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OFFICE OF THE COUNTY MEDICAL OFFICER OF HEALTH,  
14, TEMPLE STREET, BIRMINGHAM,

*June 3rd, 1909.*

## TO THE WARWICKSHIRE COUNTY COUNCIL.

MR. CHAIRMAN, MY LORDS AND GENTLEMEN,

1. I have the honour to present my tenth Annual Report as County Medical Officer of Health, and the twentieth I have made to your Council on the health of the Administrative County.
2. I propose to adopt the same system as in my last Reports, namely, to deal with the County as a whole, and then complete the Report by summarising those of the District Medical Officers of Health. In the statistics, the birth, death, and Zymotic death-rates are calculated per 1,000 persons estimated to be living, while the infant mortality is reckoned on the number of children who died under one year of age per 1,000 registered births.

### THE COUNTY AS A WHOLE.

#### AREA.

3. Owing to the fact that no change occurred in the boundaries of any of the Districts, or the County boundaries, the area remains the same as last year. The figures in acres for the County are, Urban districts 54,777, Rural districts 495,735, giving a total for the County of 550,512 acres.

#### POPULATION.

4. Adopting the estimates of the District Medical Officers of Health the population calculated to the middle of 1908, appears to be 400,821, an increase of 6,737, an increase rather above that recorded in the previous year. As, however, we are now eight years from the last census it is obvious that in many instances the estimated population is liable to considerable error. In fact, I have no doubt whatever that the figure as stated is rather too high. For reasons given by Mr. May in his report on the Borough of Aston Manor, he shows the population to have little power of further increase, owing to the fact that practically the whole of the district is built upon, but as the Registrar General in his weekly and other returns calculates the population on what may be termed the average rate of increase, as found between the two last census enumerations, and takes no regard of the peculiar local conditions, I believe that the population in this Borough alone, as does the local Medical Officer of Health, to be stated at 2,000 or 3,000 more than it actually should be. As in past years, the chief increases in the population of the Urban districts are to be found in Erdington, Rugby and Sutton Coldfield; though in Nuneaton the population is believed to have shown also a fair increase. In the Rural Districts there is no marked estimated increase, though slight increases are shown in most of the so-called Rural Districts where Urban conditions prevail.

#### BIRTHS.

5. Ten thousand three hundred and eight births were registered, compared with 9,847 in 1907, and 9,998 in 1906. Calculated on the estimated population, the birth-rate is found to be 25·7, compared with 25·08 in 1907 and 25·7 (the same figure) in 1906. The birth-rate for the whole of England and Wales was 26·5.
6. I am very pleased to be able to record an increase in the birth-rate compared with 1907, which was the lowest on record.

7. In the Urban Districts the birth-rate was 24·6, a fractional increase on that of the previous year. In the Rural Districts the rate was 27·4, a figure 1·4 above that of the previous year.
8. I have before called attention to the fact that on the face of it it appears strange, compared with the country at large, that the birth-rate of the Rural Districts should be higher than that of the Urban Districts, but this is caused by the fact that in some of the older towns there is a large collection of elderly residents past child-bearing age, while many of the so-called Rural Districts are Rural only in name and are really progressive manufacturing centres attracting young adult labour and producing therefore a greater number of children.
9. Among the Urban Districts, the highest rate is found at Bulkington, as was the case in the previous year. Nuneaton follows closely and these are the only two Districts with a rate exceeding 30·0. In Aston Manor and Erdington the rate exceeds 25·0, but in Sutton Coldfield it falls to 17·7, and in Leamington to the very low figure of 15·7. Stratford-on-Avon shows a rate 5·1 above that of the previous year.
10. Among the Rural Districts, the highest rate is shown by Foleshill with the very high rate of 38·3. This position was occupied by Foleshill last year, with a rate of 36·8. Next on the list comes Nuneaton with a rate of 36·6, Tamworth following with 35·3. Atherstone was the only other District with a rate exceeding 30·0. The lowest rate is shown by the small District of Coventry, with 5·45, but as the population in this case is only a few hundreds, we may expect all rates to be subject to great fluctuations. Only two other districts show rates below 20·0, namely, Brailes and Warwick, the rates of these two being respectively 19·5 and 19·4.

#### DEATHS.

11. Five thousand one hundred and fifty-three deaths were registered in the County during the year, namely, 3,019 in the Urban Districts and 2,134 in the Rural Districts, giving a total death-rate of 12·8 compared with 12·48 and 13·5 in the two previous years. Though slightly above that of the previous year, it is one of the lowest rates recorded since the establishment of the County Council.
12. Among the Urban Districts, Erdington shows the lowest rate, namely 8·72. This is 0·06 below that of the previous year. Sutton Coldfield comes next with 9·5, a position this Borough also held in the previous year. Next on the list is Rugby, with a rate of 9·9. The highest rate is shown by the district of Bulkington, with a figure of 20·0, compared with 20·7 last year, while in 1906 it also occupied the same position. I consider that it would be very valuable for the Medical Officer of Health for this District to initiate an investigation into the high death-rate experienced of late years. Leamington with a death-rate of 14·9 is next from the bottom, closely followed by Warwick with 14·7. Aston Manor appears to have a death-rate of 13·5. If, as is undoubtedly the case, the calculated population is considerably too high, then this rate would be actually higher than it appears to be.
13. In the Rural Districts the lowest rate is shown by Coventry which was only 3·63. Next comes Monks Kirby with a rate of 8·6, followed by Castle Bromwich with 9·6. These were the only districts with a rate under 10·0. The highest rate is again shown by the manufacturing district of Foleshill where it was 16·01. It also reached 15·0 at Alcester, Brailes and Southam.

#### ZYMOTIC DISEASE.

14. Three hundred and fifty-one deaths were registered as due to the seven principal Zymotic diseases, compared with 332 and 581 in the two previous years. This gives us a Zymotic death-rate of 0·87, only 0·03 above that of the previous year, which was the lowest ever recorded in the County. The deaths registered were as follows:—Smallpox, 0; Measles, 31; Scarlet Fever, 28; Whooping Cough, 99; Diphtheria and Membranous Croup, 71; Typhoid Fever, 12; Diarrhoea, 110. These figures compared with the previous year, show that there has been an increase in mortality from Scarlet Fever to a slight extent, and a considerable increase in the number of deaths from Whooping Cough. There has also been an increase in the mortality from Diphtheria and from Diarrhoea. On the other hand, there has been a most gratifying decrease in the number of deaths from Measles and also from Typhoid Fever.

15. **SMALLPOX.**—I am again able to record the entire absence of mortality from this disease. Only one case was notified, and that in Alcester. The patient was a soldier returning from India on a troop-ship and became infected during the voyage. Full details are given in the summary of the Report on the Alcester district. It is very satisfactory that the measures taken by the District Medical Officer of Health were such as prevented any spread of the disease.
16. **MEASLES.**—I am pleased to be able to report that the mortality from this infantile disease has been greatly reduced in the year under review. The total number of deaths in the whole of the County was 31, compared with 105 in 1907. Among the Urban Districts, in only one was it markedly prevalent, and that was the small district of Bulkington, where no less than seven deaths were registered out of the twenty of the whole of the Urban Districts. In the Borough of Warwick too it was also somewhat fatal, though the incidence was not nearly so great as in Bulkington. In the Rural Districts, Tamworth was the only one to suffer unduly and seven fatal cases occurred in this district.
17. Though Measles is a disease which exacts a large toll on infant life, it is one very difficult to deal with, chiefly on the ground that it is most infectious before the symptoms allow of its definite diagnosis. When therefore one case is introduced into a school it is very apt to spread to all who have not suffered from it, consequently schools are closed on account of its prevalence more frequently than in the case of any other disease. As it is not notifiable, it is chiefly from school teachers that any idea of its prevalence or otherwise can be obtained, and I am in hopes that the extension of hygienic work to the schools, necessitated by Medical Inspection, will do something in the way of affording additional information which may be used to cope with epidemics of Measles.
18. **SCARLET FEVER.**—This disease has shown a slightly increased mortality, though the prevalence of the disease has been less, for only 1,073 cases were notified, compared with 1,079 in the previous year and 1,276 in 1906. The prevalence is much more marked in the Urban than in the Rural Districts, 669 cases being notified in the former and 374 in the latter. The disease showed its greatest prevalence in Erdington having regard to the population, no less than 199 cases having been notified here. It was also somewhat prevalent in Aston Manor, where 261 cases were notified, which however compares very favourably with the 345 of the preceding year. The area immediately round Birmingham was considerably affected during the autumn of the year.
19. In the Rural Districts, Solihull, Southam, and Tamworth showed the largest number of cases, while there was but little prevalence in Foleshill and Rugby. On reference to the chart appended to Report, it will be seen that the maximum of the cases occurred in the forty-seventh week of the year when forty-one were notified. In the previous year the maximum occurred in the forty-fourth week, when forty-seven cases were notified. On looking through a series of Charts it is extraordinary how the prevalence of the disease is connected with a particular period of the year, and one might almost within very few cases prophesy the number of cases of Scarlet Fever likely to be notified in the County in any particular week.
20. Scarlet Fever cases are received into the Aston Manor Infectious Hospital, where the disease assumed a much more severe type than that observed of late years. Mr. May as Medical Officer to the Hospital remarks on the differences of type, and this is worthy of being borne in mind when it is alleged, as is often the case, that Scarlet Fever has become so mild a disease that expensive measures of isolation are not necessary. The public are undoubtedly to be congratulated on the milder type of Scarlet Fever experienced of late years, but there is no evidence at all that even given the improved conditions now obtaining as regards Sanitation, that the type will continually become milder, or even remain mild.
21. **DIPHTHERIA AND MEMBRANOUS CROUPS.**—I am pleased to be able to report that there have been considerably fewer cases of these two diseases than in either of the preceding years, though as a matter of fact, the cases which did occur were more virulent in type as the mortality was somewhat higher. During the year 480 cases were notified, compared with 531 and 509 in the two previous years. The number of fatal cases however has been 71, compared with 52 and 68 in the two previous years.
22. In the Urban Districts, cases have occurred in every one except Bulkington, while in the Rural Districts the only ones which escaped were Coventry, Nuneaton and Monks Kirby, each of which is small, with a population under 2,000,

