES OF INFECTIOUS DISEASE NOTIFIED
DURING THE YEAR 1914.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.								TOTAL CASES NOTIFIED IN EACH LOCALITY.				Total Cases Removed to Hospital.
	At all Ages.	Under 1 year.	1 year and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and upwards.	North-East Ward.	South-East Ward.	West Ward.	Milverton & Lillington W.	
Small-pox... ..	...	...	...	...	...	...	...	...	...	...	...	...	..
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	..
Diphtheria (including Membranous Croup)	32	1	4	20	3	3	...	1	7	13	10	2	24
Erysipelas	4	...	...	1	2	...	1	...	1	1	2	...	...
Scarlet Fever	58	..	12	38	7	1	...	...	9	17	16	16	54
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	3	...	...	...	...	2	1	...	...	2	...	1	1
Relapsing Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	..	...	...	...	...	...
Cerebro-spinal Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis	..	...	...	...	...	...	...	...	...	..	...	...	...
Pulmonary Tuberculosis	36	...	1	2	7	16	9	1	7	9	16	4	...
Other forms of Tuberculosis	22	2	1	7	6	5	1	...	6	7	6	3	...
Ophthalmia Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	155	3	18	68	25	27	12	2	30	49	50	26	79

Isolation Hospital, Heathcote, Warwick R.D., provided by Joint Hospital Board.

Small-pox Hospital at Fosse, Southam R.D.,

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TABLE XXIV. (L.G.B. TABLE III.)
CAUSES OF, AND AGES AT DEATH DURING
THE YEAR 1914.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.									DEATHS IN PUBLIC INSTITUTIONS.
	All Ages.	Under 1 year.	1 year and under 2.	2 years and under 5.	5 years and under 15.	15 years and under 25.	25 years and under 45.	45 years and under 65.	65 years and upwards.	
ALL CAUSES—Certified	...	...	...	...	...	...	...	...	...	..
Uncertified	...	...	...	...	...	...	...	...	...	..
Enteric Fever	...	...	...	...	...	...	...	...	...	1
Small-pox	...	...	...	...	...	...	...	...	...	..
Measles... ..	5	1	2	1	1	...	...	...	...	..
Scarlet Fever	1	...	1	...	...	...	...	...	...	..
Whooping Cough	4	1	1	2	...	...	...	...	...	..
Diphtheria and Croup	3	1	...	...	2	...	...	...	...	..
Influenza	3	...	...	...	...	...	1	1	1	1
Erysipelas	...	...	...	...	...	...	...	...	...	..
Phthisis (Pulmonary Tuberculosis)	14	...	...	...	1	2	3	7	1	2
Tuberculous Meningitis	2	...	1	...	1	...	...	...	...	1
Other Tubercular Diseases	9	2	...	1	1	3	1	...	1	3
Cancer, Malignant Disease	41	...	...	...	...	...	2	19	20	4
Rheumatic Fever	...	...	...	...	...	...	...	...	...	...
Meningitis	1	1	...	...	...	...	...	...	...	...
Organic Heart Disease	52	...	...	...	2	...	5	10	35	5
Bronchitis	19	2	1	2	...	...	1	1	12	4
Pneumonia (all forms)	13	2	...	1	...	1	1	4	4	4
Other Diseases of Respiratory Organs	3	...	...	...	...	...	...	...	3	1
Diarrhœa and Enteritis	8	7	1	...	...	...	...	...	...	3
Appendicitis and Typhlitis	1	...	...	...	...	...	1	...	...	3
Cirrhosis of Liver	6	...	...	...	...	...	...	2	4	...
Alcoholism	1	...	...	...	...	...	...	1	...	...
Nephritis and Bright's Disease	22	...	...	...	...	...	1	7	14	6
Puerperal Fever	...	...	...	...	...	...	...	...	...	...
Other accidents and diseases of Pregnancy and Parturition	...	...	...	...	...	...	...	...	...	...
Congenital Debility & Malformation, including Premature Birth	16	16	...	...	...	...	...	...	...	3
Violent Deaths, excluding Suicide...	16	...	...	...	1	4	...	8	3	7
Suicide	2	...	...	...	...	...	...	...	2	1
Other Defined Diseases	117	5	...	1	2	4	8	21	78	16
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...
	359	38	7	8	11	14	24	81	176	65

TABLE XXV. (L.G.B. TABLE IV.)
INFANTILE MORTALITY DURING THE YEAR 1914.

