

Contributors

Kenilworth (England). Urban District Council.

Publication/Creation

1913

Persistent URL

<https://wellcomecollection.org/works/e3rtgeap>

License and attribution

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

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

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

Urban District of Kenilworth

ANNUAL REPORT

ON THE

HEALTH OF THE DISTRICT,

FOR THE YEAR 1913,

BY

CLAUDE E. TANGYE, B.A., M.D. Lond., D.P.H.,

MEDICAL OFFICER OF HEALTH

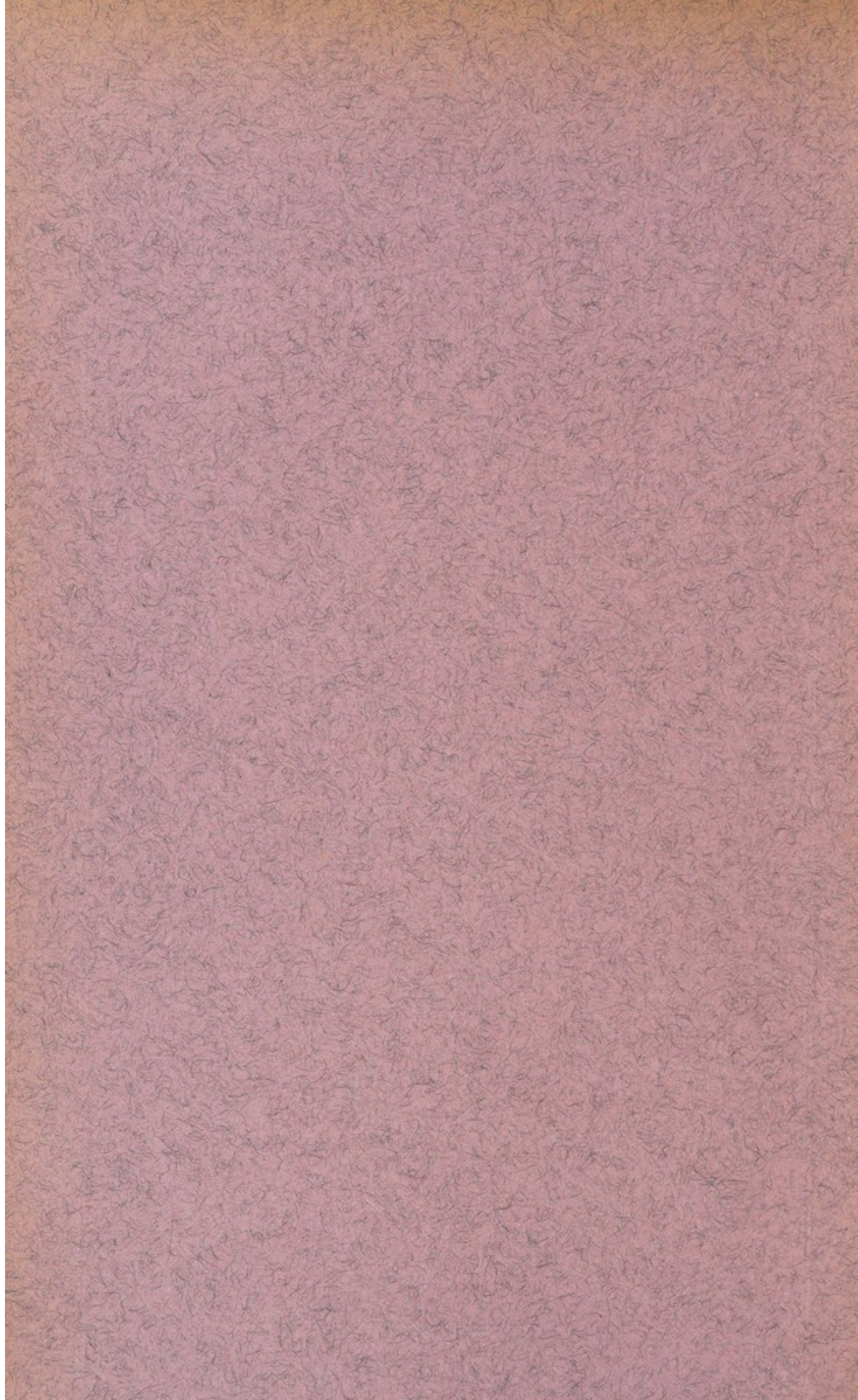
OF THE

Warwickshire Combined Districts.

Leamington :

A. TOMES, 43, 45 & 68, BEDFORD STREET.

1914.



17, LANSDOWNE CIRCUS,
LEAMINGTON,

June, 1914.

To the Kenilworth Urban District Council.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour of presenting my Fifth Annual Report on the health of the Urban District of Kenilworth.


In its preparation it has been practically impossible not to traverse much of the ground dealt with by Dr. E. P. Manby, Inspector of the Local Government Board, in his recent Report on the outbreak of enteric fever of December, 1913.

I have endeavoured here simply to follow the suggestions laid down in the Memorandum issued in December, 1913, by the Medical Officer of the Local Government Board, and would point out that much of the information which would appear to be unnecessary to those who are acquainted with the District is nevertheless particularly required by that Board.

I am, Gentlemen,

Your obedient Servant,

CLAUDE E. TANGYE,
Medical Officer of Health.



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29527673>

Kenilworth Urban District.

Area, exclusive of water, 5,899 Acres.

Inland Water, 15 Acres.

	Census, 1891.	Census, 1901.	Census, 1911.
Population	4,173	4,544	5,776
Inhabited Houses ...	987	1,113	1,420
Average number of persons per house	4.22	4.08	4.07

Estimated Population middle of 1913, 5,970.

Estimated Population, December 31st, 1913, 5,990.

GENERAL CHARACTER OF THE DISTRICT.—The town is chiefly residential, but there is a large artisan population. The latter to a great extent find employment at Coventry, but labour is also employed in the Urban District itself at two brickyards, a tannery, a fellmongery, and several large market-gardens.

The greater part of the District is rural in character, and this surrounds the town.

The population at the middle of 1913 is estimated at 5,970, as compared with 5,930 for 1912. The population is not increasing at the same rapid rate as between the census of 1901 and that of 1911.

SANITARY CIRCUMSTANCES OF THE DISTRICT.

Water Supply.—The town is supplied by the Kenilworth Water Company, the estimated number of houses connected to their mains being 1,274, affecting 5,258 of the total population of the District. There still exist about a dozen private wells in use within the town. In the rural parts shallow wells are the only source of supply.

In my last Annual Report I gave some details as to the sources of supply at the Waterworks. These details were

given by the Water Company, but with regard to the adit were inaccurate, as was also the return on the same subject made by the Company to the Local Government Board in 1911. The adit is now presumed to be about 300 feet long, and on measurement at the man-hole its crown was found to be 10 feet and its floor 16 feet below the surface of the ground, the floor of the adit being about 5 feet below the bed of the brook which runs roughly parallel to the adit. There is an overflow into the brook which may at times have acted as an inlet. Mr. Hill, geological adviser to the Local Government Board, who made an inspection during the recent typhoid epidemic, reported with regard to the adit as follows :—

“It is obvious that it is liable to receive water from the stream by percolation through the sandstone, and that the distance is too small to admit of efficient filtration.”