23. The greatest prevalence was shown among the Urban Districts. In the Borough of Warwick 44 cases were notified. Rugby and Leamington also shewed a marked prevalence, while at Aston Manor the cases were considerably fewer than in the preceding year. I note that in Warwick there was also a marked prevalence in the preceding year, the number of cases being practically identical with that for 1908.
24. In the Rural Districts, the greatest prevalence was shown in Brailes, while in Solihull, Stratford-on-Avon, and Warwick, a considerable number of cases occurred. I am pleased to be able to Report that the prevalence which was so marked in Tamworth Rural District in the previous year is not shown in 1908 the number of cases having gone down from 86 to 16.
25. In no department of Hygienic work has more been done than with the question of dealing scientifically with the prevention of Diphtheria. This is largely due to the fact that the cause of it is definitely known and is a bacillus having such marked characteristics that it can be readily identified. For a long time it was an article of belief that Diphtheria was due, either to the drinking of polluted water, or the inhalation of air polluted with drainage emanations. The first of these suggestions is certainly not true, and the second has such an element of truth in it that it may for practical purposes be discouraged. We may take it as bacterially proved that no person can acquire Diphtheria unless the particular bacillus is present. This being so, we are able to identify cases when they occur and also to determine whether or not it is safe for a particular person to associate with others. This being granted, it is obvious that the question of dealing with Diphtheria becomes from the scientific point of view, remarkably simple. We have only to identify those cases likely to spread the disease and take the necessary measures to prevent its spreading. In theory it is simple: in practice it is somewhat difficult, though with every Sanitary Authority taking steps, now definitely recognised as essential, the difficulty may be considerably reduced.
26. Another factor having an important bearing on the problem is that an anti-toxin is now prepared, which if used in the early stages of the disease, prevents a considerable proportion of the mortality which would occur in cases uncontrolled. Obviously therefore, to deal rationally with the disease over a large area, it is necessary to have means of identifying the cases at an early date, and taking the necessary steps for treatment and isolation of those affected.
27. The first step for detection is open to any authority and any medical man in the County, under the County Council scheme by which a swab from the throat of any suspected patient can be sent to the Pathological Department of the Birmingham University, free of expense to the patient or the practitioner.
28. By the supply of anti-toxin, which I am glad to say is now stocked ready for use by many Authorities, the severity of the disease can in the great majority of cases be so mitigated, that its fatality instead of rising as it has sometimes done in the past, to a third of the cases, may be reduced to the level of that of Scarlet Fever.
29. With this knowledge at our disposal, I am compelled to consider whether some more definite steps could not be taken in the County as a whole, to deal with Diphtheria, and I am bound to state that I think that if the disease cannot be removed from the list of preventible diseases, it might, with everyone working to that end, be reduced very materially, compared with its prevalence at the present time.
30. As a matter of fact, it is somewhat curious that the type chiefly prevalent in the County of Warwick does not appear to spread much to other persons in the house, most of the cases recorded being single ones. This fact is especially noted by Mr. May in dealing with the health of the Borough of Aston Manor, and I have remarked upon it in other districts on previous occasions.
31. The following is an outline of what I think might be attempted to decrease the prevalence of the disease. Every doubtful case of sore throat should be bacterially examined at the earliest date. If the report from the laboratory is positive, however little the patient suffers in health, he or she should be isolated. At the same time swabs should be taken from other people,—particularly children—in contact with the patient, because some of these though having no clinical symptoms, may be carriers of the disease, that is, they may be the hosts of the bacillus who without being affected themselves, may cause the disease to be carried to other susceptible people. When the symptoms have

cleared up clinically, no cases should be allowed to mix with others, or to return to school, until two or three swabs have been taken from the throat and negative results obtained, while all carrier cases should also be treated as possibly infective, until swabs taken from them yield negative results. In addition, every District Council should lay in a small stock of anti-toxin for use for patients whose pecuniary position is such that they cannot afford to pay for it themselves. When the outbreak has occurred among several children attending an elementary school, the throats of all children in the same class at least, should be bacterially examined, and if found to be either suffering, or acting as carriers, should be isolated at home or in hospital. Disinfection under proper modern scientific conditions should be carried out after patients have recovered. If such a system were generally adopted throughout the whole of the Country, I am sure it would be possible to effect an enormous saving of life, and of misery which often follows outbreaks of this insidious disease.

32. I am pleased to say that a good deal of work in the direction I have mentioned is being done. Anti-toxin is now supplied by the following Councils:—Aston Manor, Erdington, Leamington, Nuneaton, Stratford-on-Avon, Sutton Coldfield, Alcester, Castle Bromwich, Foleshill and Tamworth.
33. I am also in hopes that in connection with the Inspection of Schools, which is now taking place, much may be done to prevent the spread of this disease, and that means likely to be effective should be utilised, for lessening the incidence of a disease so fatal is something worth achieving, even though the efforts necessary to effect it require much care from all concerned.
34. **WHOOPING COUGH.**—This is one of the diseases which remains an opprobrium to the sanitarian. Almost regularly, year by year, its fatality oscillates with great regularity. One year the deaths are few, but next almost certainly there is a great rise. The number of deaths from it in 1908 was 99, while in the previous year it was only 44, but in 1906 it was as high as 109. The reason is, as I have previously stated, that it is a disease affecting very young children and consequently as fresh children are born into the world and reach their second year, new material is introduced susceptible to the virus. It is a highly infectious disease and that fact was accentuated in 1908 by the fact that 78 deaths occurred in the more closely populated Urban Districts, compared with 21 in the Rural Districts. The chief fatality occurred in Aston Manor, no less than 52 out of the 78 deaths occurring in that Borough. In no other District as a matter of fact did the deaths reach double figures. In the Rural Districts, Foleshill and Southam were the only two where more than two deaths occurred. A large proportion of these deaths are avoidable but they will continue until the parents learn the elements of hygienic prevention.
35. **FEVER, INCLUDING TYPHOID AND OTHER CONTINUED FEVERS.**—Nothing in the Sanitary history of the County is of more interest than the prevalence or otherwise of Fever, because of all statistical results which can be taken as an index, the Continued Fever rate is undoubtedly the best. It is therefore with great pleasure that I can record this year, not only a continuation of the decrease of the Fever rate as I have been able to do in previous years, but can state that the Death-rate and the number of cases notified, are the lowest ever recorded in the Sanitary history of the County. The total number of deaths from all types of Continued Fever is 12. The number of cases notified was 66 compared with 122 and 195 in the two previous years, both of which were lower than in the majority of past years.
36. Of the 12 deaths notified, no less than 11 occurred in the Urban Districts, 5 of them, or nearly one half, being in the Borough of Nuneaton. The solitary death in the Rural Districts occurred also in the Rural District of Nuneaton. As regards cases, of the 66 altogether notified, 43 occurred in the Urban and 23 in the Rural Districts. Eleven cases altogether were notified in the Borough of Nuneaton, which with 5 deaths, shows a mortality of between 40 and 50 per cent. The greatest prevalence in the Rural Districts was shown in the Rugby District, where 6 of the 23 cases occurred. Allowing however, for the difference of population, Southam with 3 cases had almost as high a record.
37. I have dealt with the details of the cases in the summary of the Reports of the District Medical Officers of Health. It must not be forgotten that Southam suffered from a much greater epidemic prevalence in the previous year, 18 cases having been reported, this, looking at the origin of the disease, so frequently associated as it is with polluted water supply, points to the importance of the efforts now being taken by the Southam District Council to improve the general conditions of the water supply of large portions of their area.

38. **DIARRHŒA.**—The total number of deaths registered from this fatal infantile disease was 110, compared with 82 in the previous year. In 1906, however, the number was 315. Diarrhœa in its epidemic form must not be mistaken for that unpleasant symptom so often associated in adults with various complaints. It is a disease in its epidemic form associated with high temperature, almost entirely attacking—that is with fatal results—children under one year of age. It is due to one or more organisms, chiefly associated with foul conditions of soil or house, and therefore nearly always seen at its worst in crowded communities.
39. Of the 110 deaths, 66 occurred in the Urban Districts and 44 in the Rural Districts. While the chief prevalence in the Urban Districts was observed in the two populous districts of Aston Manor and Nuneaton Borough. In fact, of the 66 deaths in the Urban Districts, 49 occurred in these two places. In the Rural Districts, of the 44 deaths, 33 occurred in Atherstone and Foleshill, or to put it in other words, in the whole of the Rural Districts, with a population of 156,000, there were 44 deaths, of which 33 occurred in the two districts named with a population only of 38,178; so that while in the Rural Districts as a whole, the death-rate was 0.28 per 1,000, in the two districts mentioned the death-rate was 0.86, but if we take all the other Rural Districts excluding these two and with a population of 117,000, we find that the death-rate from epidemic Diarrhœa was only 0.09 per 1,000, so that in these two particular districts where Diarrhœa was prevalent, the death-rate from it exceeded eight times that of the rest of the Rural Districts and this in a year when the conditions favourable to the propagation of the disease were not specially marked. I beg to call attention, therefore, to the remarks made by the Medical Officer of Health for the Foleshill Rural District. He says: "This is the one disease which causes me dissatisfaction; it is at a much higher figure than it should be. With a view to diminishing, if possible, this mortality, I obtained permission from your Council to get warning notices printed and circulated in Foleshill and Bedworth." This notice refers to the importance of boiling all milk used for infants; for storing it in a cool ventilated pantry in a clean vessel protected from flies; for dealing with feeding bottles so that they may be used in a cleanly condition; and to the removal of manure heaps, midden contents, etc., which are to a large extent the breeding place of flies.
40. Apropos of this, I may observe that the Inspector of Nuisances in his Report says:—"Once again, I have to complain of the small assistance I receive from the people in the Parish of Bedworth in this respect. Although for sometime a box, in which a note may be placed when an ashpit requires emptying, has been fixed, easy of access to all, and notices have been published broadcast, it is very seldom used; but they expect me to find out each time the ashpits require attention, which is quite impossible in a large district like this, with the increased amount of work." This points particularly to the necessity of education of the people in elementary hygiene, and it is obvious that in the case of the present residents this can only be done in practice by the Health visitors advising people in what would seem to be such elementary matters of house hygiene.
41. In connection with this subject too, the Medical Officer of Health for the Borough of Aston Manor reports that the Health visitor for that Borough informs him that in 79 of the 80 houses visited by her, where deaths from Diarrhœa had occurred, the covering of milk and food stuffs was to her mind very inadequately carried out, and that at least 44 houses were pestered with a great many flies. Commenting on this, Mr. May says:—"The results confirm facts previously noted in other towns, that mortality was due to food or milk unsuitable, or contaminated either by infected dust or flies."
42. **PHTHISIS AND OTHER TUBERCULAR DISEASES.**—There have been a few more deaths from Phthisis than in the previous year, and the same remark applies to the deaths from other tubercular diseases; the death-rate however, owing to the increase of population is only 0.05 higher. As was the case in the previous year, the death-rate was relatively higher in the Urban than in the Rural Districts, and in the year 1908 the disparity was more marked than 1907. This of course is not surprising when we consider that Urban conditions undoubtedly produce a stronger pre-disposition to the disease and give also more opportunities of spread.
43. I am particularly pleased that a good deal has been done during the year in endeavouring to reduce the chances of infection. It is sometime ago since I made the suggestion that in all cases where deaths from Consumption are known to have occurred, that the premises where the deceased lived, and the personal belongings, should be disinfected by the Sanitary Staff just as in the case of other

Infectious diseases. I find that at the present time many of the large districts adopt this procedure, and that in Aston Manor, Erdington, Leamington, Stratford-on-Avon, Sutton Coldfield, Alcester, Castle Bromwich, and Tamworth, disinfection is offered in all cases where Phthisis has caused mortality. Leamington and Tamworth also have adopted voluntary notification, but for reasons I have previously given, particularly in such districts as these, I do not think much value is to be obtained from it, unless it be by the education of the public. The Medical Officer of Health for Leamington, referring to the offer of disinfection after deaths from Phthisis, says that most people refuse to accept it. This is unfortunate and I think special efforts should be taken to urge the importance of this from the point of view of public health. The work of the County Council Health Visitors has been continued, and in all cases which come to their knowledge, visits are made as circumstances permit, and leaflets issued to the head of the house giving simple directions as to what means should be taken to protect the health of the other inhabitants.