CAUSE OF DEATH.										Total Deaths under One Year.									
ALL CAUSES:—		Certified		Uncertified		Under 1 week.	1-2 weeks.	2-3 weeks.	3-4 weeks.	Total under 4 weeks.	4 weeks and under 3 months.	3 months and under 6 month.	6 months and under 9 months.	9 months and under 12 m'ths.					
ALL CAUSES:—		...	...	...	...	...	...	...	...	...	...	...	...	...					
Certified		...	...	...	...	...	...	...	...	...	...	...	...	...					
Uncertified		...	...	...	...	...	...	...	...	...	...	...	...	...					
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Measles	...	...	...	...	...	...	...	...	...	...	...	1	...	1					
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	1	1					
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	1	1	...	2					
Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Meningitis (not Tuberculous)	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Convulsions	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Laryngitis	...	...	...	...	...	...	1	...	...	1	...	...	...	1					
Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Pneumonia (all forms)	...	...	...	...	...	...	...	1	...	1	...	...	2	2					
Diarrhoea	...	...	...	...	...	...	...	...	...	...	1	...	1	3					
Enteritis	...	...	...	...	...	...	...	...	...	...	...	2	...	4					
Gastritis	...	...	...	...	...	...	...	...	...	...	1	...	...	1					
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Rickets	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Suffocation, overlaying	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Injury at Birth	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Atelectasis	...	...	...	...	...	...	2	...	...	2	...	...	...	2					
Congenital Malformations...	...	...	...	...	...	...	...	...	...	...	...	...	...	1					
Premature Birth	...	...	...	...	...	...	...	...	...	7	...	...	...	7					
Atrophy, Debility and Marasmus	...	...	...	...	...	...	...	...	...	1	2	1	...	6					
Other Causes	...	...	...	...	...	...	1	1	...	2	1	...	...	3					
										12	1	...	1	14	6	7	6	5	38

Nett Births in the year :

Legitimate ... 414

Illegitimate ... 27

66

Deaths in the year of

Legitimate Infants 36

Illegitimate Infants 2

TABLE XXVI.

COMPARATIVE STATEMENT OF BIRTHS AND DEATHS FOR THE LAST TEN YEARS.

ROYAL LEAMINGTON SPA DISTRICT.

NAMES OF LOCALITIES.	ROYAL LEAMINGTON SPA. 1				NORTH-EAST WARD. 2				SOUTH-EAST WARD. 3				WEST WARD. 4				MILVERTON & LILL'S WARD. 5			
	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.
1904	27,060	492	401	61	7281	106	112	12	8470	202	129	24	7486	130	107	21	3823	54	53	4
1905	27,100	526	385	54	7292	131	97	19	8482	195	137	19	7497	134	105	12	3829	66	46	4
1906	27,140	476	390	60	7303	128	93	15	8495	177	136	24	7509	117	105	16	3833	54	55	5
1907	27,207	515	417	58	7321	124	92	11	8516	191	127	23	7528	134	111	20	3842	66	48	4
1908	27,217	428	448	36	7324	123	114	8	8519	146	137	17	7530	102	100	9	3844	57	57	2
1909	27,252	432	386	43	7333	101	105	13	8530	176	118	22	7540	106	100	5	3844	49	63	4
1910	27,360	414	402	31	7371	99	125	8	8543	171	113	12	7554	100	86	8	3892	44	78	3
1911	26,739	463	423	41	6229	122	103	16	8699	173	141	18	7212	102	115	7	4599	66	64	0
1912	26,690	477	391	35	6220	107	85	6	8673	171	120	16	7201	134	109	6	4596	65	77	7
1913	26,671	459	382	37	6215	122	97	5	8668	162	123	14	7196	109	111	12	4592	66	51	6
Averages of Years 1904 to 1913	27,043	468	402	45	6988	116	102	11	8559	176	128	19	7425	117	105	12	4069	59	59	4
1914	26,652	441	359	38	6210	119	90	14	8662	170	127	14	7191	102	96	10	4589	46	46	0

Deaths of Residents occurring beyond the district are included in sub-column *c* of this Table, and those of Non-residents registered in the district excluded.
Deaths of Residents occurring in Public Institutions are allotted to the respective Localities, according to addresses of the deceased.
Deaths of Residents which occurred in the Warneford Hospital, the Home for Incurables, and the River and Canal, are included in the respective Localities to which they belonged.