The adit, which was constructed in 1884, has been the chief source of supply to the town, the other sources consisting of two deep bores, the older bore, sunk in 1894, being 226½ feet deep, and the newer bore, sunk in 1909, being 265 feet deep.

A sample from the main was submitted by the Council on 24th May to the County Analysts, who reported as follows :—

RESULTS OF ANALYSIS EXPRESSED IN PARTS PER 100,000.

Free and Saline Ammonia.	Organic Ammonia.	Chlorine in Chlorides.	Nitrogen in Nitrates and Nitrites.	Oxygen absorb'd in four hours at 80 F.	Total Solid Matter.
0	0.003	2.3	0.11	0.012	34

REMARKS.—Bright—many particles.

This is of good quality, free from contamination, and well suited for a public or private supply.

(Signed)—BOSTOCK HILL & RIGBY.

On 22nd November I received information of the occurrence of a number of cases of gastro-enteritis, and although from the information then available there was no other reason to suspect the water supply, it seemed advisable on account of these cases of gastro-enteritis to have both chemical and bacteriological examinations made. Samples were submitted the same day, with the following results :—

COUNTY ANALYSTS' LABORATORY,
BIRMINGHAM,

December 1st, 1913.

RESULTS EXPRESSED IN PARTS PER 100,000.

Free and Saline Ammonia	...	...	...	trace
Organic Ammonia	...	...	...	0.006
Chlorine in Chlorides	...	...	...	2.4
Nitrogen in Nitrates and Nitrites	...	...	...	0.33
Oxygen absorbed in four hours at 80 F.	...	...	...	0.033
Total Solid Matter	...	...	...	42.
Hardness—				
Temporary	...	...	...	18.5
Permanent	...	...	...	10.0
Total	...	...	...	28.5

REMARKS.—Few large, many small particles.

In appearance it was not at all satisfactory. It contained few large and many small particles, and was not bright and clear.

The Chemical results shewed that the figure for Organic Ammonia is rather too high, as is also that of Oxygen absorbed.

By this we do not intend to suggest that the water should be condemned as unsafe for use, but we are distinctly of opinion that the conditions discovered in this sample are such as to make us think that the water should be regarded as open to some slight suspicion.

We would point out that it is a well established fact that it is extremely difficult to state when a Public Water Supply is only analysed at very rare intervals whether it is safe or not. The minute differences shown by samples when examined at regular intervals enables opinions on the quality to be much more weighty.

Yours faithfully,

(Signed)—BOSTOCK HILL & RIGBY,
County Analysts.

THE UNIVERSITY,
BIRMINGHAM,

December 1st, 1913.

I have to report that this sample of water exhibited a considerable amount of bacteriological impurity.

The number of organisms present in it reached 60 per c.c. at 37 degrees C., and 500 per c.c. at 20 degrees C. The varieties present included some objectionable kinds such as liquefiers of gelatine and bacillus coli. These were present even in one c.c. of the sample, and indicate a contamination, probably with sewage, which should be removed.

The sample was further examined for organisms connected with special diseases, such as typhoid fever and dysentery, but neither the Bac. Typhosus nor any of the dysentery bacilli were isolated. Some non-lactose-fermenters were present, one of which resembled Morgan's Bacillus.

The examination shows the necessity of some search for the source of impurity either at the well or on the course of the pipes to the place of sampling.

(Signed)—C. J. LEWIS,
The University Pathological Department, Birmingham.

I submitted these reports to the District Council on 2nd December, and fully explained their significance. I advised that samples should be immediately submitted from each of the sources of supply separately and fully analysed as quickly as possible, so that the polluted source could be identified and abandoned. If this step had been taken at once, definite information as to which source was polluted would have been available within two or three days, but there was considerable delay in taking further analyses, and it was not until 16th December that the supply from the adit was finally discontinued. Thereafter the two deep bores, which have yielded continuously good analyses, were the only sources of supply. As the result of the receipt of two notifications of typhoid on Saturday, 13th December, and one on

Sunday, 14th December, I issued, on 15th December, with the consent of the Chairman and Vice-Chairman, a notice to the public urging the boiling of all water before use.

In the light of subsequent events there is very little doubt that the adit was polluted with the specific infection of typhoid fever from the adjacent stream which had received on 17th November the overflow of the sewer in Odiborne Close. This sewer was receiving the sewage from certain houses where typhoid fever was being nursed.

Previous to the group of cases of typhoid just mentioned, four other cases had occurred in the town since the beginning of October, but with one possible exception, exhaustive inquiries both at the time and subsequently failed to connect the origin of these cases with the public water supply.

Under the personal supervision of Dr. Houston, of the Metropolitan Water Board, a thorough disinfection of the whole of the water works system was begun on 20th December and completed with all possible despatch.

Samples of water have since been submitted by the Council from the mains for chemical and bacteriological examination at short intervals, and the following are typical results. These show the water which is now derived entirely from the boreholes to be of excellent character.

SAMPLE OF KENILWORTH WATER.

UNIVERSITY BACTERIOLOGICAL DEPARTMENT,
BIRMINGHAM.

I have to report that this sample was free from contamination with sewage, and that none of the tests applied to it disclosed any impurity. Its character were those of a good drinking water.

(Signed)—C. J. LEWIS.

COUNTY ANALYSTS' LABORATORY,
BIRMINGHAM.

RESULTS EXPRESSED IN PARTS PER 100,000.

Free and Saline Ammonia	...	...	0.0003
Organic Ammonia	...	...	0.0016
Chlorine in Chlorides	...	...	1.95
Nitrogen in Nitrates and Nitrites	...	...	0.16
Oxygen absorbed in four hours at 80° F.	...	...	0.009
Total Solid Matter	...	...	45
Hardness—			
Temporary	...	...	15.6
Permanent	...	...	11.0
Total	...	...	26.6

REMARKS.—Bright, few small particles.

This water was quite satisfactory in a chemical sense, and showed characters almost identical with the last sample or two submitted.

(Signed)—BOSTOCK HILL & RIGBY,
County Analysts

I would draw particular attention to the remarks of the Local Government Board Geologist, Mr. J. B. Hill, in Dr. Manby's Report with regard to the deep bores :—

“The danger of contamination from the proximity of the river or from subsoil drainage, to which the water in the adit is exposed, does not exist in the case of the deep-bore wells. The depth of these wells is very great, and the strata through which they pass is not fissured, so that assuming that they are adequately protected by their linings to a sufficient depth, there is practically no risk of polluted water gaining access to them.”

With this statement the opinions of all experts, so far as I know, is in complete accord.

Dr. Manby concludes his Report with a series of valuable suggestions, which are now engaging the consideration of the Council. There can be no doubt that the community would greatly benefit by the transfer of the works to the Council, which question is raised by Dr. Manby. Undoubtedly the

control of the works should be vested in the Sanitary Authority, on whom is the responsibility of the public health.

Drainage and Sewerage.—There is very little to add to the remarks in my last Annual Report under this head. Flushing has been carried out thrice weekly, but since 15th December the water supply from the mains has been so restricted that water from the brook has been used for this purpose.

The effluent from the sewage works has been analysed at quarterly intervals by the County Staff, and has given uniformly satisfactory results.