44. Year by year I am struck by the fact that for the County, Smallpox Hospitals are in existence supplying the needs of every district, which happily for the population are but rarely needed. It is now generally accepted, owing to the nature of Smallpox infection, that such Institutions must be in readiness to receive the first case which happens to be imported. In many other districts I find these Institutions are put to a practical use as Sanatoria for the treatment of certain cases of Phthisis. In inter-epidemic periods, the same thing might be done with much advantage and little expense in Warwickshire. The buildings exist and all that would be required in most of the Districts would be the provision of a small cottage into which the first case of Smallpox might be admitted while the Consumptive cases were removed, so that the Hospital might receive any other Smallpox cases, should the disease spread. I do not suggest that these Hospitals should be turned into Sanatoria in the fullest sense of the word but rather that they should be used as Institutions where a limited number of people might be instructed on the means best adapted for the cure or retardation of the disease, and for the protection of the public health. It is a melancholy fact to record year after year that so large a proportion of the deaths registered in the County are due to a disease which spreads entirely by infection.
45. In 1908, one out of twelve of all the deaths were due to Phthisis or other tubercular disease. If it could be once grasped that Phthisis was a preventible disease, and *might therefore be prevented*, I cannot but think that the public would make strenuous efforts to avert those oft occurring tragedies which are spreading lasting sorrow in so many families.
46. Among subsidiary causes tending to spread the disease, spitting in close rooms and spaces is undoubtedly an important one, and I again trust that the police will render me a good deal of aid in encouraging the exhibition of "Spitting Cards" in public house bars particularly, as bacterial research has shown a very grave danger may result from this filthy habit. Children too in the elementary schools—boys particularly—should be discouraged in spitting, and should be made to understand, as is quite possible, the effect the habit is likely to have on the health of those among whom they live.
47. At the end of this year I am pleased to state that the Local Government Board issued an Order making the notification of pauper cases compulsory. Though this in itself is a remedy somewhat limited in its operation, yet it will do an immense amount of good in educating public opinion to the importance of the subject, and the undoubted extension, in time, when public opinion is ripe for it of a general notification of all cases of pulmonary Phthisis.
48. CANCER.—I am pleased to be able to record a further reduction in the number of deaths from this disease, the number being 321, compared with 332 and 338 in the two previous years. Of these, 189 occurred in the Urban Districts (exactly the same figure as in the previous year), and 132 in the Rural Districts, compared with 143. In the Urban districts, Leamington shows a very high mortality, due as one would naturally expect, to the large number of elderly people to be found in a town of this kind. In the Rural districts Brailes has a large mortality, while Solihull has one considerably above the average. The fear was expressed some years ago that cancer was a disease increasing very fast, due possibly to certain conditions associated with civilization. It cannot be denied that there has been probably some increase, but speaking generally this is due, not to a greater prevalence of the disease, but to two facts of importance, namely, that more people are living to advanced ages than formerly, and are therefore more subject to the disease, it being a disease of after middle life, and secondly, medical diagnosis is improving and cases are now discovered which formerly were attributed to other diseases.

49. **INFLUENZA.**—This disease was a little more fatal than in the previous year, 62 deaths being registered from it, compared with 57 in 1907. The increase was only in the Urban Districts, as the mortality in the Rural Districts was slightly less than in the previous year.
50. **DISEASES OF THE RESPIRATORY ORGANS.**—An increase has also been noticed in the number of deaths from these diseases, due chiefly to a greater fatality from Bronchitis. This may probably be attributed to adverse meteorological conditions.

#### INFANT MORTALITY.

51. In 1908, 1,060 deaths were registered in infants under one year of age, giving a rate of infant mortality of 100 per 1,000 registered births, compared with 99 in the previous year. The Rates it will be seen are practically identical and this is a very satisfactory feature, as the Rate of last year was considerably lower than any recorded in the previous years.
52. In the Urban Districts 634 such deaths were registered, and in the Rural Districts 426. It is somewhat strange that the figures for the Urban and Rural Districts should so closely approximate. The rate for the Urban Districts as a whole was 105, and for the Rural Districts 99. Coming to individual Districts among the Urban, we observe that the highest Infantile Death-rate was in Aston Manor, where it was 125, closely however, followed by Stratford-on-Avon and Warwick, where the rates were respectively 122 and 121. The lowest rate was found in Rugby, where it was 79, and in Leamington and Erdington with figures of 84 and 91 respectively. In the Rural Districts, the highest figure is shown at Nuneaton where it reached 169. In Foleshill it was 133, while in Atherstone and Tamworth it was 125 and 122 respectively. The lowest rate was found in Monks Kirby where it was only 31. In Brailes it was 51, and in Stratford-on-Avon 53. In Coventry there was no infant mortality at all but the District is so small that only three births and two deaths were registered altogether.
53. There is no doubt whatever that one of the most important facts in the County statistics is the improvement which has taken place in the Infantile Death-rate. The following figures taken for the ten years, conclusively prove this.

YEAR.	Infant Mortality per 1,000 Births.			
1899	..	..	..	142
1900	..	..	..	142
1901	..	..	..	133
1902	..	..	..	116
1903	..	..	..	125
1904	..	..	..	133
1905	..	..	..	109
1906	..	..	..	124
1907	..	..	..	99
1908	..	..	..	100

54. It will be seen that not only have we a lower rate for the latter half of the period than for the other, but that there has been—subject to meteorological conditions—a progressive diminution, which if a larger number of years were taken, would be even more marked. In 1898 for instance, the figure was 151.
55. I have already pointed out, that even with our improved rate, we ought not to rest satisfied. There can be no doubt that a considerable number of children born, are unhappily in such a weakly condition, that a considerable death-rate will always occur in the first year of life. The infants to which I refer, die very largely in the first few weeks of existence, and I think that there will be little doubt that the figure I have before suggested may be taken at the present time as a fair one for infant mortality, namely, 70 per 1,000 children born. Adopting this figure, it will be seen we ought to save on the average, at least 30 per 1,000 of those born if all preventible mortality were dealt with.
56. I have often been asked, locally and elsewhere, whether any results could be shown from the work of our Health Visitors in the houses of the poor. I have been somewhat chary in expressing a definite opinion, but I think the facts shown the last few years, must open the eyes of the least observant,

to the good work that is being accomplished. I am aware that Infant Mortality is being reduced all over the country and that this reduction is largely due to the spread of knowledge, and to the increase of humanity in dealing with children, but making full allowance for this, I am convinced that we are showing better results than would have been attained had no such work been done, as that which our Health Visitors are doing.

57. I have been particularly pleased—especially of late—in receiving reports from the Health Visitors, that there can be no doubt whatever, that the conditions as to baby feeding and tending are being greatly improved. I have been pleased to find from their reports that breast feeding of infants—particularly in some districts—is undoubtedly becoming more common, and that attention is now paid to the leaflet I issued some time ago, explaining to those who are compelled to feed their infants artificially, the best way to rear them in a healthy manner.
58. Out of the 836 babies visited by the Health Visitors during the year, no less than 504 were originally breast fed. No doubt some of the mothers in these cases reverted to artificial feeding later, but it is a great gain for the infant to be breast fed during the first few weeks of its life.
59. Three great difficulties I find have to be dealt with, namely, the use of the long tube bottle; the constant use of a “comforter”; and the habit of allowing infants to sleep with their parents. The Health Visitors wage a constant war against the long tube bottle on account of the fact that it is utterly impossible for the best intentioned mother to keep such bottles in a cleanly state. In many districts, however, the boat shaped tubeless bottle is obtained with difficulty and I am quite convinced in my own mind, that chemists and others who sell such goods, would do the community and the nation at large, a great service, if they were to push as far as possible, the tubeless bottle, and indeed, not sell the objectionable and insanitary long tubed one. The “comforter” too, is an instrument of evil. It is constantly put into a child’s mouth to suck and this leads to indigestion, and in some cases to deformity of the mouth, and add to that, that though covered with india rubber on the outside, it is generally made of a filthy, fluffy material, which becomes the home of septic organisms, and must of necessity be prejudicial to the health of the child. In addition to this, the child often drops it on to the floor and it is a common sight to see it picked up by another child and placed in the baby’s mouth without wiping.
60. I regret that comparatively little is being done in most parts of the County in persuading parents to give a separate cot to the infant. From every point of view this is very desirable and the Health Visitors are always willing to show how one can be made, both useful and sightly, from a banana box, at a cost of a few pence. In connection with this subject I would call attention to a clause in the Children’s Act recently passed:—“Where it is proved that the death of an infant under three years of age was caused by suffocation (not being suffocation caused by disease or any foreign body in the throat or air passages of the infant) whilst the infant was in bed with some other person over sixteen years of age, and that that other person at the time of going to bed was under the influence of drink, that other person shall be deemed to have neglected the infant in a manner likely to cause injury to the health within the meaning of this part of the Act.”
61. I regret to find that with the exception of Aston Manor, as reported upon last year, no district in the County has adopted the notification of Births’ Act. In many of the districts, to my mind, this is a great misfortune, as much good might be done by the opportunities the Act would give for discovering births immediately after they had taken place and thus allowing advice to be tendered to mothers at an early date, in suitable cases.