CONGRESS OF THE ROYAL INSTITUTE OF PUBLIC HEALTH, 1914.

As instructed by the Committee, I attended the Annual Conference of the Royal Institute of Public Health, held in Edinburgh, July 15th to July 20th inclusive.

The various Sectional Meetings of the Conference were held concurrently, so that it was impossible for me to attend all, and no doubt for that reason several interesting papers and discussions were missed. I have, however, endeavoured to gain information of the proceedings so missed from other sources.

SECTION OF STATE MEDICINE.

The President, Dr. W. Leslie Mackenzie, in his opening address, discussed the question: "What are the predominant problems in State Medicine in the coming Ten Years." He drew attention to the following:—Tuberculosis, Housing, Medical Inspection of Children of pre-school age, Maternity and Pre-Maternity, Milk Supply, the Carrier Case in Infectious Disease, the Problem of Venereal Disease, and the Organization of Research.

Dr. A. Mearns Fraser, M.O.H. for Portsmouth, described the steps taken in Portsmouth to reduce the Mortality from Cancer, and emphasised the necessity for recognition of the ravages that the disease is making. He drew attention to the curability of the disease in its early stages by surgical interference, and showed that the obvious remedy was the instruction of the public generally as to the main facts in connection with the disease, though this would necessitate plain speaking. I may say that the Portsmouth Authority has issued leaflets, stating the main facts about Cancer and its recognition.

Housing and its relationship to the Incidence of Tuberculosis was the subject of a paper by Dr. Maxwell Williamson, M.O.H. of Edinburgh. He laid down the proposition that "the number of cases of Pulmonary Tuberculosis in any one district is almost precisely in direct proportion to the number of houses of one or two apartments which exist in it." Whilst the Clinician had his important place in the crusade against

Consumption, and also the same might be said in regard to Sanatoria and Dispensaries, the battle must be fought mainly by the Local Authorities and their Medical Officers.

Progress in the attempt to reduce the ravages of Tuberculosis must be along the line of improved housing conditions; existing conditions must be dealt with even if new schemes are being carried out also. A census recently taken in Edinburgh, with a view to finding out the position, financially and otherwise, of the occupants of about 1,000 houses of one or two rooms, had served to show that there was a distinct tendency on the part of a certain class to occupy a smaller and poorer type of dwelling than was justified by their financial position.

Dr. Alexander James also laid stress on the role of bad conditions in producing a moral deterioration, so to speak, of the Tubercle Bacillus from a comparatively harmless or even beneficial organism to one of the most virulently destructive type. His deduction was that it was the bad conditions against which we should wage war, rather than the Tubercle Bacillus itself.

SECTION OF BACTERIOLOGY AND COMPARATIVE PATHOLOGY.

The first paper was one by Prof. Ritchie, of Edinburgh, on "The Present Relationship of Bacteriology to Water-borne Disease." Amongst other points made by the writer was the following:—"In Urban communities the great difficulty lay in accounting for the small number of cases of Typhoid Fever which still occurred each year, often at one particular season, and whose causation was at present entirely obscure. The necessity for keeping Water Supplies up to the standard of safety, and the possibility that the unexplained cases of Typhoid Fever might, as there was some evidence, be due to water-borne sources, made the bacteriological control of these supplies of the greatest importance." The further part of his paper was devoted to an examination of the bacteriological standard which should be laid down when considering the suitability or otherwise of a water supply.

In the discussion which followed, the view was expressed and emphasised that water should not be condemned after a single test, but that a series of tests should be made.

SECTION OF TUBERCULOSIS.

The earlier and the greater part of the time of this Section was devoted, as one would have expected, to the explanation of the Edinburgh System of Tuberculosis treatment; that is to say, a scheme in which the Dispensary forms the centre from which all other activities radiate. The adaptation of this method to various other boroughs and districts was described by various Tuberculosis Officers present.

The necessity for looking for the root cause of the prevalence of the disease was insisted on by a member of the Lanarkshire County Council, who said that they had made ample provision for the treatment of Phthisis, but had failed miserably in dealing with the cause of the Phthisis. Koch stated in 1901 that the main cause of Phthisis was the overcrowded dwellings and the bad houses of the working people. If housing was the main cause of Tuberculosis, then why in the name of common-sense should we refuse to deal with it. They condemned houses in Lanarkshire, but this only meant more overcrowding. He suggested that Government loans on more favourable terms might be arranged, which would permit of the erection of houses for working people, and the letting of them at a reasonable figure.