Closet Accommodation.—Of the 1448 houses of the District, 1,299 are estimated to be connected with the sewer. There are only three instances of dry disposal within the sewered area, and these are under notice. The town is fortunate in the completeness of its water-carriage system, and also in the very general provision of proper flushing cisterns.

There are 149 instances of dry disposal methods in the rural parts of the District. In connection with this I would draw attention to the fifteen houses, known as Crackley Cottages, lying outside the sewer area and provided with pail closets. It would be desirable for the Council to undertake the scavenging of these conveniences since it is the common experience that the work is not satisfactorily done by cottagers themselves, and danger of pollution of the wells at these cottages may arise.

Scavenging.—The Surveyor's Report gives full details with regard to scavenging, and I would here again draw attention to the desirability of the removal of house-refuse at weekly intervals instead of fortnightly as at present. This matter has been before the Council, but no decision has been arrived at to alter the present system.

I hope that the question of the provision of a destructor will receive careful consideration.

SANITARY INSPECTIONS OF THE DISTRICT.—The Table appended to the Sanitary Inspector's Report gives a summary of his inspections, and in his Report will be found full details on this matter, as well as on the premises controlled by Bye-laws.

SCHOOLS.—Inspections have been made as occasion arose at the various elementary schools of the town. On the whole they are satisfactory from a sanitary point of view.

The nuisance at Abbey Hill Schoolroom mentioned in my last Report has been abated, and the premises kept under frequent inspection.

FOOD.—The numbers of registered persons under the Dairies, Cowsheds, and Milkshops Orders, are given in the Inspector's Report. Certain cowsheds are unsatisfactory from a structural point of view, and are about to receive attention from the Sanitary Authority.

An additional bakehouse has come into use during the year, but can only be described as fairly satisfactory in structure. The total number in use is now eight.

The slaughter-houses of the town are fairly well kept, but are not above the average structurally.

The Sale of Food and Drugs Acts are administered in the District by the County Staff, and the Sanitary Inspector has not recently taken samples on behalf of the District Council.

HOUSING.

HOUSING (INSPECTION OF DISTRICT) REGULATIONS 1910.

Number of Houses Inspected for purposes of Sec. 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.
1911 59	8	8	8	5	1
1912 52	13	13	13	Nil*	5
1913 88	14	14	14	21	6

* Defects were remedied in a number of houses which are not included in this space.

During the past year six of the thirteen houses closed during 1912 were rendered fit for habitation, and the remaining seven are used as warehouses. The question as to the demolition of the latter in accordance with the Housing and Town Planning Act, Section 18, has been under the consideration of the Council, and was referred to the Local Government Board, who are awaiting a decision in the High Court which will settle the principle involved.

The 21 houses which were completely repaired had all been inspected during 1912, the remaining four which were outstanding from that year being included amongst the 14 closed during 1913.

Forty-four of the 88 houses inspected during 1913 were found not to require repair, 39 were in hand when the year closed, and in five no repairs had been begun. Included in the latter figures are the 14 houses closed by the Council, of which 12 were in course of repair when the year ended.

The main defects found in housing, besides defects in the actual structure of walls, roofs, floors, windows, etc., were insufficient bedroom lighting and ventilation, absence of proper

food cupboards, and inadequate wash-house and scullery accommodation. In one row of two-bedroomed cottages, although the front bedroom could be made moderately satisfactory, the back bedroom consisted merely of the back portion of the same room partitioned off and obtaining light and ventilation only by a small window or skylight. The best course from most points of view would have been to have removed the partition and converted the houses into single-bedroomed houses ; but this was considered by the Council too drastic a step, and arrangements were made for a suitable window to be inserted at the back, or a large skylight in those cases where the back wall of the house abutted upon the property of another owner who objected to the insertion of windows.

As might be expected, the thorough examination of such houses revealed a considerable amount of overcrowding, and I am indebted to the Inspector for the following list of such cases :—

OVERCROWDING.

The case of overcrowding remaining on the books as unabated at the end of the year under review, will be somewhat abated shortly by the eldest children being boarded out, the particulars relating to this case being :—

Father, mother, and 10 children, 4 being over 10 years of age, occupying cottage with 2 bedrooms with a total cubic capacity of 1,618 cubic feet.

The following are particulars of the eight cases abated during the year :—

- (1) Father, mother, and 7 children (3 being over 10 years of age), occupying cottage with 2 bedrooms with total cubic capacity of 1,517 cubic feet. 3 children boarded out.
- (2) Father, mother, and 4 children (1 being over 10 years of age), and 1 lodger, occupying cottage with 2 bedrooms with a total cubic capacity of 1,298 cubic feet. Lodger removed.
- (3) Father, mother, and 8 children (2 over 10 years of age) occupying house with 2 bedrooms, cubic capacity of bedrooms 1,363 cubic feet. 2 adult children boarded out.
- (4) Father, mother, 3 adult children, and 2 lodgers, occupying cottage with 2 bedrooms having a total cubic capacity of 1,681 cubic feet. 2 lodgers removed.

- (5) Father, mother, 3 adult children, and lodger, occupying cottage with 2 bedrooms having a total cubic capacity of 1,721 cubic feet. Lodger removed.
- (6) Father, mother, and 6 children (3 being over 10 years) occupying house with 2 bedrooms, cubic capacity of bedrooms 1,526 cubic feet. 2 eldest children sent out to sleep.
- (7) Father, mother, and 7 children (4 over 10 years) occupying house with 2 bedrooms, cubic capacity of bedrooms 1,425 cubic feet. 3 eldest children sent out to sleep.
- (8) Father, mother, 3 adult children, and lodger, occupying house with 2 bedrooms, total cubic capacity of bedrooms 1,641 cubic feet. Lodger removed.

Owing to the necessity for action by means of closing orders on the one hand, and the difficulty of finding houses experienced by dispossessed tenants on the other, the Council has been led to consider seriously the question of themselves providing additional housing accommodation. A site has been provisionally obtained with the purpose of erecting 24 three-bedroomed cottages, to be let at from 4s. 3d. to 4s. 9d. per week, and it is hoped to proceed with this scheme without delay. These will undoubtedly meet a pressing demand, and remove much of the present difficulty in dealing with unfit houses.

From the Inspector's Report it will be seen that 12 new small houses and cottages came into occupation during the year.

The supervision over the construction of new houses is carried out by the Surveyor, and the drainage is submitted to a water test before passing.

SANITARY ADMINISTRATION OF THE DISTRICT.

Staff.—The duties of Surveyor and Sanitary Inspector are carried out by Mr. Sholto Douglas, who is a whole-time official. He is also the officer designated for the purpose of the Housing (Inspection of District) Regulations.

During the outbreak of typhoid fever in December a fully qualified Sanitary Inspector was temporarily appointed

to assist Mr. Douglas in the large amount of extra work entailed.

Hospital Accommodation.—Heathcote Hospital, within the area of the Borough of Warwick, and under the control of the Warwick Joint Hospital Board, has continued to meet the requirements of the District satisfactorily. The total available beds at this institution is 70, and scarlet fever, diphtheria, and typhoid fever can be treated therein.

Twenty-four cases of typhoid fever, 14 of diphtheria, and 4 of scarlet fever were admitted from the Kenilworth Urban District during the year.