#### A SUMMARY OF MATTERS INFLUENCING THE PUBLIC HEALTH, TO WHICH ATTENTION IS DRAWN IN THE REPORTS OF THE DISTRICT MEDICAL OFFICERS OF HEALTH.

62. As in the last few years, thanks to the courtesy of the Medical Officers of Health in the County and also in the County Boroughs of Birmingham and Coventry, I have received each Monday, the number of cases of notifiable diseases, notified to them during the previous week. These have been tabulated, and circulated on the following day, so that a record has been kept each week of the cases of notifiable diseases throughout the whole area. Arrangements have been made between the County Medical Officers of Health of all the Midland Counties to circulate these Returns among themselves, with the consequence that each week, the condition of the large Midland area, as regards the prevalence of infectious disease, is known to all those who have to deal with the County areas.

## ISOLATION AND HOSPITAL ACCOMMODATION.

63. Very little is to be added to my previous reports on this subject. The County is undoubtedly well provided with these important Institutions. Another step has been taken to fill in the blanks existing. The Solihull and Meriden District Councils have secured a site, prepared plans and applied for a loan to the Local Government Board, for building a new Joint Fever Hospital. I inspected the site, which is an excellent one, and after some modification which I suggested as regards nurses' accommodation, the plans I hear have been approved by the Local Government Board, and the loan granted at the beginning of the present year. I regret, however, to state that the only other Hospital now waiting to be built is one to give joint accommodation for Fever, etc., to Rugby Urban, Rugby Rural, and Monks Kirby Districts and that practically very little advance has taken place during the year. For some reason which I do not appreciate, further delay has taken place, and although plans for the Joint Hospital have been prepared, they have not yet been submitted to the Local Government Board for approval, it being stated that this is because there has been no general agreement either as to the number of beds which should be provided, or precise plans as to blocks. Dr. Wilson says:—"Postponements of final decision, too, has been agreed upon until inquiry had been made as to Hospitals in districts of a similar character in which payment for maintenance of patients is insisted on, and the Ruling rates of charges." Looking at the question of isolation as it is effected in other Districts of the County, I am strongly of opinion that there is not the least valid reason for any further delay, and I feel, having regard to the importance of Rugby as an educational centre, as well as for other reasons, that it is very desirable that steps should be taken to bring this matter to a head. Although a Joint Committee has been formed under the public Health Act, I must point out that powers are given to the County Council to set in motion the Isolation Hospitals Acts, and although I should be very unwilling to suggest a line of action which would probably produce friction between the various Authorities concerned, the importance of the matter is such, that I consider it imperative that something should be done without further delay.

## RIVER POLLUTION.

64. As usual, much attention has been given to this important work and at the present time there is no doubt whatever that greater care is being taken—despite increased population—to deal with sewage and effluents, so that River pollution is less marked than formerly.
65. As regards the River Tame, not the most important River in the County, but the most important because it receives the largest quantity of sewage, an immense amount of work has been accomplished. The Birmingham, Tame and Rea District Drainage Board has been most energetic in laying down further beds of large area, for the treatment of sewage by bacterial means. Not only has there been an extension of the original filter beds, so that at the end of the year thirty acres of bed five feet deep had been completed, but in addition, a start had been made with the plant it is proposed to lay down in order to deal with the vast quantity of storm water which has to be treated during periods of heavy rain. The area of filter beds at the present time is such, that it is capable of dealing ordinarily, by bacterial means, with all the sewage that comes down from the conjoint area. Advantage has been taken of this during a portion of the year to rest and relieve the land of its accustomed quantity of sewage, and thus allow it to lie fallow and become oxidised, and to be therefore in the future better fitted than it has been of late years. I am of opinion that the work done by the Birmingham, Tame and Rea District Drainage Board has been quite satisfactory, and as work is still progressing, we may hope that in the future to get a marked improvement in the quality of the River.
66. The Tamworth Borough Council and the Rural District Council have started their new works for sewage disposal and drainage during the year, and considerable progress has been made, and I should imagine that the works will be completed and in full operation during the present year.
67. Unhappily for the condition of the water in the Tame, the River starts its career in a thickly populated, manufacturing and mining district. As I have before pointed out, when the River enters Warwickshire, it does so, not as a pellucid stream, but as something little better than a sewer. It is obvious therefore that something is required to improve the condition of the River in its early reaches and I have therefore made enquiries as to what is being done by other County Councils to reduce the pollution, of which we have undoubtedly full right to complain.

68. At the end of the year I wrote Dr. Reid, the County Medical Officer of Health for Staffordshire, and received from him the following reply:—"The following is the position with regard to sewage disposal in South Staffordshire within the Tame Watershed, except Tipton and Oldbury:—

WEDNESBURY.—Notwithstanding the good work they have already done, have just determined to increase the filter area by 4,000 sq. yds., the work to be pushed on at once so as to afford employment for the unemployed.

BILSTON.—The new works have been for some time in operation, and only the other day I had an excellent effluent from the works.

DARLASTON.—Hitherto the effluent from Darlaston has been one of the best in the County, but for some time it has been deteriorating, and I find that this arises partly from negligence on the part of those in charge of the works and partly from the plant having got out of order especially the floating arms of the precipitation tanks. Quite lately I wrote a very decisive letter to the Surveyor with reference to the irregularities, and he is going to bring the matter before the Council. I certainly shall not allow it to rest until it is put right.

WILLENHALL.—Here the Local Government Board have been the cause of delay because they refused to sanction a loan for new works until certain measures had been tried to see whether the area of land available would not with different management be sufficient for the purpose. This I am now in a position to prove is not the case, and have made a representation to that effect to the District Council, pointing out that Local Government Board or no Local Government Board, my Committee will be compelled to take proceedings unless they push the Local Government Board to grant the loan for the scheme which was submitted a year or two ago. As a result of this action, plans have now been submitted and will be forwarded to the Local Government Board immediately.

WALSALL.—The Walsall plans have been before the Board for a long time, but I expect they have not yet made up their minds as regards the requirements since the Commissioner's fifth Report was published.

WEST BROMWICH.—West Bromwich unfortunately had an accident a few months ago owing to subsidence which fractured one of the main sewers, and for a time about half the sewage was being turned into the stream without treatment. I had a communication from the Borough Engineer, however, the other day informing me that the necessary repairs had been executed, and that the whole of the sewage of the Borough was now reaching the works."

69. As regards Tipton, I have made enquiries, and find that the scheme to which I referred last year has been sanctioned by the Local Government Board, and that the work has been commenced. Oldbury is also engaged in extending and building other works.
70. There can be no doubt that the chief offender at present, is the large County Borough of Walsall, and I shall look forward to an early commencement of the new works which are so important if the River Tame is to become as it should do, having regard to the large expenditure in Warwickshire.
71. As regards the Avon, I may say at the outset, that a great deal of attention has been paid to it during the year. The new works at Rugby were, for the low level portion, completed in November, and the high level portion has been completed since the end of the year, and both works are turning out very much improved effluents.
72. The works at Kenilworth have produced somewhat mixed results. As I have before described them, they are scientifically designed and excellently carried out, and with proper management should produce an effluent as good as any in the County. Practically on all the occasions when inspected, I find that the effluent has been satisfactory, and if regard be taken to the peculiar conditions caused by a large local industry, should prove quite satisfactory.
73. Further down the River we come to Coventry, a City at the end of the year with 90,000 inhabitants. The sewage works originally laid out by one of the leading engineers of the country, were for years admirably adapted for producing a non-polluting effluent. The city has now outgrown the works and as I have pointed out in my Quarterly Reports, a deterioration has been shown in the general results obtained, and the consequence is, particularly at storm times, that the River has shown

some evidence of pollution. The City Council, however, has now become aware of the fact that an extension of the works must be carried out, and at the time of writing, plans are being prepared for an experimental installation on bacterial lines with a view to determining the best form to be adopted.

74. The Borough of Warwick is still treating its sewage by irrigation on land of which the Town Council possess a considerable area, but as the result of several inspections, I am of opinion that the best use is not being made of the land solely for the purposes of purification. I consider it very urgent, in the interest of the County Council and of the Borough of Warwick, that steps should be taken to improve these works.
75. The works of Stratford-on-Avon have at all times when they have been examined, yielded a very good result, and I am pleased to bear testimony to the very excellent management of these works, whereby serious difficulties have been overcome, difficulties caused by the large quantities of brewery refuse passing into the sewers.
76. I also have to report that the works at Kineton have been completed, and in the early part of the year were working satisfactorily, but will require, I am afraid, some extension, or alteration before the effluent can be considered satisfactory.
77. Up to the end of the year nothing had been done in the way of sewerage Wellesbourne, or dealing with the sewage, which still runs into the river. I am therefore pleased to report that a scheme has been prepared, and a loan applied for to the Local Government Board to carry out these works and there is little doubt that a commencement will be made during the present year.
78. As regards the Cole, the chief pollution of which is from districts outside the County, I am able to state that works of extension have been commenced by the Yardley Council. The district of Yardley has increased in population enormously, and the works, though good of their kind, had become quite insufficient to deal with the increased flow of sewage.
79. The Blythe is a River which shows no serious sign of pollution although a large quantity of domestic sewage at the present time unfortunately gains access to it.
80. In connection with this I attended an inquiry of the Local Government Board, for a very comprehensive sewage works on bacterial lines, to deal with a large and newly developed portion of the Solihull District, and at the time of writing am informed that consent has been given for the loan, and that the work will be commenced at an early date.
81. The district of Knowle and the rapidly increasing district of Olton also drain indirectly into this River. The sewage is treated on land and at the present time the results may be considered fairly, if not wholly, satisfactory.
82. The Anker is the only other important River and this was in the past very largely polluted by the sewage of Hinckley, in Leicestershire, Nuneaton, Foleshill, Bedworth and Polesworth. As regards Hinckley, the condition is by no means satisfactory. A large dye works sends its waste liquor into the Hinckley sewers. The method of dealing with the sewage is by land treatment, after subsidence in tanks. The land is distinctly unsatisfactory from a sewage treatment point of view, while the tanks are too small. During the year something has been done in the way of increasing the tank accommodation, but as I said in my last Annual Report, I do not consider that the nuisance is likely to be remedied until something is altered in the reception and treatment of the large quantity of dye waste which comes down from the Hinckley Dye Works. At the present time, though I do not think the new works are completed, the condition of the River above Nuneaton is not satisfactory.
83. As regards Nuneaton, the effluent discharged during the year, (and I have examined it on several occasions), has been satisfactory and the River below the outfall shows no sign of material sewage pollution. The works I am bound to say, have been very well and energetically managed, and at the present time some of the original contact beds are being converted into sprinkling filters, with mechanical sprinklers. This conversion was rendered necessary by the fact that the original contact beds deteriorated—as I prognosticated they would do—but thanks to the large area of very excellent land on which the bacterial effluent is allowed to pass, the final effluent is perfectly satisfactory.