Prof. von Pirquet, of Vienna, in a most interesting paper, dealt with the causation of Tuberculosis amongst children, and gave as his opinion that infection was, as a rule, by way of the Lungs, and comparatively seldom by the ingestion of Tuberculous Milk. This opinion, coming from such an authority, was the more interesting in that it is contrary to that generally accepted by other men who have studied the matter. The only reservation that he made was that conditions in Austria are somewhat different to those in this country, in that Milk is almost invariably boiled before being taken.

Prof. Sims Woodhead, in his paper on "Bovine Tuberculosis in relation to Tuberculosis of the Child," stated that "He became more and more convinced that whilst bovine milk was not the main carrier of Tuberculosis to the human subject, it still must account for a fair percentage of the cases of Tuberculosis that occur amongst children. He hoped the Congress would give no uncertain utterance as to the bearing of the Edinburgh findings on the danger of ingestion by infants of milk derived from Tuberculous cattle."

Prof. Stiles said that, seeing that there was so much Bovine Tuberculosis in children, they would be wise if they devoted more attention to the stamping out of Bovine Tuberculosis than hitherto. He maintained that until the Milk Bill then before Parliament were passed, and had taken effect, it was their duty to recommend that all milk given to children should be sterilised.

SECTION OF CHILD WELFARE.

Dr. Forsyth, of London, contributed a paper on "Care of Children under School Age." The Medical Inspection of School Children, he said, had disclosed a wide condition of ill-health, and a large number of the coming generation were deteriorated at five years of age. A great proportion of children, healthy in every respect at birth, became within five years the physically defective entrants whom the Education Authorities were required, at no small cost, to restore, as far as possible, to their original state of health. The mother was a mighty influence for good or evil. If she was enlightened she could turn the advantage to her children's benefit. It was to the mother, her well-being and training, they must look if her children were to be healthy. Only by teaching adolescent girls the rules and methods of infant rearing was the future child welfare to be ensured. No reform was more pressing than the practical training of girls in their responsibilities as mothers.

Dr. J. W. Ballantyne, Edinburgh, urged attention to mothers at the time of pregnancy to prevent much of the mortality which occurred after birth.

The Electric treatment of Milk was described by Prof. Beattie, of Liverpool. The treatment which he described did not absolutely sterilize the milk, and yet it got rid of the Tubercle and other dangerous bacilli. No harm was done to the milk.

THE CLOSING MEETING OF THE CONFERENCE.

The following resolution was passed:—"That in view of the fact that Cancer annually causes nearly 40,000 deaths in England and Wales, and realising that a large proportion of these could be prevented if prompt treatment were secured, this meeting is of opinion that Local Authorities should take steps

to spread a knowledge of the early signs of Cancer, and educate the public as to the curability of Cancer if prompt surgical treatment be secured."

GENERAL CONCLUSIONS.

In considering the work of the Conference, one is straight-way impressed by the insistence of all authorities on the vital and close connection between Tuberculosis and the Housing Problem; the realisation of this fact is of the greatest importance. The enforcement of the housing provisions of the Housing and Town Planning Act is a very essential part of any scheme for the elimination of Tuberculosis, and cannot be said to be any less important than Sanatoria, Dispensaries, and other expensive methods of dealing with Tuberculosis, which have been brought so prominently before the public.

The relationship of Tuberculosis in children to the ingestion of infected milk would seem so obvious from the discussion and the papers which were read, that it behoves all Authorities to take full advantage of the provisions of the Milk and Dairies Act, 1914, for dealing with this matter; for this purpose it would be necessary to take samples and examine the same for evidence of the Tubercle Bacillus. This work is being carried on here in a tentative manner, as in other places, but I think it would be advisable to have occasional samples tested biologically by injection into Guinea Pigs; this work could only be done in a licensed laboratory. The ordinary microscopical method could be continued as before. The elimination of the root cause of the infection of milk by Tubercle Bacilli arising from Bovine sources, by action taken under the provisions of the Tuberculosis Order of the Board of Agriculture, is obviously the most logical method to pursue, and must be attempted. The process is naturally a long one, however, and for the present, at any rate, one must insist on the necessity for the sterilisation, or at any rate pasteurisation, of milk supplied to infants. I am endeavouring to get particulars of the Electrical method as practised in Liverpool.