It was at one time feared that the Heathcote Hospital would not be able to accommodate all the cases of typhoid which might arise, and tentative arrangements were made for their reception elsewhere. Fortunately the number of patients did not prove so great as to necessitate further provision than that available at Heathcote.

The Smallpox Hospital, under the control of the same Board, is situated at Fosse in the Southam Rural District. Sixteen beds are available, and the Hospital is kept in constant readiness, but no case was admitted during the year.

Adoptive Acts.—The following Acts have been adopted by the Urban District Council :—

The Infectious Disease (Prevention) Act, 1890.

The Public Health Acts Amendment Act, 1890 (Parts II., III., and IV.)

The Notification of Births Act, 1907.

Public Health Acts (Amendment) Act, 1907 (Part VI.)

The Private Street Works Act, 1892.

The Baths and Wash-houses Acts.

The Public Health (Water) Act, 1878.

The Infectious Disease (Notification) Act, 1889, has been extended to include cerebro-spinal meningitis and acute poliomyelitis.

PREVALENCE OF AND CONTROL OVER ACUTE INFECTIOUS
DISEASES.

Sixty-eight cases of infectious disease, exclusive of tuberculosis, were notified during the year as compared with 9 during the previous year. These consisted of 40 of typhoid fever, 19 of diphtheria, 3 of erysipelas, 5 of scarlet fever, and one of puerperal fever. Table II. gives the statistical details and areas of occurrence, and Table IIA. gives statistics also for past years.

Typhoid Fever.—After a long period of freedom from this disease a case occurred in February. A second case was notified on 18th October, a third on 22nd November, a fourth on 27th November, and a fifth on 5th December. With the possible exception of this last case, as already mentioned, exhaustive enquiries failed to connect any of these preliminary cases with each other or with any common cause such as the water supply. From 13th December up to the end of the year 35 further cases were notified. The total number of cases in the epidemic which are to be attributed to the infection of the water supply must therefore include these latter 35 cases as well as 4 others notified in January, and one other notified in December in another District, but which originated in Kenilworth. The total number of the cases in the epidemic was thus 40.

Although many of these cases were not notified until long after the date when the water supply was presumably infected, as previously described, there is very little doubt that they all received the infection at the end of November or during the first few days of December, with the exception of one case which was probably infected from a previous case. In this connection it is of interest to observe that the incubation period of typhoid fever is accepted generally as about 14 days, although it may occasionally vary from 8 to 23.

Only one case proved fatal before the end of the year, but 5 further patients succumbed after the close of the year.

At the end of November and early in December a large proportion of the population of all ages were affected quite suddenly with more or less severe gastro-enteritis. The onset of this epidemic corresponded in the majority of the cases with the probable date of pollution of the water supply as above described, allowing for a short period of incubation. The epidemic was, however, by no means confined to the town, large numbers of persons being similarly affected at about the same time in adjacent villages, and in more remote parts of the County, where it was attributed by doctors to influenza. Some Kenilworth residents who habitually consumed large quantities of water were unaffected, whilst others suffered who took none.

A large amount of bacteriological work was undertaken to establish the cause of this outbreak, but the only definite conclusion reached was that it was not of a typhoidal nature. Rather more than half of the forty typhoid patients whose illness must be attributed to the water supply had previously suffered from an attack of the prevailing gastro-enteritis, whilst the rest had been free from this affection.

Diphtheria.—Nineteen cases of diphtheria were notified at various times during the year, and in various parts of the town. The cases were mostly mild, and careful search was made, especially at the schools, for infectious contacts, who were excluded from school attendance until free from infection.

One death was due to this disease at Crackley Cottages.

Scarlet Fever.—The 5 cases of this disease were of the usual mild type.

Puerperal Fever.—One case of this disease was notified in March, and was said to have been attended by a registered midwife, but investigations failed to verify this. The case ended fatally.

The following Table shows the extent to which the County scheme has been utilised for bacteriological examinations by Birmingham University :—

	Positive.		Negative.		Total.
Diphtheria ...	15	...	42	...	57
Enteric Fever...	23	...	28	...	51
Phthisis ...	1	...	7	...	8
					—
					116

Non-notifiable Infectious Diseases.—I am glad to be able to report that, although a few cases of non-notifiable infectious disease occurred amongst school children at various times, none were fatal, and there has been no need during the year to close any school for any kind of infectious disease. The District has thus been fortunate in this respect as compared with the County generally.

The school teachers of the District carefully follow the rules laid down by the County Council with regard to exclusion of members of infected families from school, which rules are based upon the Local Government Board's Memorandum of 1909. Notifications of all infectious disease occurring amongst school children are duly forwarded from the schools to myself.

PREVALENCE OF AND CONTROL OVER TUBERCULOSIS.

Eighteen new cases of tuberculosis were notified during the year, 8 being of phthisis and 10 of other forms of this disease.

Only 3 deaths were due to tuberculosis, all being cases of phthisis.

By an arrangement with the County Medical Officer of Health, I have supplied him every week with lists of new cases of phthisis notified, and the County Health Visitor has visited and given advice where such appeared necessary. Through this arrangement I have from time to time received valuable information as to defective conditions discovered in the patients' homes, and steps have been taken to remedy these.

Disinfectants and sputum bottles are supplied free through the Sanitary Inspector for cases where they are desirable. After deaths from phthisis and after removals of phthisical patients when the circumstances require it, disinfection is carried out by the Inspector, and the bedding removed for steam disinfection to Warwick Workhouse.

The Council purchased a Shelter for the use of a phthisical patient at home, but this did not actually come into use until after the end of the year.

INFANT MORTALITY.

Nine deaths of infants were registered during the year, giving the comparatively satisfactory infant mortality rate of 60 per thousand births.

Table IV. sets forth the various causes of infant deaths, 4 of which were due to various congenital conditions, but none to infantile diarrhoea.

Under the Notification of Births Act, 147 births have been notified by doctor, nurse, or relative, being the exact total of births registered within the District. It is very satisfactory that the Act has been so remarkably well observed.

Weekly lists of births have been regularly forwarded by me to the County officials, and a large number of infants have been visited by the County Health Visitor, and advice given as to feeding and treatment generally.

VITAL STATISTICS.

Tables I. and III. are self-explanatory and need very little comment. The general net death-rate was 13.0 per thousand, the net number of deaths belonging to the District being 78. This is a fraction below the average for the previous five years.

Since the age and sex distribution of any community naturally differs from that of England and Wales generally, the rate just given must be corrected before it is compared with the statistics given below Table I.

On applying the factor supplied by the Registrar-General for this correction, the death-rate becomes 11.5. This is known as the standardised death-rate, and can be used with fair accuracy for comparison with the rates of other towns, and with those of England and Wales given below Table I.

The main features of Table III. have already been mentioned. In addition it will be seen that 13 deaths were due to heart disease, 11 to cancer, and 4 to pneumonia. A large proportion of the 20 deaths over 65 years of age under "other defined diseases" were certified as due to old age.

The net number of births belonging to the District was 151, 4 births occurring outside having to be added to the 147 already mentioned as registered in the District. This number gives the satisfactory birth-rate of 25.3 per thousand, which is slightly above that for 1912, and very much above the average of recent years.

BURIAL GROUNDS.