84. I hear that the works both at Bedworth and Foleshill have on the whole been working satisfactorily.
85. At Polesworth, steps have now been taken to bring the much needed sewage scheme into being. An application was made to the Local Government Board for sanction for a loan to carry out these works, and though I believe some alterations have been required by the Board, to bring the plans into conformity with the ideas expressed in the Fifth Report of the Commissioners on the treatment and disposal of Sewage, yet, before long the works will probably be commenced. The Injunction obtained against the Atherstone District Council, by the County Council has again therefore been suspended for twelve months.
86. The works at Hatton Asylum have been inspected on more than one occasion during the year, and are producing an excellent non-polluting effluent.
87. The important event during the year, however, was the issue of the Fifth Report of the Royal Commissioners on "Treatment and Disposal of Sewage." The Report was important, because it has given a series of conclusions and recommendations dealing with sewage treatment. The majority of these had already been adopted by those conversant with, and experienced in, modern methods of sewage treatment, but the importance of the Report lies in the fact that there is no longer any excuse for Local Authorities delaying works for remedying River pollution on the grounds that methods of treatment are any longer in doubt. The main points in the recommendations refer to removal of suspended matters, sedimentation tanks, septic tanks, chemical precipitation, filters treatment of sewage on land, factory and trade effluents, the treatment of storm water sewage at the works, separate systems of sewers, and tests for sewage effluents in relation to standards. All these have been very carefully considered, and I think it may be stated that the procedure of the County Council during the last ten years has been generally in accord with the recommendations now issued.

#### ELEMENTARY SCHOOLS.

88. During the year 41 Schools were closed in the Administrative County on account of the prevalence of infectious diseases, compared with 36 and 39 in the two previous years. Of these, 23, or more than one half were on account of Measles, 5 on account of Scarlet Fever, 10 on account of Whooping Cough, 2 on account of Diphtheria and 1 on account of Chickenpox.
89. The year has been noteworthy as being that in which the Elementary School came into close touch with Public Health administration, in that the Administrative Provisions Act came into force. I have in a separate Report dealt with the results of inspection and while it is too early to do more than patiently investigate, I have no doubt that incalculable good will result, not only to the children, but to the cause of Public Health.
90. The Inspection of School buildings themselves periodically will disclose, as inspections have already done, easily remedied sanitary defects, while the following up by Medical Officers and Health Visitors, of cases to their homes, will have an influence in calling attention to Sanitary deficiencies not dealt with in the past because unsuspected.

#### VACCINATION.

91. The usual Table appears in the Appendix, giving particulars of the Vaccination carried out in the County Districts. For all who have been impressed with the importance of vaccination as a preventive of one of the foulest diseases that ever affected humanity, this table is somewhat sad reading. It is sad reading in that we find that more than double the number of Certificates of conscientious objection have been obtained, compared with that of the previous year. In fact in some Districts, notably Nuneaton and Rugby, comparatively little Vaccination is now performed. In Nuneaton for instance, out of 1,075 births, only 394 are put down as successfully vaccinated, while no less than 522 Certificates of conscientious objection were obtained. In Rugby the results are much the same; out of 489 births, 138 only were successfully vaccinated. In connection with this, I am bound to call attention to what I consider a very serious matter, that is, the very large number of cases remaining unvaccinated at the date of the return and unaccounted for by Certificates of conscientious objection having been obtained. The same thing was apparent last year, but even to a greater extent.

92. In the interests of Public Health, it is bad enough for Vaccination to be deficient when the law has been complied with, but it is inexcusable to have Vaccination neglected when no legal warrant for the neglect exists. We have been fortunate now for many years in Warwickshire in having but little Smallpox, and even when the disease has been introduced, we have been able, owing to the better protection which then existed, to deal without undue expense with the epidemic, but in the future it must be definitely understood that when the inevitable epidemic comes, not only will there be a much greater amount of personal suffering, but the cost of dealing with the epidemic will be a heavy one for the ratepayers as the examples of towns which neglected Vaccination in the past have invariably shown.

#### REFUSE DISPOSAL, SCAVENGING, ETC.

93. My experience definitely tells me, though in many instances not much information is given in the Reports, that public scavenging and the removal of domestic refuse is being carried out in a more complete manner year by year. Of all the large Districts, the Borough of Sutton Coldfield was the most behind in this matter, and although the promised public scavenging had not been commenced in the year under review, I am able to state that after a Local Government Inquiry for the purpose of a loan to purchase land for a tip, at the time of writing the work has actually been commenced.
94. In the Report of Castle Bromwich, the Medical Officer of Health says:—"I would call your attention that, in my opinion, the time has arrived for the public scavenging of ashpits, &c., to be commenced and maintained in the Castle Bromwich district. Many complaints have been received of the difficulties attending the removal of waste matters by householders themselves, and I am quite sure that such regular collection would not only promote the health of the inhabitants, but it would, when it was once adopted, receive the approval of tenants and ratepayers of all sorts."

In the Report on the Southam District, for the year 1907, as mentioned in my last Annual Report, I called attention to some remarks of Dr. Wilson as to the desirability of instituting a system of public scavenging, his words were:—"There will always be more or less risk to health in certain parts of the town so long as a system of public scavenging, which has been so often discussed, is not adopted." In the Report for this year I cannot find any record of anything having been done in this respect.

95. That the expense entailed on local authorities in removing refuse is not as great as it appears to be is shown by a statement of the Inspector of Nuisances for Foleshill, who says:—"Owing to the large number of Water Closets, and the consequent removal of the ashpits, the men are now enabled to dispense with about half the night work, and empty the dry ashes in the daytime from the ashbins." I mention this because though the chief point in the removal of refuse is entirely a sanitary one, yet the fact that a greater efficiency may be produced by a diminution of expenditure otherwise entailed is worthy of consideration.

#### INSPECTORS' REPORTS.

96. I am pleased to state that tabular returns of the work done by Sanitary Inspectors have been received from every district in the County except Bulkington and Atherstone. In the case of Bulkington no table has ever yet been received, but from Atherstone as a rule the information is afforded, and I can only suppose that changes in the Inspectors' staff are responsible for the omission during the present year.
97. A perusal of the Reports sent in show that excellent work has been done in all the Districts in the way of abatement of nuisances, and an Inspection of those places which the Sanitary authorities have power to regulate.

#### BYE-LAWS.

98. In the Report of the Medical Officer for the Tamworth Rural District, he says that progress has been made during the year and that a draft form of Bye-Laws, as approved by the Council, has been submitted to the Local Government Board for their approval. I note also that in this District the Council have made application for a certain portion of the public Health Amendment Act to be adopted by the Council for the District. At Southam nothing appears to have been done and this is one of the few Districts now where no local Bye-laws exist.

## WATER SUPPLY.

99. Nearly all the reports deal with work done for the improvement of the water supply of the Districts. As I have before pointed out, most of the larger Districts have supplies above suspicion, and I note that year by year, by the extension of mains from towns, or by the institution of new supplies, Rural Districts are depending less and less on supplies from surface wells.
100. I refer at length in my Summary of the Medical Officer's Report, to the work that has been done in the Southam District, in endeavouring to find a proper supply for this large area. The facts adduced here, show the great difficulties to be overcome owing to remarkable conditions, and the sparse character of the population.

## BACTERIOLOGICAL EXAMINATIONS.

101. I am quite convinced that much more appreciation has been shown during 1908 of the facilities offered by the County Council scheme for obtaining examinations in suspected cases of Typhoid Fever and Diphtheria. In Sutton Coldfield and Erdington a large number of cases are examined, and the same remark applies to many of the other districts. In others, however, I regret that little has been done.
102. It must not be supposed for one instant that I suggest by these examinations we have a definite means of establishing the definite diagnosis of Diphtheria and Typhoid Fever, but there can be no doubt that in the vast majority of cases, the results obtained are quite conclusive, while in the case of Diphtheria, as I have shown on a previous page, information can be afforded as to whether or not a patient apparently well, can safely be allowed to mix with others in the school or social circle.

## COWSHEDS, DAIRIES AND MILK SHOPS.

103. In most of the Reports, details are given of the Inspection of the above. Greater attention is given to the condition of Cowsheds than formerly, and practically in every district modern regulations referring to these places have been adopted.
104. During the present year, I hope to be able to make some investigations as to the cleanliness or otherwise of milk produced and supplied in the County. Some efforts have already been made to fix the standard of dirt in milk and the importance of the subject is such that I have determined to see if anything can be done to raise the hygienic standard of milk sold.
105. Evidence has accumulated that a considerable quantity of milk sold is contaminated with the tubercle bacillus, and it is to be hoped that before long legislative enactment will provide that special means shall be taken to prevent the sale of tuberculous milk. In the meantime, I wish to accentuate the importance of all milk before being used in the household being boiled for a short period, or at all events, sterilised, as is done in nearly every country of the world except our own. I look upon this as a temporary measure of safety until public sentiment is sufficiently awakened to demand that milk when sold for human consumption, shall be a healthy animal secretion, as well as one up to the mere commercial standard.

## HEALTH VISITORS.

106. In 1907 I was able to say that our staff of Health Visitors underwent no change. In 1908, however, I very much regret to say that of the four Health Visitors then in the service of the County, no less than three have left us. Miss Mackenzie retired on account of ill-health; Miss Colles to undertake work under the Education Committee of Essex; and Miss Swallow for private reasons. Their retirement was a great loss to the County, as all these ladies were devoted workers, possessed of tact, and did much to popularise health visiting in the County. In their places, Miss Freeberne, Miss Morrison, and Mrs. Lord were elected early in the year, while later on, owing to the extra work necessitated by School Inspection, two other Health Visitors—Mrs. Moore and Miss Chorlton—were appointed.