The necessity for pre-maternal instruction and supervision of children under school age is obvious, and to some extent is unofficially carried out in Leamington. The question of whether more could not be done in this matter is well worthy

of consideration, especially in view of the grants offered by the Government for this purpose.

In conclusion, I would thank the Health Committee for enabling me to attend this Conference, which was of great interest. The association with other Medical Officers of Health, and the discussion of difficulties which would be possible by no other method, adds very considerably to one's interest in the work of this Department, and often indicates further activities which are desirable, to maintain our good reputation amongst towns similar to our own.

Your obedient servant,

H. GIBBONS WARD.

METEOROLOGICAL REPORT, 1914.

The taking and recording of Meteorological Conditions in the Borough has been continued throughout the year. The following instruments are in use:—

AT THE PUMP ROOMS.

- (1) A Standard Fortin Barometer.
- (2) A Self-Recording Barograph.
- (3) A Campbell-Stokes Sunshine Recorder.
- (4) A Wind Vane and Anemometer.
- (5) Lowne's Patent Electric Wind Vane.

IN THE PUMP ROOM GARDENS.

- (6) A Stevenson's Screen, containing a Hygrometer and Maximum and Minimum Thermometer.
- (7) One Solar Radiation Maximum Thermometer, Black bulb in vacuo.
- (8) One Solar Radiation Maximum Thermometer, Bright bulb in vacuo.
- (9) One Terrestrial Radiation Thermometer.
- (10) One 8in. Rain Gauge (Meteorological Office Pattern) with Measuring Glass.
- (11) One Earth Thermometer at a depth of 1 foot.
- (12) One Earth Thermometer at a depth of 2 feet.
- (13) One Earth Thermometer at a depth of 4 feet.

RECORDS AND REPORTS.

The Station is now recognised by the Meteorological Office, who inspect it annually.

A daily record is kept of the readings of all the instruments, and a return is sent to the Meteorological Office every month. Weekly returns are supplied to the Local Press and telegrams are sent each evening to the Meteorological Office, giving the Barometer Reading, Direction and Force of Wind, State of Weather, Dry Bulb Reading, Maximum for the day, Sunshine, Minimum for the day and Rainfall, and weather phenomena. This information appears in the leading newspapers each day, and is also included in the Daily Report of the Meteorological Office. Returns are also sent to the British Rainfall Organisation.

EXTREMES FOR THE YEAR.

BAROMETER.—The highest reading (corrected to 32° F. and Mean Sea Level) was 30.65 on 1st January. The lowest reading was 28.80 on 14th December.

TEMPERATURE.—The highest temperature recorded in the shade during the year was 84° on the 30th of June, and the absolute minimum was 20 degrees on 1st January. The mean maximum for the year was 58.8, and the mean minimum for the year 42.4.

SUNSHINE.—As will be seen from Table XXVIII. there were 1,494.8 hours of bright sunshine during the year. This gives a daily average of 4.09 hours. The maximum sunshine for one day was 14.7 hours on 4th July. The month yielding the most sunshine was June, with 243.7 hours, a daily mean of 8.13 hours.

RAINFALL.—During the year 24.55 inches of rain fell, distributed over 175 days. For the last 34 years the average annual rainfall has been 20.65, and the average number of days upon which rain has fallen 168.6. The wettest month during 1914 was December, with 5.40 inches, which was distributed over 22 days.

MONTHLY NOTES.

JANUARY.—The maximum temperature was 55° on the 9th, and the minimum was 20° on the 1st. The lowest daily maximum was 34° on the 11th, 19th, and 20th, and the highest daily maximum was 50° on the 10th. Snow fell on the 13th and there was fog on the 28th. Only 0.82 ins. of rain fell during the month, on 12 days. The prevailing wind was South-West.

FEBRUARY.—The maximum and minimum shade temperatures were 57° on the 14th and 28° on the 27th respectively. The lowest daily maximum was 46° on the 17th, 18th, and 24th, and the highest minimum 50° on the 15th. The total rainfall for the month was 1.16 ins., distributed over 13 days. There was fog on the 9th, and the prevailing wind was South-West.

MARCH.—The maximum shade temperature for the month was 62° on the 31st, and the minimum was 27° on the 11th. The lowest daily maximum was 43° on the 9th, and the highest daily minimum was 49° on the 31st. Snow fell on the 19th and 20th, and there was a thunderstorm on the 26th, when an admixture of sleet and snow fell. Rain fell on 25 days amounting to 2.36 ins. The prevailing wind was West.