The District Council made an application to the Local Government Board for the making of a closing order with respect to four burial grounds in the town, and an Inquiry

was held by one of the Board's Inspectors on December 9th, at which my evidence was taken. The application was subsequently refused.

I append the annual report of the Surveyor and Sanitary Inspector :—

REPORT OF SANITARY INSPECTOR.

TO THE CHAIRMAN AND MEMBERS OF THE KENILWORTH URBAN
DISTRICT COUNCIL.

GENTLEMEN,

I have much pleasure in submitting herewith my Tenth Annual Report as Sanitary Inspector, namely, for the year ending December 31st, 1913.

NUISANCES.

Of the 35 nuisances remaining on the books at the end of 1912, 30 have been abated, namely :—25 water closets without adequate flushing arrangements ; 1 foul drain ; 1 inadequate drains to stable ; 1 foul privy ; 1 damp house ; 1 defective gulley. With respect to the remaining 5 nuisances certain works have been executed with a view to abating the nuisances, but as these have not had the desired effect, works calculated to effectually and permanently abate the nuisances are at present in hand.

Notices were served during the year respecting 96 nuisances. Of these nuisances 80 have been abated, namely :—1 accumulation of manure ; 5 foul pit or ditch ; 2 defective overflow from pit ; 8 overcrowding ; 2 absence of adequate receptacle for house refuse ; 2 discharge of foul water on to roadway ; 2 structural defects in dwelling houses ; 4 verminous houses ; 3 impure water supply ; 1 uncovered well ; 5 obstructed or defective drain ; 5 foul privies requiring conversion into W.C.'s ; 5 inadequate intercepting arrangements to house drains ; 7 defective W.C. pans ; 3 defective drain ventilation ; 2 generally defective drainage ; 4 miscellaneous drainage defects ; 1 undrained premises ; 2 slaughter-houses requiring limewashing ; 2 accumulations of offal at slaughter-houses ; 2 dirty bakehouses ; 6 miscellaneous nuisances at workshops ; 4 cowsheds requiring limewashing ; 2 defective drainage of cowsheds.

The following 16 nuisances with respect to which notices were served during the year, remained unabated at the end of the year, but

in all cases the work has either since been executed or is at present in hand, *i.e.*, 3 W.C.'s without adequate flushing arrangements ; 2 insufficient W.C. accommodation ; 1 foul privy requiring conversion into W.C. ; 2 inadequately drained premises ; 1 defective sink ; 1 absence of adequate interceptor to drains ; 1 defective paving to yard ; 1 defective yard drainage ; 1 absence of adequate receptacle for house refuse ; 1 defective W.C. pan ; 1 damp wall to cottage ; 1 cottage overcrowded.

The total number of nuisances on the books at the end of 1913 was therefore 21, including 5 brought forward from 1912.

None of the numerous nuisances discovered whilst inspecting houses under the provisions of the Housing Acts have been included in the above summary. These have all either been abated or are in hand. Further particulars will be found under the heading "Housing and Town Planning Act, 1909."

INFECTIOUS DISEASES (NOTIFICATION) ACT, 1889.

I regret to record that 68 cases of infectious disease (other than tuberculosis) were notified during the year :—40 typhoid fever, 19 diphtheria, 5 scarlet fever, 3 erysipelas, 1 puerperal fever.

39 of these cases were due to the recent unfortunate typhoid epidemic.

Of the 68 cases 42 were removed to Hospital, namely :—24 typhoid fever, 14 diphtheria, 4 scarlet fever.

The remaining 26 cases were isolated at home, namely :—16 typhoid fever, 5 diphtheria, 1 scarlet fever, 3 erysipelas, 1 puerperal fever. Trained nurses were in constant attention upon practically all the typhoid patients isolated at home.

Of the 19 diphtheria cases 3 occurred in one family, and in 3 instances there were 2 cases in the same family.

Of the typhoid cases 5 occurred in a public institution, and there were only 2 instances in which 2 members of the same family were attacked.

In all cases the rooms occupied by the patients were thoroughly fumigated, and in most instances the bedding was stoved. Disinfectants were freely distributed and the drains to all premises where cases were isolated at home were frequently disinfected by your workmen.

During the year in accordance with your instructions I prosecuted the father of a child suffering from diphtheria for obstructing me in the

execution of a Magistrates' Order for the removal of the child to hospital. A fine of £1 and costs was imposed.

The same man was also summoned by me for exposing same child whilst so suffering. A fine of 10s. and costs was imposed. Defendant was committed to prison on the failure of Distress Warrant.

SEWERAGE.

No sewer extension has taken place during the year. Up to December 15th the whole of the sewers throughout the District were regularly flushed thrice weekly by means of the 38 underground flushing chambers in connection with the sewers.

Since that date they have been flushed periodically by means of water pumped from the brook into water carts and carted to the various flushing chambers, this being necessary owing to the Water Company being short of water as a consequence of their abandoning all supply from the shallow adit, the yield from which is suspected of having caused the contamination of the supply. As soon as the Water Company have completed the new bore-hole the usual method of sewer flushing will be resumed. Disinfectant has been freely added to all water used for sewer flushing purposes.

Owing to the fact that the main out-fall sewer has proved insufficient to take the whole of the storm water which gains access thereto in time of heavy storms, a new storm water overflow therefrom into the Tan brook has been constructed during the year.

No new sewer ventilations have been erected during the year. The sewers are efficiently ventilated (except at two points) by means of 27 ventilators. At these two points it is your intention to erect ventilators immediately.

Nothing has yet been definitely settled as to your granting facilities for the discharge into the sewer of the waste from the Fellmongers' Works in Millend.

I estimate that 1,299 of the 1,448 houses in the District are connected with the sewer, and all those not so connected are outlying premises not within reasonable distance of any sewer.

SEWAGE DISPOSAL.

The effluent from the Sewage Disposal Works has been of an excellent character throughout the year.

On four occasions during the year a quantity of tan-liquor was discharged into the sewers, after I had received due notice, and was successfully treated at the works.

The top layer of media has been removed from two of the high level beds and new media substituted, that taken off being added to the already large quantity of old media waiting to be washed. I am sure the purchase of a Mechanical Media Washer cannot be long delayed.

The high level sprinklers were overhauled during the summer.

SCAVENGING.

All the dust bins in the District have been regularly emptied once in every fortnight, and the brick ashpits once in every six or eight weeks.

The demand continues for a weekly emptying of dustbins, and this matter you had before you at your meeting in November, but you could not see your way to alter the present arrangements.

I estimate that there are now within the District 418 fixed ash-pits and 670 moveable dustbins in addition to 49 ashpits in connection with privies, but these latter, with the exception of 3, are all in the out-lying parts of the District remote from any sewer.

In the last nine years 230 ashpits have been replaced by moveable bins, and if the number of these antiquated and objectionable fixed receptacles were further reduced the cost of scavenging would be less, and the weekly collection desired more easy of attainment.

The question of the provision of a Refuse Destructor in lieu of the present tip at the Brickyard for house refuse has also been before you, but for the present at all events you have decided to continue the present system.

SLAUGHTER-HOUSES.

All the five registered slaughter-houses in the District have been frequently inspected throughout the year. I have had to serve 4 informal notices requiring the limewashing of premises (2), and removal of offal (2), and these matters were immediately attended to.