107. Increase of staff has necessitated an alteration of the County Divisions in which they work, and instead of four, we now have six Health Visitors' Districts.
108. Work proceeded in the first three quarters of the year on the same lines as in the past but when the Medical Inspection of School Children commenced in the last quarter of the year, a considerable change had to be effected, as the subject of home hygiene could be dealt with to some extent, by way of the schools.
109. More has been done than in the past in endeavouring to prevent the terrible waste of infant life which occurs, and a considerable portion of the time of the Health Visitors has been taken up in visiting babies as soon as they have become aware of the births. I have before referred to the importance of our knowing as soon as possible, the occurrence of births, and it would be a great advantage, as I have before said, if the Notification of Births Act was adopted, so that this inspection of babies could commence at a very early period. I have been indebted in the past to two sources for information, the midwives on the one hand, and the Registrars of Births on the other. The Midwives in many instances have notified us of births a few days after they have taken place, but in the case of the Registrars, they are not able to afford any information until the Registration has taken place, and this may be delayed for a period of six weeks.
110. I have put in tabular form in the Appendix, the chief results of the work done. Among other items of interest, it will be noticed that altogether, 4,485 visits have been made. No less than 64 wasting babies have been discovered, and from subsequent Reports, I am pleased to know much improvement has been effected in the health of many of them. Two hundred and twenty-four cases of babies improperly fed were discovered, and by constant care and attention to example as well as precept, many of these mothers have been persuaded to give up the unfit starchy foods so many of them were using, and to rely on a proper diet of milk and water. In 126 cases, neglected children were discovered, the biggest proportion being in Miss Freeberne's District. Some of the cases were tragic, in that mothers were eager to treat their children, but extreme poverty, produced by the wage earners being out of work, prevented proper food being obtained.
111. In some instances the Health Visitors have been able to bring cases into touch with charitable agencies, and this has been notably the case in the Rugby District, and much suffering has been averted. In other cases, the aid of the N.S.P.C.C. has been invoked with thoroughly good results. Though in some quarters the work of this Society has received some stringent criticism, I cannot help saying I consider at the present time that it is one of the most important agencies in the County in dealing with some of the worst cases of neglect in young children.
112. Owing to the fact that so much time has been taken up at Schools, by aiding in the work of Medical Inspection, fewer "Health Talks" have been given than in the previous year. Though this has been the case, it does not mean that there has been any diminution of activity in this direction, because opportunity has been afforded by the Inspection, for private talks to be given, not only to the children, but to the parents of the children attending at the inspection, and at their own homes in suitable cases.
113. In the early part of the year an influential meeting was held in the Town Hall, Leamington where the subject of Infant Mortality was discussed, and as a result, I am quite sure an important stimulus was given to the work of amelioration in that town. I am still looking forward to the time when the work will be aided to a considerable extent by ladies acting as voluntary helpers. I hoped to have been able to have moved towards this end during the year but the extreme pressure of work caused by the inauguration of the system of Medical Inspection has prevented me taking the necessary steps.
114. Health visiting is also carried on in the Borough of Aston Manor, and after perusal of the Health Visitors' Report I am of opinion that looking at the characteristics of the town, the work is proving of the greatest value. In Leamington, too, a School Nurse has been appointed and although I understand Health Visiting in the ordinary acceptance of the term is not to be one of her functions, it is quite certain that much good in a somewhat similar direction will be produced.

## METEOROLOGY.

115. In the Appendix will be found tables dealing with observations taken at Sutton Coldfield and Leamington. Inspection of these is interesting and throws a good deal of light on the general climatic conditions of the year. Dealing with rainfall first, it will be noticed that at Leamington, though the number of rainy days was almost the same as at Sutton Coldfield, the quantity of rain was 5·80 inches less than at Sutton Coldfield. The greatest difference is observed in May, which was a somewhat wet month in the north-west of the County, and a comparatively dry one at Leamington. In November, the rainfall at Sutton Coldfield was 1·47 inches, but in Leamington it was less than half inch. It is somewhat strange that in Districts not more than twenty-five miles apart, there should be such marked differences in the rainfall, and it enables us to see how even within a small area, climatic conditions vary. The mean temperature at Sutton Coldfield for the year was 47·8, at Leamington 51·4, a very marked difference. The mean temperature was only one degree above that of 1907, and half a degree below that of 1906. The highest maximum temperature of the year in Sutton Coldfield was 83·6 on the 4th of July, while the lowest was ten degrees on the 28th December. At Leamington higher temperatures were registered, but the lowest registered was on the 4th January and the 30th and 31st December, when twenty degrees were observed. I regret that in many respects the observations are not comparable. As regards sunshine, 1908 compares very favourably with the previous year. At Sutton Coldfield 1,223 hours of bright sunshine were registered, compared with 1,186 hours, 13 minutes in the previous year. This increase of bright sunshine, though so much enjoyed by the community at large, was no doubt responsible for the increased Death-rate from Infantile Diarrhoea.

## ADULTERATION.

116. During the year 740 samples were submitted to the County Analysts, compared with 653 in the previous year. I am pleased to see that the suggestion I made for an increase in the number of samples submitted has been carried out, and I am of opinion that the number submitted last year was much more in accordance with the increased population of the administrative Area.
117. Nearly all the samples were submitted by the three Food and Drug Inspectors, but in addition, samples were submitted by Inspectors Parsons, Withers, Parker and Harris, on behalf of the Urban District of Rugby and the Rural Districts of Rugby, Tamworth and Solihull.
118. The percentage of adulteration was slightly less than in the previous year, and about the average of the last few years.
119. I am of opinion that in the County the Acts are being very well administered.
120. A large number of samples have again been taken informally, as suggested by the Board of Agriculture. In this way light is often thrown on methods of trading which are useful in giving guidance for the taking of formal samples later on.

## FACTORY AND WORKSHOP ACT.

121. The Home Office issue a tabular form for Sanitary Authorities, so that the work done in the department in the way of Inspection may be incorporated in the report of the Medical Officer of Health. From these Reports, I am of opinion that in the Rural Districts particularly, work of great value is being done in looking after the cleanliness and Sanitary arrangements of workshops. In the majority of these in the County area but few people are employed, but due regard to cleanliness, ventilation, and sanitation, almost have an equal importance in these as in those of the towns and cities. I am convinced that year by year the conditions under which work is done in the Country is being much improved, making not only for healthier, but for more decent conditions and surroundings.

## MIDWIVES ACT, 1902.

122. The work under this Act has been carried out on the same lines as heretofore. The two additional Health Visitors being trained Midwives, carry out the work on the same lines as the other four.

123. The Reports which I receive from the Health Visitors at frequent intervals, undoubtedly show that the type of work is considerably improved. Greater attention is paid to the patients and greater cleanliness observed both in the person and in the instruments, indeed in this respect I am convinced that much improvement has been effected during the year.
124. I was unable to give any other courses of instruction, though these were looked forward to in certain quarters. During the year 1909 I have reason to hope that courses on the same lines as in 1907 will be given.
125. In March 1910 all the women now in practise who are uncertified, will have to retire from real Midwives' work, but all those at present on the Register, whether originally trained or not, will remain as heretofore. This does not appear to be completely understood, as I have received several enquiries of late bearing on this subject.
126. As in the previous year, the Education Committee set aside £150 for the training of Midwives to take the place of those retiring, and grants were given in several cases to Nurses who desired to become Midwives and whose employment was guaranteed by Nursing Associations. I pointed out in my last Report that in some instances, women who had trained themselves, but held no definite appointments, found great difficulty in obtaining a living, and in fact were inclined to undertake maternity cases rather than Midwifery in the strict sense of the word. Under the new arrangement this difficulty will be obviated, and the services of the women will be retained under the guarantee of the Nursing Associations, for work in the County.
127. The number of cases of Puerperal Fever in the practice of Midwives was 18, practically the same as in 1907.
128. One hundred cases of stillbirth were reported to me, about which enquiries were made, while 184 notices of sending for Medical aid, as required by the Act, were duly received.
129. The total number of Midwives on the Roll was 375, but the actual number who sent in notification of their intention to practise was 290, or, 8 more than in the previous year. Of these, however, only 70 have received training and were Certificated; the others were on the Roll by virtue of having been in practice at the date of the passing of the Act.

#### SPECIAL DEATH RATES.

130. I give below in tabular form, figures showing the Death-rates in the County per 1,000 persons living, from the three Zymotic diseases, Typhoid Fever, Diphtheria, and Scarlet Fever.
131. I have before referred to the fact that the rate from Typhoid Fever has been reduced, but in 1908 it is less than one-third of what it was in the previous year, and one-half what it has ever been in any preceding year since we have records.
132. The rates from Diphtheria and Scarlet Fever are each slightly higher, as I have said in the previous pages, but may be considered for all practical purposes identical with the low rates of the preceding year.

	Typhoid Fever.	Diphtheria.	Scarlet Fever.
1899.	0·25	0·15	0·08
1900.	0·22	0·14	0·04
1901.	0·13	0·16	0·11
1902.	0·09	0·12	0·15
1903.	0·04	0·11	0·12
1904.	0·07	0·18	0·10
1905.	0·04	0·14	0·05
1906.	0·07	0·16	0·05
1907.	0·07	0·13	0·05
1908.	0·02	0·17	0·06

#### HOUSES AND BUILDINGS.

133. At the present time greater efforts are being made to see that houses are maintained in a better Sanitary condition than in the past. To some extent, this is effected by the building Bye-laws, and to some extent by proceedings being taken under the housing of the Working Classes Act for condemning buildings unfit for human habitation. Every year, I am struck more and more, by the fact that in some

country districts a large number of houses do not reach such a reasonable standard as to admit of a decent or healthy existence being lived. In some instances, bedrooms are used having no window, or any appliance for ventilation. I find also, and this I consider the most important point of all, that a considerable number of the houses are unprovided with pantries, or suitable places for the storage of food. I am compelled to associate some of the infant mortality with this state of affairs, and although I appreciate to the full the difficulties of any radical alteration of it in existing property, I wish to urge the importance in the future, of all plans for cottages, being passed only, if proper ventilated pantries are provided.

#### CONCLUSION.

134. At times, there is an advantage in matters scientific and administrative, as well as commercial in what may be termed an account of stock-taking, and as this is the twentieth Report I have had the honour of submitting on the health of the County, and the tenth as County Medical Officer of Health I feel somewhat impelled to endeavour to answer an oft asked question: "What evidence can you show to prove that the expenditure entailed has had the hoped-for effect, and that the results achieved are commensurate with it?" Nothing is so easy as to appear to prove by the misuse of figures, something that one wishes to prove and therefore the putting forward of figures is not always a thing to be commended. It will, I think, however, be interesting to see what has happened during the ten years that the County Sanitary administration has been in operation.