APRIL.—The maximum shade temperature was 71° on the 21st and 22nd, and the minimum was 32° on the 15th and 16th. The lowest maximum was 51° on the 7th and 30th, and the highest minimum was 49° on the 25th. Rain fell on 10 days and totalled 1.26 ins. There were 234.7 hours sunshine, equal to a daily average of 7.33 hours. The corresponding period for last year there were only 91.9 hours sunshine, equal to a daily average of 3.06. The prevailing winds were East, South-West, West, and North-West.

MAY.—The amount of sunshine totalled 169.8 hours, equal to a daily average of 5.48 hours. On the 18th, 21st, and 26th there were over 13 hours' sunshine recorded each day. The maximum shade temperature for the month was 74° on the 18th, and the lowest temperature was 31° on the 2nd and 27th. The lowest daily maximum was 47° on the 9th, and the highest minimum was 54° on the 23rd. The prevailing wind was West.

JUNE.—There were 243.7 hours sunshine during the month, which is equal to a daily average of 8.13 hours. The daily

average for the corresponding period last year was 6.8 hours only. Rain fell on 9 days and totalled 2.77 ins., 1.40 of which fell on the 9th. The maximum shade temperature for the month was 84° on the 30th, and the minimum 41° on the 1st and 8th. The lowest daily maximum was 55° on the 5th and 8th, and the highest daily minimum was 58° on the 30th. The prevailing wind was North-East.

JULY.—Sunshine recorded during the month 140.3, equal to a daily average of 4.52 hours. Rain fell on 17 days and totalled 2.06 in. On 20 days the sky was completely overcast at 9 a.m. There was a thunderstorm on the 12th. The maximum temperature was 83° on the 1st, and the minimum was 44° on the 4th. The lowest daily maximum was 60° on the 26th, and the highest minimum was 62° on the 20th. The prevailing winds were South-West and West.

AUGUST.—There were 191.8 hours of bright sunshine during the month, which is equal to a daily average of 6.17 hours. The rainfall was 1.59 in., distributed over 13 days. The maximum shade temperature was 81° on the 13th and 14th, and the minimum was 45° on the 8th. The lowest daily maximum was 64° on the 5th, and the highest minimum 61° on the 31st. The prevailing wind was South-West.

SEPTEMBER.—The amount of bright sunshine recorded for the month was 176.2 hours, equal to a daily average of 5.87 hours. The daily average for the corresponding period last year was 3.3 hours only. The month was fine and dry; only 0.80 in. of rain fell, and this amount was distributed over 8 days, 0.29 in. being the most to fall on one day. The maximum shade temperature was 80° on the 3rd, and the minimum 31° on the 30th. There were 2.4° of frost recorded on the grass on the 21st and 4.4° on the 30th. The lowest daily maximum was 57° on the 19th, 20th, 21st, and 29th, and the highest minimum was 58° on the 10th. The prevailing wind was North-West.

OCTOBER.—Only 64.3 hours of sunshine were recorded during the month, which equals a daily average of 2.06 hours. The rainfall was 2.32 ins., and distributed over 14 days. The maximum shade temperature was 65° on the 3rd, and the minimum 35° on 19th and 28th. The lowest daily maximum was 53° on the 18th, 20th, 28th, 29th, 30th, and 31st, and the

highest minimum was 53° on the 3rd. The prevailing wind was North-West.

NOVEMBER.—There were 62.6 hours sunshine during the month. Rain fell on 18 days and totalled 2.69 ins. 11.4° of frost were recorded on the grass on the 18th. Fog occurred on 6 days, and there were 5 hoar frosts. The maximum shade temperature registered during the month was 58° on the 3rd and 5th, and the minimum was 25° on the 18th and 19th. The lowest daily maximum was 37° on the 21st, and the highest minimum 50° on the 10th. The prevailing wind was South-West.

DECEMBER.—The sunshine recorded for the month only totalled 40.8 hours. On 15 days the sun was not visible. The rainfall was exceptionally heavy; 5.40 ins. fell on 22 days. Snow fell on the 21st and 28th. There were 7 hoar frosts, and mist or fog on 7 days. On the 24th the fog was exceptionally heavy. The maximum shade temperature was 55° on the 6th, and the minimum 22° on the 25th. The lowest daily maximum was 31° on the 24th, and the highest daily minimum 43° on the 1st, 4th, and 18th. The prevailing wind was West-South-West.