It has been necessary during the year to warn a butcher against slaughtering animals intended for the food of man on premises other than properly registered or licensed slaughter-houses, and so far there has been no recurrence thereof.

DISEASES OF ANIMALS ACT. TUBERCULOSIS ORDER, 1913.

During the year 3 notices have been received from the Inspector of the Local Authority under the Order as to tuberculous animals.

FACTORIES AND WORKSHOPS.

One workshop has been added to the register during the year, the number registered now being :—4 factories, 43 workshops and work-places (including bakehouses) ; total, 47.

All these premises have been periodically inspected, and I have had occasion to serve 6 informal notices respecting miscellaneous nuisances.

The extra means of escape from the Tanyard premises in case of fire referred to in my last Annual Report, has been provided.

BAKEHOUSES.

One bakehouse has been registered during the year. The number on the register is now 10, of which 8 only are in use, and these have been regularly inspected.

Two Statutory Notices had to be served respecting the necessity of limewashing bakehouses, and informal notice respecting certain structural defects in one instance. These matters were immediately attended to. All the bakehouses are kept in satisfactory condition with one exception, and this I am keeping under close observation.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDER, 1880.

During the year six persons have been registered as cow-keepers, dairymen, or purveyors of milk, but as 7 persons have ceased to follow the trade, the number of persons on the register at the end of the year was 26. Of these 15 are cowkeepers selling milk in this District, 8 are cowkeepers selling milk for retail outside the District, and 3 are purveyors of milk only, one of whom obtains supply of milk from outside this District.

The premises occupied by the registered persons have been periodically inspected, and on several occasions I have had to call attention to the necessity of more frequent limewashing and to certain drainage defects. The structure of a few of the cowsheds leaves much to be desired, although the air space and ventilation is on the whole very good.

During the year I have prosecuted a person for carrying on the trade of a cowkeeper and purveyor of milk without being registered as required by law. Defendant pleaded guilty, and was ordered to pay cost of the proceedings.

The desirability of periodically grooming cows in the Dairies is a matter to which the attention of the majority of cowkeepers in this

District may be directed. It is next to impossible to obtain clean, wholesome milk if the udder and hind quarters of the cow are not kept free from dung, as the liability of the milk being polluted by minute particles of dry dung falling off into the can is very great. At certain dairies in the District the regular grooming of the cows is carried out.

WATER SUPPLY.

Details under this head are given in the Report of the Medical Officer of Health.

It is popularly supposed that it is practically impossible to obtain a reliable supply of water from boreholes situated in the site of the Company's present works, but this, I am convinced, is pure fallacy. If the tubes with which the boreholes are lined are sound and water-tight down to the impervious strata through which they run for a considerable depth, and if the tubes are sealed round at the top of such strata, there can be no reason to fear that the water therefrom should not at all times be equal to that shown by recent analysis.

PUBLIC HEALTH (WATER) ACT, 1878.

Three notices have been served during the year requiring the provision, within reasonable distance of dwelling houses, of a wholesome and sufficient supply of water for domestic purposes, samples of water from wells which had previously supplied the premises in question having been reported upon as being unfit for drinking purposes. In one of these instances the notice was complied with by the cleaning out and otherwise improving an existing well, and in other two cases a supply from the Company's mains was laid on.

The three cases mentioned in my last Annual Report in which notices had been served and which had not been complied with before the end of 1912 received attention during the year, inasmuch it was endeavoured to make existing polluted wells yield a pure supply. In this the owners in question have not been successful, so that a supply from the Company's mains will have to be laid on immediately.

Seven certificates under this Act have been issued during the year with respect to 12 new houses completed during the year. All of these are supplied with water from the Company's mains.

NEW BUILDINGS.

Twenty-three plans have been approved during the year, these being for the following works :—15 small houses, 6 cottages, 4 additions

to cottages, 6 additions to houses, 2 shops, 2 shop fronts, 2 motor houses, 1 cowshed, 1 boiler shed.

HOUSING AND TOWN PLANNING ACT, 1909.

Your work under Section 17 of this Act has been greatly handicapped by the fact that there is a great shortage of cottages available for the housing of dispossessed tenants, therefore you have decided to proceed with the building of 24 cottages which you hope to let at rentals of from 4s. 3d. to 4s. 9d. per week. The rent of these cottages when ultimately fixed will be the lowest economic rents possible. The site has been selected and a provisional agreement to purchase subject to the consent of the Local Government Board is being prepared.

With respect to the 13 houses closed during 1912, six have been rendered fit for human habitation, and orders determining the Closing Orders will shortly be issued with respect thereto ; 7 are now being used as warehouses, and you have instructed your Clerk to communicate with the Local Government Board respecting the necessity for the demolition thereof.

With respect to the 25 houses mentioned in my last Annual Report respecting which notices were served upon the owners requiring the execution of certain works in order to prevent the issuing of Closing Orders—21 of these have been thoroughly repaired in accordance with your requirements, and closing orders were issued with respect to the other 4.

Eighty-eight houses have been inspected during the year under and for the purpose of Section 17 of this Act, and 44 of these were found to be in proper order.

Fourteen closing orders have been issued during the year, including those for the 4 cottages referred to above. All the houses with the exception of 2 are now being rendered fit for human habitation, and I have reason to believe that the other 2 will receive attention shortly.

Ten notices have been served under Section 15 requiring landlords to execute works, and in all these cases the necessary repairs are in hand.

Notices have been served upon the owners of 24 houses inspected during the year not falling within the scope of Section 15, informing them that unless certain specified works are executed, Closing Orders will have to be issued. All these works are, I am pleased to say, being executed at the present time.

It has been necessary for me to apply to the Magistrates on your instructions for ejectment orders with respect to tenants of six houses

with respect to which Closing Orders had become operative. The Orders were granted and the tenants thereupon removed without any police action being necessary. As in previous years certain minor defects in houses have been remedied upon my mentioning the matter to the owner, without the necessity of issuing any notice whatsoever with respect thereto.

There are still within the District approximately 762 houses within the limit of rent applicable to the District under Section 14 of the Act which have not been inspected under and for the purpose of Section 17 of the Act, but I hope to have inspected all these before the end of 1915.

I am, Gentlemen,

Your obedient Servant,

SHOLTO DOUGLAS, C.E.,

M.R. San.I.,

Surveyor and Sanitary Inspector.

URBAN SANITARY DISTRICT OF KENILWORTH.
SUMMARY OF SANITARY WORK DONE IN THE INSPECTOR OF NUISANCES'
DEPARTMENT DURING THE YEAR 1913.