135. The population has increased from 352,000 to 400,000. The Birth-rate has fallen, as over the whole of the country. The Death-rate in 1899 was 15.93 and there has been—allowing for slight variations—a progressive decrease in the decade, so that, taking the average of the ten years, we have saved during the last year, on a population calculated on the middle of the period, no less than 487 lives per annum. To put the matter in another way, in 1899, with a population estimated at 352,000, the actual number of deaths occurring during the year was 5,625, but in 1908, with a population estimated to have increased to 400,821, the number of deaths in the County was only 5,123. If however, we look to what is known as the Zymotic Death-rate, i.e. the death-rate from the seven principal Zymotic diseases, we find that in 1899 the Death-rate was 1.94; in 1908 it was 0.87, or disregarding the increase of 50,000 in our population, the deaths in the two years were respectively 706 and 353.

136. But perhaps from a local as well as from an Imperial point of view, the most satisfactory result which can be pointed to, is the reduction in the rate of Infant Mortality. If we take the rate of Infant Mortality in 1899, we find that it was 142 per 1,000 registered births; in 1908 it was 100 per 1,000 registered births. As the births in 1908 were 10,308, the number of lives actually saved in 1908, compared with 1899 were 433, a number which goes considerably to compensate for the diminished Birth-rate of the latter compared with the former year.

137. But this is not all that can be said. In 1899 the number of deaths from Typhoid Fever and other Continued Fevers was 90; in 1908 it was 12. Allowing for the difference of populations, the death-rate had been reduced from 250 per million to 20 per million. That this is not an accident is proved by noting the progressive fall in the number of deaths.

#### DEATHS FROM TYPHOID AND CONTINUED FEVERS.

YEAR.	NO. OF DEATHS.
1899.	90
1900.	81
1901.	47
1902.	35
1903.	17
1904.	27
1905.	18
1906.	27
1907.	28
1908.	12

138. If it be asked why I select Typhoid Fever, my answer is that this is the one disease of all others, pythogenic or filth produced, the best single index in the same community of its condition of sanitation or insanitation.

139. These are figures to which anyone may point with pride, and in face of certain criticism, they give dumb but eloquent evidence of the importance and wisdom of the expenditure which has produced them. The aim of Sanitary effort is not only to prevent preventable mortality but to prolong and add to the comfort of life, and when we consider that for every life saved, many cases of sickness have been avoided, one may feel just a tinge of satisfaction in that one has been permitted to take part in so great a work.

140. I cannot speak too highly of the work of all my staff. Everyone has given of his or her best, while at the same time I must express my indebtedness to my brother officers in the County Districts, for the help they have now as in the past always been willing to render, and it is I think fitting that I should say in passing, how much I regret the resignation of Dr. George Wilson, of the Mid-Warwickshire Combined District, who for a period exceeding thirty years has been associated with me in certain branches of sanitary work. I am sure I voice the opinion of all the Medical Officers of Health in the County, when I say that while we regret that the relinquishing of official work is due to failing health, we cordially hope that a measure of health will be regained, so that he may be able to enjoy a well-earned retirement.

I have the honour to remain,

My Lords and Gentlemen,

Your obedient servant,

A. BOSTOCK HILL, M.Sc., M.D., D.P.H., Camb.,

County Medical Officer of Health.

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

URBAN DISTRICTS.

ASTON MANOR.

141. Mr. F. H. MAY in commencing his Report says that during the year under review the health of the Borough has been even more satisfactory than that of the previous one, and the vital statistics compare very favourably with the average for the previous ten years, and with those of other large towns.
142. The Death-rate is 13·5, or 1·7 lower than the average of the previous ten years.
143. Referring to the population, he calls attention to the point that he knows as a matter of fact, that the population as estimated by the Registrar General is considerably in excess of that living within the precincts of the town. Referring to this, he says:—"I have more than once previously remarked that the Registrar General's method of calculating the population of towns in intercensal years, on the assumption that the rate of annual increase will be the same as that which obtained between the two last Census years, is not now applicable to this Borough, owing to its being for the past few years practically built up."
144. The Registrar General's Census is 84,256. Mr. MAY's estimate is 79,718. From what I know of the District and its built up condition, I quite agree with Mr. May's estimate, and I feel therefore that although a higher population is the official one, based though it is on insufficient information, that it is a pity that the statistics of Births, Deaths and other rates should be vitiated by adhering to it, as it is certainly in error.
145. Calculated on Mr. MAY's local estimate, the Birth-rate would be 27·4 and the Death-rate 14·2, as against 26·0 and 13·5.
146. A chart is given showing the steady fall of the Birth-rate, which was as high as 44 in 1876.
147. Mr. MAY quotes the following paragraph from the 70th Annual Report of the Registrar General of the Births, Deaths and Marriages of England and Wales, as explaining to his mind some of the causes of the falling Birth-rate in Aston Manor:—"As the birth Registers do not afford information respecting the ages of the mothers there are no means of ascertaining the fertility of women at the several ages comprised in the child-bearing period; there are, however, sufficient grounds for stating that during the past 30 years approximately 14 per cent. of the decline in the birth-rate (based on the proportion of births to the female population aged 15-45 years is due to the decrease in the proportion of married women in the female population of conceptive ages, and that over 7 per cent. is due to the decrease of illegitimacy. With regard to the remaining 79 per cent. of the decrease, although some of the reduced fertility may be ascribed to changes in the age constitution of married women, there can be little doubt that much of it is due to deliberate restriction of child-bearing."
148. The death-rate for the year was the lowest of recent years with one exception, namely, that of 1902, and Mr. MAY considers the present rate remarkably low. He points out that the reduction of the general Death-rate has been principally brought about by the gradual lessened mortality from Diarrhoea during the past two years.
149. Referring to Zymotic Disease, he shows that the rate, if slightly higher than in the previous year, is considerably below the average of the previous ten years. He shows that the slight increase compared with 1907 was due in the main, to a malignant type of Whooping Cough, which prevailed during the first quarter of the year, and to the usual annual epidemic of summer Diarrhoea.

150. He records that the Infantile Mortality for the Borough for 1908 was the lowest but one on record. This rate has shown a marked decrease of late, and though high, may be considered fairly satisfactory. Referring to this, Mr. MAY says:—"The attendant conditions which account for a high Infantile Mortality rate vary widely in different towns and localities. The Borough of Aston Manor is mainly inhabited by the people of the poorer or artisan classes living in small and back to back houses in a thickly populated area, and this contributes a higher Infantile Mortality than in those less densely populated towns which are more affluent and residential in character. One condition favourable to Aston Manor is, however, the very low proportion of married women who before or after child-birth work in factories."

"One of the principal diseases which contribute to high Infantile Mortality rates in towns is Epidemic Summer Diarrhoea, but during the year under review the deaths from diarrhoeal diseases in the Borough, although in excess of 1907, were very much less than the average of the previous ten years; in fact, the number of deaths registered during 1908 was the lowest but two on record. The causes of this are referred to specially, under the heading of epidemic Diarrhoea."

"To the improved sanitary state of the Borough, it having practically become a watercloset town, is this to some extent attributable. It is from the study of the avoidable and unavoidable causes of Infantile Mortality in each town that the remedies are sought, and when found, every possible effort should be made to apply them, in order to preserve our infant population, especially bearing in mind the country's declining birth-rate, and Aston Manor's in particular."

151. Mr. MAY further says:—"More care and better food for the poor and expectant mother (then and also during suckling) would do much towards minimising the number of cases where weaning of healthy infants has to be advised owing to poorness or insufficiency of breast milk. The irregularity or the almost continual feeding of the infant (feeding every time it cries) upsets the infant stomach (which requires intervals of rest) as much as unsuitable food, and should be discouraged. The following are other avoidable causes, viz.: Alcoholism, ignorance, want of cleanliness of bottles, teats, etc., carelessness in storage, and neglect in covering milk, especially tins of condensed milk, from dust and flies, together with tardiness in obtaining medical advice in the early stages of illness of infants, often the only stage at which medical aid may save the life of a child."

152. Mr. MAY refers to the adoption on the first January, 1908, of the notification of Births Act, 1907, and says the Act has worked smoothly during the year, and so far it has not been deemed advisable to prosecute for failing to notify.

153. He also says:—"The adoption of this new Act enables visits to be paid by the Lady Health Visitor during the first week of a child's life, and consequently permits of earlier and more effective measures being taken, especially in encouraging the breast feeding of infants. It has in previous reports been noted that great delay occurred in obtaining intimation of births, as the Law allows six weeks for registration. Early notification of births, is a very desirable measure, when we consider that 46 infants died in 1908 within a week of birth, and 77 within a month. Under this Act the Health Visitor may by much earlier visits and education of mothers prevent the weaning of infants and the giving of unsuitable food during the first few days of a child's life, and may also prevent habits being formed detrimental to the child."

154. Referring to Infectious Diseases, Mr. MAY deals with Measles and Whooping Cough together, and shows that while only two deaths were due to Measles, compared with an average of 26, Whooping Cough was responsible for 52 deaths, compared with the average of 31 for the previous ten years.

155. Diphtheria was slightly more prevalent than usual, the number of cases being 78 compared with an average of 73 for the past ten years. It was, however, a little more fatal than normal, there being 12 deaths compared with the average of 10 for the 10-year period. Of the 78 cases, 73 occurred as single cases in houses. In these 73 houses 64 were supplied with waterclosets and 9 had privy middens. Details are given as to the inspection of the property and what has been done for minimising the prevalence of the disease. Six of the twelve deaths were of children under five years of age. Mr. MAY referring to this says:—"This is another argument against admitting children to school before the age at which school attendance is compulsory."

156. He further says:—"I am pleased to see that medical practitioners take more advantage of the facilities provided for the bacteriological examination of throat secretions at the University of Birmingham. This is not only a safeguard to the patients, but enables earlier and more certain diagnosis to be made, tending also to greater accuracy in statistics relating to this particular affection."
157. Scarlet Fever was about normally prevalent, but the disease was of a somewhat virulent type, the deaths being 12 compared with an average of 8 for the previous ten years. It was chiefly prevalent—as was to be expected—in the last quarter.
158. As regards Diarrhœa, Mr. MAY records that it was the cause of 81 deaths, compared with a yearly average of 126. He says:—"I have in previous Reports commented at length on the causes contributing to Zymotic Diarrhœa, stating that it is a seasonal disease governed by meteorological conditions; long spells of heat and drought, which cause high soil temperature, favouring the activity of the micro-organisms of this disease, which are supposed to be present in polluted soil, these organisms being carried by dust into milk and uncovered food, where they are either poisonous themselves or multiply and produce toxins, which, when swallowed, produce Epidemic Diarrhœa, so fatal to infants, especially the bottle fed. I have emphasised the fact that cold and wet summers are productive of a lesser prevalence of this fatal disease. The summer of the year 1908, although warmer than 1907, had no extremes of heat or drought for long periods, therefore did not altogether favour the development of this particular cause, as the temperature of the 4-ft. earth thermometer did not reach 56 degrees in this neighbourhood on any one day during June, July, August or September, at which soil temperature diarrhœa becomes very prevalent. The average temperature as ascertained from the Birmingham and Midland Institute Observatory for the 4-ft. earth thermometer for June was 49·86, July, 52·38, August, 53·75, and September, 52·40. The mean maximum temperature was highest in July, and reached 68·5, and the mean minimum temperature of these four months was in September, and was 48·4. The greatest number of deaths, viz., 51, took place in August, when the average temperature of the 4-ft. earth thermometer registered its highest, viz., 53·75."