TABLE XXVII.

METEOROLOGICAL AVERAGES
OF LEAMINGTON SPA.



For the 34 Years, 1881—1914.

MONTH.	Means of Barom. 9 a.m.	Air Temperature.		Rainfall.	
		Max.	Min.	Inches	Days.
January ...	29.82	43.9	34.6	1.46	14.1
February...	29.89	44.8	36.5	1.29	12.7
March ...	29.78	50.0	36.2	1.31	17.5
April ...	30.08	56.2	49.0	1.00	12.8
May ...	29.87	63.2	47.7	1.16	10.9
June ...	29.88	72.2	54.3	1.37	12.8
July ...	29.67	75.6	54.3	1.43	9.4
August ...	29.83	73.5	54.2	2.38	14.2
September	29.92	67.6	48.2	1.61	10.0
October ..	29.81	56.2	44.1	2.34	16.0
November	29.54	48.5	37.8	2.45	18.2
December	29.66	48.1	36.0	2.85	20.2
Means ...	29.81	58.3	44.2	20.65	168.8

TABLE XXVIII.
TABLE OF METEOROLOGICAL OBSERVATIONS.
LEAMINGTON SPA, 1914.

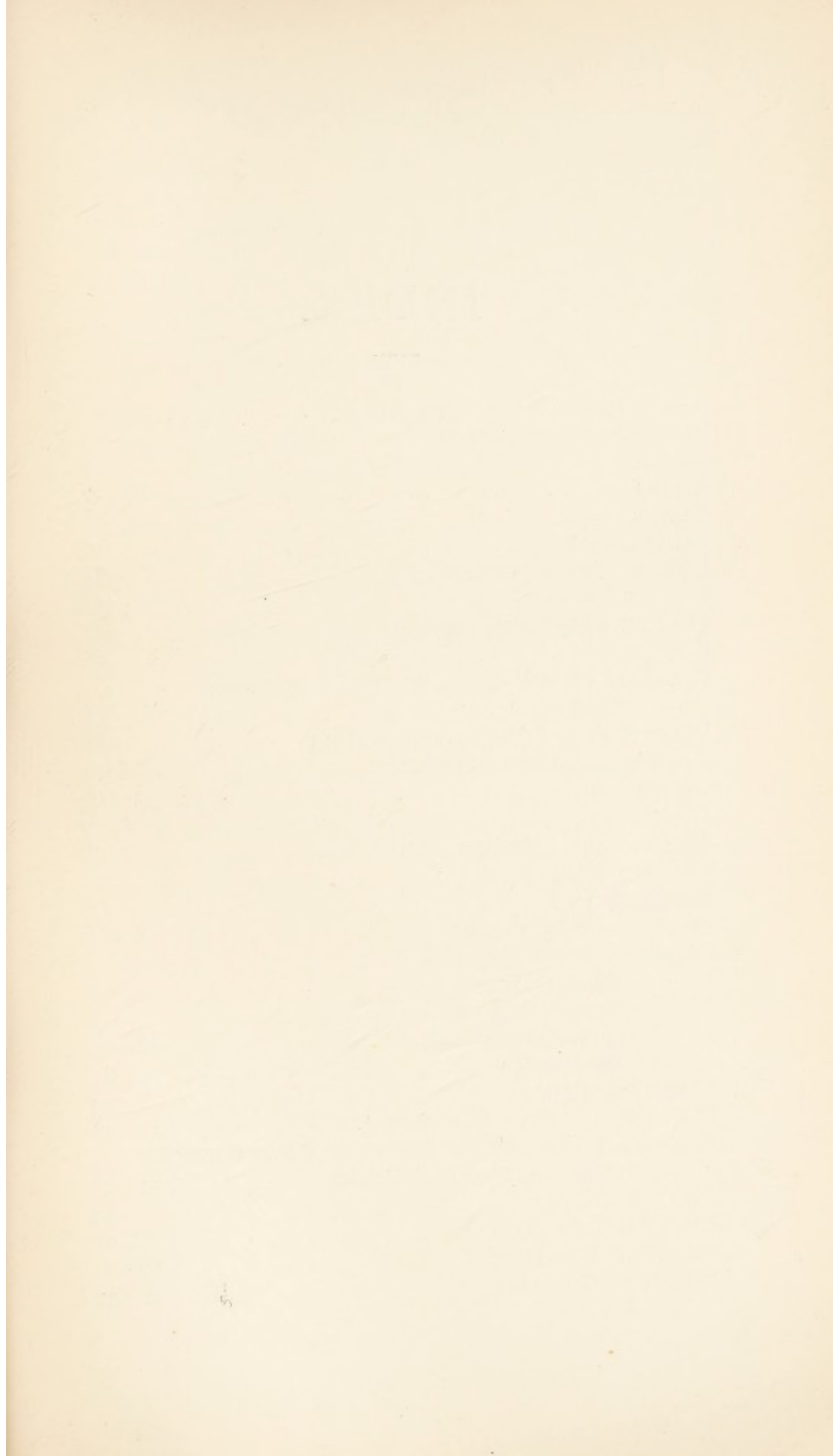
Latitude 52° 18' N. Longitude 1° 30' W.