			Inspections and Observations made.	Notices served.		Nuisances Abated after Notice.
				Statu- tory.	In- formal.	
Dwelling Houses and Schools—						
Foul Conditions	...	...	14	3	4	4
Structural Defects	...	...	8	3	3	3
Overcrowding	...	...	94	9	9	8
Unfit for Habitation	...	...	88	14	—	1
Lodging Houses	...	...	—	—	—	—
Dairies and Milkshops	...	...	104	—	6	6
Cow Sheds	...	...		
Bakehouses and Workshops	...	...	119	2	8	8
Slaughter-houses	...	...	26	—	4	4
Canal Boats	...	...	—	—	—	—
Privies	...	...	18	5	8	8
Deposits of Refuse and Manure	...	...	5	1	1	1
Water Closets	...	...	45	28	7	32
House Drainage—						
Defective Traps	...	...	85	1	—	1
Generally Defective Drainage...	...	...		1	2	2
No Disconnection	...	...		2	4	4
Undrained Premises	...	...		1	1	1
Other Faults	...	...		10	13	14
Water Supply...	...	...	5	3	3	3
Pigsties	...	...	8	—	—	—
Animals improperly kept	...	...	6	—	—	—
Offensive Trades	...	...	10	—	—	—
Smoke Nuisances	...	...	6	—	—	—
Other Nuisances	...	...	7	4	5	5
Made Gravel Drained Stables	...	...	1	1	—	1
Foul Pit or Ditch	...	...	8	3	5	5
TOTALS			657	91	83	110

	No.
Seizures of Unwholesome Food (voluntarily surrendered)	...
Samples of Food taken for Analysis	...
Ditto of Food found Adulterated	...
Ditto of Water taken for Analysis	6
Ditto of Water condemned as unfit for use	3

NOTE.—Where an inspection or notice embraces more than one defect, it may be enumerated separately as regards each such defect.

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

Lots of Infected Bedding Stoved or Destroyed	...	...	...	20
Houses Disinfected after Infectious Disease	...	...	...	79
Schools ditto ditto ditto	...	...	...	—
Prosecutions for Obstructing Execution of Magistrates Order for Removal of Persons suffering from Infectious Disease	...	...	...	1
Convictions ditto ditto ditto ditto	...	...	...	1
Prosecutions for Exposure of Infected Persons or Things	...	...	...	1
Convictions ditto ditto ditto ditto	...	...	...	1

SHOLTO DOUGLAS, Inspector of Nuisances.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

2.- DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts:—</i>				
Want of cleanliness	2	2		
Want of ventilation				
Overcrowding				
Want of drainage of floors				
Other Nuisances	6	6		
Sanitary accommodation { insufficient				
unsuitable or defective				
not separate for sexes				
Notice to Limewash Bakehouses				
<i>Offences under the Factory and Workshop Act:—</i>				
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	8	8		

KENILWORTH URBAN DISTRICT.—FACTORIES, &c.—(continued).

3.—HOME WORK.

Nature of Work	Outworkers' Lists, Section 107.						Outwork in Unwholesome Premises, Section 108				Outwork in Infected Premises, Sections 109, 110			
	Lists received from Employers.						Prosecutions	Instances	Notices Served	Prosecutions	Instances	Orders made (Section 110)	Prosecutions (Secs. 109, 110)	
	Sending twice in the year		Sending once in the year		Occupiers as to keeping or sending lists.	Falling to keep or permit of inspection of lists.								Falling to send lists.
	Lists	Outworkers. Con- tractors.	Work- men.	Lists											Outworkers. Con- tractors.	Work- men.
Wearing Apparel—														
(1) Making, &c.														
(2) Cleaning and washing														
Household Linen														
Lace, Lace Curtains and Nets														
Curtains & Furniture Hangings														
Furniture and Upholstery														
Electro-plate														
File making														
Brass and Brass Articles														
Fur pulling														
Cables and Chains														
Anchor and Grapnels														
Cart Gear														
Locks, Latches and Keys														
Umbrellas, &c.														
Artificial Flowers														
Nets, other than wire nets														
Tents														
Sacks														
Racquet and tennis balls														
Paper, etc., Boxes, Paper Bags														
Brush making														
Pea picking														
Feather sorting														
Carding, &c., of Buttons, &c.														
Stuffed Toys														
Basket making														
Chocolates and sweetmeats														
Casaques, Christmas Crackers,														
Christmas Stockings, &c.														
Textile Weaving														
Total														

KENILWORTH URBAN DISTRICT.—FACTORIES, &c.—(continued).

4.—REGISTERED WORKSHOPS

Workshops on the Register (s. 131) at the end of the year.		Number.
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Bakehouses	10
	Other Workshops and Workplaces	33
Total number of Workshops on the Register		43

5.—OTHER MATTERS.

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

TABLE I.

KENILWORTH URBAN DISTRICT.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 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.			
		Uncorrected Number.	Nett.		Number.	Rate.	Of Non-Residents registered in the District.	Of Residents not registered in the District.	Under 1 Year of age.		At all Ages.	
			Number.	Rate.					Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1908	5,440	99	.....	18.2	52	9.6	.....	12	11	111	64	11.8
1909	5,560	120	.....	21.6	73	13.1	.....	9	10	84	82	14.7
1910	5,680	114	.....	20.0	65	11.4	.....	6	6	53	71	12.5
1911	5,810	111	114	19.6	70	12.0	.....	15	11	96	85	14.6
1912	5,930	142	143	24.1	57	9.6	2	19	10	70	74	12.5
1913	5,970	147	151	25.3	60	10.0	.....	18	9	60	78	13.0

° Rates in Columns 5, 7, and 13, calculated per 1,000 of estimated Population.

VITAL STATISTICS IN ENGLAND AND WALES (1913).

We are indebted to the Registrar-General for the following statement showing the birth-rates and death-rates and the rate of infantile mortality in England and Wales, and in certain parts of the country during the year 1913.

ENGLAND AND WALES.

Birth-rate, Death-rate, and Infantile Mortality during the Year 1913 (Provisional Figures).

Average Rate per 1,000 Living.

				Average Rate per 1,000 Living.			Deaths under
				Births.	Deaths.		one year to 1,000
					Crude.	Standardized ^a .	Births
England and Wales	...	...	...	23.9	13.7	13.4	109
96 Great Towns, including Lon-							
don	...	...	...	25.1	14.3	14.7	116
145 Smaller Towns	...	...	...	23.9	12.8	13.0	112
England and Wales, less the 241							
towns	...	...	...	22.2	13.1	12.1	96
London	...	...	...	24.8	14.2	14.2	104

*The standardized death-rates (formerly called corrected death-rates) are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with that of England and Wales as enumerated in 1901.

TABLE II.—KENILWORTH URBAN DISTRICT.
CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

NOTIFIABLE DISEASE.	Number of Cases notified.							Total Cases notified in each Locality.										Total Cases removed to Hospital.
	At Ages.—Years.							Stoneleigh Rd. & Neighbourhood.	Ladies Hills and Neighbourhood.	Castle Green & Neighbourhood.	Warwick Rd. & Neighbourhood.	Priory Road and Neighbourhood.	Albion Street & Neighbourhood.	Reformatory.	Whitemoor and Neighbourhood.	Crackley.	Bridge street & Neighbourhood.	
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.												65 and upwards.
Small-pox
Cholera
Plague
Diphtheria (including Membranous Group)	19	...	2	10	3	4	...	1	5	3	...	3	...	2	3	2	14	
Erysipelas	3	...	...	...	...	3	...	...	...	2	...	1	...	...	...	...	...
Scarlet Fever	5	...	...	4	1	...	2	...	...	...	...	3	...	...	...	...	4
Typhus Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	40	...	...	15	17	7	1	6	4	4	7	6	4	5	3	1	24
Relapsing Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...
Cerebro-spinal Meningitis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	8	...	...	4	1	2	1	...	1	...	1	...	4	...	2	...	...
Other forms of Tuberculosis	10	...	...	2	5	2	1	...	...	2	2	...	5	...	1	...	...
Totals	86	...	2	35	27	19	3	9	5	12	15	6	20	5	8	3	42	

Isolation Hospitals: Heathcote Joint Isolation Hospital (Warwick U.D.);
Joint Small-pox Hospital (Fosse, in Southam R.D.)