Month.	AIR TEMPERATURES.										Direction of the prevailing Wind.	RAINFALL.		SUNSHINE	
	Means of Barom. 9 a.m.	Means.		Absolute Temperatures.				Earth Temperature.				Inches.	Days.		
		9 a.m.	Max.	Min.	Max.	Date.	Min.	Date.	At 1 ft.	At 2 ft.					At 4 ft.
January	29.99	37.6	42.6	33.1	55.0	on 9th	20.0	1st	37.7	46.6	49.2	S.W.	0.82	12	37.0
February ...	29.73	43.1	51.0	37.5	57.0	14th	28.0	27th	43.7	44.4	48.6	S.W.	1.16	13	64.3
March	29.63	44.2	50.1	36.8	62.0	31st	27.0	11th	43.7	45.3	48.7	W.	2.36	25	69.3
April	30.43	55.8	59.9	39.4	71.0	21st & 22nd	32.0	15th & 16th	51.6	49.2	49.8	E., S.W., W., N.W.	1.26	10	234.7
May.....	30.12	53.9	59.5	42.6	74.0	18th	31.0	2nd & 27th	57.3	56.4	52.8	E. & S.E.	1.32	14	169.8
June	30.07	60.9	67.9	49.6	84.0	30th	41.0	1st & 8th	63.6	59.6	55.8	N.E.	2.77	9	243.7
July.....	29.88	62.8	69.2	53.8	83.0	1st	44.0	4th	67.0	65.8	59.6	S.W. & W.	2.06	17	140.3
August	30.03	62.5	70.9	52.7	81.0	13th & 14th	45.0	8th	65.8	63.5	60.4	S.W.	1.59	13	191.8
September...	30.10	57.8	61.6	45.9	80.0	3rd	31.0	30th	59.8	62.1	61.0	N.W.	0.80	8	176.2
October	30.69	51.6	57.7	44.6	65.0	3rd	35.0	19th & 28th	52.4	54.5	58.3	N.W.	2.32	14	64.3
November ...	29.87	44.1	50.4	38.2	58.0	3rd & 5th	25.0	18th & 19th	44.0	51.0	55.5	S.W.	2.69	18	62.6
December ...	29.58	41.0	50.0	34.6	55.0	6th	22.0	25th	38.4	49.8	51.2	S.W.	5.40	22	40.8
Totals...	...	...	...	...	...	...	...	...	...	...	...	...	24.55	175	1494.8
Means...	30.01	51.3	58.0	42.4	84.0	30th June.	20	1st Jan.	52.1	54.0	54.2	S.W.	...	...	...

TABLE XXIX.
PREVAILING WINDS & NUMBER OF DAYS PER MONTH.
(Observations taken at 9 a.m.)
YEAR 1914.

	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January	10	...	3	5	1	...	6	5	1
February	11	...	...	...	1	2	10	4	...
March ...	12	1	3	...	...	2	4	8	1
April ...	10	1	2	4	1	...	4	4	4
May ...	4	2	6	6	...	...	3	7	3
June ...	7	1	8	4	...	...	2	2	6
July ...	10	1	3	1	1	1	5	5	4
August..	13	..	2	1	...	1	8	4	2
September	12	3	...	4	2	...	...	2	7
October	14	1	...	4	3	1	...	2	6
November	6	1	1	3	4	...	10	3	2
December	13	...	...	3	...	...	14	1	...
TOTALS	122	11	28	35	13	7	66	47	36





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