TABLE IIA.
KENILWORTH URBAN DISTRICT.

CASES OF ACUTE INFECTIOUS DISEASE NOTIFIED SINCE 1889.

	Small- pox.	Scarlet Fever.	Diphtheria and M. Croup.	Enteric Fever.	Puer- peral Fever.	Erysip- elas.	Total.
1890	—	2 (1)	—	1	—	1	4 (1)
1891	—	—	1 (1)	2 (1)	—	3	6 (2)
1892	—	8 (7)	6 (2)	8 (6)	—	7	29 (15)
1893	—	9 (8)	—	2 (1)	—	7	18 (9)
1894	—	26 (24)	3 (1)	4 (2)	—	5	38 (27)
1895	—	11 (8)	3 (1)	2	—	2	18 (9)
1896	—	12 (11)	3 (2)	1 (1)	1	3	20 (14)
1896	—	12 (11)	3 (2)	1 (1)	1	3	20 (14)
1897	—	4 (1)	—	—	—	2	6 (1)
1898	—	2 (2)	—	2	—	2	6 (2)
1899	—	30 (27)	1 (1)	—	—	6	37 (28)
1900	—	9 (6)	4 (1)	4 (2)	1	2	20 (9)
1901	—	26 (9)	2	5 (1)	—	3	36 (10)
1902	—	28 (22)	5 (1)	1	—	8	42 (23)
1903	—	36 (36)	3 (2)	2	—	6	47 (38)
1904	—	21 (17)	5 (3)	2 (1)	1	1	30 (21)
1905	—	1	4 (4)	3 (1)	—	—	8 (5)
1906	—	10 (6)	2	—	—	2	14 (6)
1907	—	14 (10)	4 (4)	—	—	2	20 (14)
1908	—	14 (11)	5 (1)	1	—	4	24 (12)
1909	—	21 (17)	5 (4)	4 (4)	—	1	31 (25)
1910	—	7 (3)	2 (2)	—	—	3	12 (5)
1911	—	11 (9)	3 (3)	6 (5)	1	6	27 (17)
1912	—	6 (5)	1 (1)	—	—	2	9 (6)
1913	—	5 (4)	19 (14)	40 (24)	1	3	68 (42)
Totals	—	313 (244)	81 (48)	90 (49)	5	81	570 (341)

The figures in brackets refer to those cases which were removed to hospital.

KENILWORTH URBAN DISTRICT.

CAUSES OF, AND AGES AT DEATH DURING THE YEAR 1913.

CAUSES OF DEATH.	Nett Deaths at the subjoined Ages of "Residents" whether occurring within or without the District.									Total Deaths in Institutions in the District.
	All Ages.	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.	
All causes { Certified	77	8	3			2	10	18	36	
{ Uncertified	1	1								
Enteric Fever	1						1			
Smallpox										
Measles										
Scarlet Fever										
Whooping Cough										
Diphtheria and Croup... ..	1		1							
Influenza										
Erysipelas										
Phthisis (Pulmonary Tuberculosis)	3						1	2		
Tuberculous Meningitis										
Other Tuberculous Diseases										
Cancer, Malignant Disease	11						2	3	6	
Rheumatic Fever										
Meningitis										
Organic Heart Disease	13					1	1	3	8	
Bronchitis	1								1	
Pneumonia (all forms)	4	2	1				1			
Other Diseases of Respiratory Organs	2					1		1		
Diarrhoea and Enteritis										
Appendicitis and Typhlitis										
Cirrhosis of Liver	1								1	
Alcoholism										
Nephritis and Bright's Disease	2	1						1		
Puerperal Fever... ..	1						1			
Other Accidents and Diseases of Pregnancy and Parturition										
Congenital Debility and Malforma- tion, including Premature Birth	4	4								
Violent Deaths excluding Suicide... ..	3		1					2		
Suicides										
Other Defined Diseases	31	2					3	6	20	
Diseases, ill-defined or unknown										
All Causes	78	9	3			2	10	18	36	

TABLE IV.
KENILWORTH URBAN DISTRICT.

INFANTILE MORTALITY DURING THE YEAR 1913. NETT DEATHS FROM
STATED CAUSES AT VARIOUS AGES UNDER ONE YEAR OF AGE.

Cause of Death.		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month	1-3 Months	3-6 Months	6-9 Months	9-12 Months	Total Deaths under 1 Year
All causes	Certified ...	4	...	...	...	4	1	1	...	3	9
	Uncertified ...	...	...	...	...	...	...	...	...	...	...
{ Small-pox ... ..		...	...	...	...	...	...	...	...	...	...
{ Chicken-pox ... ..		...	...	...	...	...	...	...	...	1	1
{ Measles ... ..		...	...	...	...	...	...	...	...	...	...
{ Scarlet Fever ... ..		...	...	...	...	...	...	...	...	...	...
{ Whooping Cough... ..		...	...	...	...	...	...	...	...	...	...
{ Diphtheria and Croup ... ..		...	...	...	...	...	...	...	...	...	...
{ Erysipelas ... ..		...	...	...	...	...	...	...	...	...	...
{ Tuberculous Meningitis... ..		...	...	...	...	...	...	...	...	...	...
{ Abdominal Tuberculosis ... ..		...	...	...	...	...	...	...	...	...	...
{ Other Tuberculous Diseases ... ..		...	...	...	...	...	...	...	...	...	...
{ Meningitis (not Tuberculous) ... ..		...	...	...	...	...	...	...	...	...	...
{ Convulsions... ..		1	...	...	...	1	...	...	...	...	1
{ Laryngitis ... ..		...	...	...	...	...	...	...	...	...	...
{ Bronchitis ... ..		...	...	...	...	...	...	...	...	...	...
{ Pneumonia (all forms) ... ..		...	...	...	...	...	...	...	...	2	2
{ Diarrhoea ... ..		...	...	...	...	...	...	...	...	...	...
{ Enteritis ... ..		...	...	...	...	...	...	...	...	...	...
{ Gastritis ... ..		...	...	...	...	...	...	...	...	...	...
{ Syphilis ... ..		...	...	...	...	...	...	...	...	...	...
{ Rickets ... ..		...	...	...	...	...	...	...	...	...	...
{ Suffocation, overlying ... ..		...	...	...	...	...	...	...	...	...	...
{ Injury at Birth ... ..		...	...	...	...	...	...	...	...	...	...
{ Atelectasis ... ..		...	...	...	...	...	...	...	...	...	...
{ Congenital Malformations		1	...	...	...	1	...	...	...	...	1
{ Premature Birth		2	...	...	...	2	...	...	...	...	2
{ Atrophy, Debility & Marasmus... ..		...	...	...	...	...	...	1	...	...	1
{ Other Causes ... ..		...	...	...	...	...	1	...	...	...	1
All causes		4	...	...	...	4	1	1	...	3	9

Nett Births in the Year:—Legitimate, 144 ; Illegitimate, 7.

Nett Deaths in the Year of:—Legitimate Infants, 7 ; Illegitimate Infants, 2.