"Other causes of Epidemic Diarrhœa of recent years have been recognised, particularly the prominent part that flies play in the dissemination of the infection of this disease, the warm weather (not necessarily extremes), lending itself to the hatching and breeding of flies in ashpits, middens, manure pits, and wherever collections of fish garbage, animal or vegetable matter is allowed to collect, and not very frequently removed. These germ-laden insects are now considered a source of infection to our milk and food."

"Summer Diarrhœa is to a great extent a preventible disease, being fostered by the too infrequent removal of filth in hot weather, such as is contained in ashpits, middens, manure pits; also by carelessness in not keeping food covered from dust and flies, whereby milk, the staple food of the hand-fed susceptible infant, becomes polluted. The breast-fed infant escapes this source of infection, also improper and unsuitable food. This is illustrated in this town, as in other large towns, from the inquiries which were made under my direction by your Lady Health Visitor, Miss K. Walton, into the circumstances attending the deaths of the 80 children who died from epidemic summer diarrhœa during 1908. She elicited the following facts: of the 80 deaths, 3 died who were breast-fed, 6 died who were breast and hand-fed, and 70 who were solely hand-fed, one case not being traced after leaving the district. One other death in an adult from dysentery, classified under diarrhœa, occurred, making a total of 81 deaths for the year. The reasons given for the hand-feeding of children by various mothers were in ten instances that the doctor had advised them to do so; in 42 instances the breast milk was lost soon after getting up; and in eleven instances they weaned the baby after six months without any particular reason, but it is remarkable to note that in only four instances out of the 80 deaths did the mothers wean their babies in order to go to work. Out of the 80 homes visited where a death occurred the Health Visitor discovered only one really dirty, but the covering of milk and food stuffs in these homes was to her mind very inadequately carried out. I particularly asked her to inquire in these 80 homes as to whether they had been troubled with any great quantity of flies. She reports that in at least 44 homes they were pestered with a great many flies, especially in those 12 homes where there were no waterclosets. The comparative absence of sanitary defects found in the houses where deaths occurred is remarkable, only a few being noted. There was no overcrowding, and practically as many deaths occurred where they used the tubeless or boat bottle as where they used the tube bottle. She

particularly advised the parents not to wean their subsequent babies during the hot summer months. Taking into consideration this analysis, of 79 of the 80 deaths from diarrhoea in this Borough, the results confirm facts previously noted in other towns, that mortality was due to food or milk unsuitable, or contaminated either by infected dust or flies. It is to my mind necessary to instruct people more as to the necessity for the systematic covering of food, thereby affording protection from dust and flies, and to encourage breast-feeding of infants; this of itself will minimise to a great extent the already lessening mortality from this disease. Daily removal of organic matter, house filth, and the more frequent emptying of ashpits during the summer months, swilling of yards, and watering of streets was also of great importance. I am pleased to say that the conversion of privies and middens into waterclosets has been continued with the same ardour in the Borough as in previous years, Aston Manor rapidly becoming a watercloset town."

159. The most satisfactory feature of the Report is the record as regards Typhoid Fever. There were only 15 cases notified in the Borough during the year, as compared with 41 in the previous year, and 87, the average of the previous ten years, while the number of deaths was only 2. Mr. MAY says:—"Since the epidemic of 1899 Typhoid Fever has gradually declined in this district, and if the sources of infection of some of these 15 cases could be traced I feel sure that many would prove to have been outside the Borough, the germs probably being swallowed or obtained by eating contaminated oysters or other shell fish, etc."

160. All the 15 cases were duly investigated as regards the sanitation of the homes, and where nuisances were discovered means were at once taken for their abatement. In only two cases were serious nuisances discovered, one being a choked drain and the other a broken pan in a watercloset.

161. Only two specimens of blood were sent to the Bacteriological Department of the Birmingham University for Widal's reaction, and both of these showed negative results.

162. Seven cases of Puerperal Fever have been notified, three of these being in the practice of Medical men, and four in the practice of midwives. Mr. May details how in connection with the Executive Officer of the County under the Midwives Act, disinfection was dealt with, and the other regulations rigorously enforced.

163. Phthisis was responsible for 102 deaths, compared with 94 during 1907. The disinfection of premises and bedding after death has been systematically offered for some years, and satisfactorily carried out, and only in a few cases has it been refused.

164. Referring to the General Sanitary Administration, Mr. MAY says:—"It is pleasing to be able to record that the numbers of privies and middens replaced by waterclosets, with ashpits or dustbins, during 1908 was slightly in advance of those for the preceding three years, being 340, as compared with 333, 334, and 331 respectively during 1907, 1906, and 1905. These results are not achieved without much consideration and tactfulness, and it is satisfactory to note that no legal proceedings for the abatement of nuisances from this cause were necessary during the year under review, and that in only a few cases was it necessary for your Inspector to report to the Health Committee with regard to privies and middens. In cases where this step has been called for I have, at your Inspector's request, visited the properties and inspected the nuisances, and have thus been prepared to advise as to any legal proceedings, and support them if necessary with medical evidence."

"As showing the steady replacement of privies and middens with waterclosets which has taken place in Aston Manor, it will be interesting to note certain figures appearing in a table on page 132, kindly furnished by Mr. A. Treadaway, Superintendent of the Interception Department. This table shows, among other details, the decrease in the number of loads of night-soil removed from middens to the destructor year by year, and I have extracted from it the figures representing five-year-intervals as follows:—

1893	..	..	..	..	..	..	..	..	14,868 loads.
1898	..	..	..	..	..	..	..	..	14,121 ..
1903	..	..	..	..	..	..	..	..	8,676 ..
1908	..	..	..	..	..	..	..	..	4,107 ..

(There is, of course, a corresponding increase in the amount of dry refuse removed by day.) It will be seen from the figures above quoted that during the past five years alone the number of loads of night-soil removed has been reduced by more than one-half, which is, of course, due to the rapid abolition of privies and middens in favour of waterclosets, with dry ashpits or tubs."

165. He refers also to the important duty of systematic house-to-house inspection, and says that during 1908 five streets were inspected, namely, Guildford Street, Lennox Street, Vicarage Road, Bright Street, and Gladstone Street, and a table is given showing the sanitary defects found.
166. He notes that seven houses were dealt with under the Housing of the Working Classes Act, 1860, and that these houses, which were back-to-back houses, were finally converted into four "through" houses. The houses were improved in various other directions, making them much more sanitary dwellings.
167. He also records with much pleasure that useful work has been done during the year in the abatement of nuisances connected with dwelling houses.
168. Referring to Public Sanitary conveniences, he says:—"Six urinals have been provided during the year by the owners of licensed premises in the district, the Council having undertaken to do the whole of the necessary cleansing and maintenance of the lamp where the urinals have been provided, to the satisfaction of the Surveyor.
169. The Report also deals with the work done under the Factories and Workshops Act, both as regards cleanliness and sanitation, and the means of escape in case of fire.
170. The Report also states that there are no underground Bakehouses in the Borough.
171. A considerable section is devoted to the work done by the Isolation Hospitals and a full description of these is given, as well as of the condition of the patients received.
172. The Report also contains details of the work done by the Health Visitor—Miss K. Walton—during the year, in which she deals largely with the visits to infants under the Notification of Births Act. She refers to the importance of natural feeding, and calls attention to a section in the new Children Act which requires fire guards to be provided in the homes as a protection against burning fatalities. She also calls special attention to the desirability of covering food stuffs, and thus preventing the contamination of dust and that brought by flies.
173. The Report concludes with a full appendix, giving Vital and other Statistics, and a Summary of the work done in the Inspectors' Department.
174. It is only fair that I should add that altogether it is a record of a large amount of work excellently done, and when I mention that the Report extends to no less than 134 pages, it is obvious that in a comparatively short *resume*, such as mine is compelled to be, that full justice cannot be done in all particulars.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
84,256	26·0	13·5	1·9	125

## BULKINGTON.

175. Mr. PEACOCK having resigned as Medical Officer of Health, Dr. Lionel E. Orton was appointed in his place. He estimates the population to have increased to 1,650.
176. The Birth-rate was 2 per cent. lower than in the previous year.
177. The Death-rate was high, practically the same as in 1907.
178. The high mortality was caused chiefly by the large number of deaths occurring in old people over 65, and also to some extent by a severe epidemic of Measles, which occurred in September and October to which seven children succumbed. As an illustration of the great danger of Measles under certain conditions, I may remark that this number—7—was more than twice as high a figure as that from any other cause of death at any age. This high mortality from Measles gives a high Zymotic Death-rate, namely, 4·2.
179. The Infant Mortality was fairly satisfactory, and lower than in the previous year.
180. It is reported that the Factories and Workshops have been found to be in a satisfactory condition.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,650	35·1	20·0	4·2	103

## ERDINGTON.

181. Dr. Bostock Hill is able to report that this large and rapidly increasing district has not only maintained the high standard of Health of the previous year, but has actually a record death-rate.
182. He estimates the population at 30,501, including the institutions, but after eliminating those who do not belong to the district, chiefly inmates of the large Aston Workhouse, situated in the Erdington District, he estimates the population to be 28,560, being a marked increase on the previous year.
183. The Birth-rate was 25.9, namely .59 below that of the previous year, and must be considered on the whole satisfactory.
184. The total number of deaths to be debited to the District was 254, giving the very satisfactory Rate of 8.72. He states that the rate for the previous year was 8.78, which he at the time pointed out was a record for this district. It is therefore all the more satisfactory to again be able to show a further diminished death-rate, and to see that the year 1908 still upholds the record of having the lowest Death-rate recorded in the district. The rate is 1.81 per 1,000 below the average for the last ten years.
185. Referring to Infant Mortality he says:—"It is a matter for great congratulation that this figure for Infant Mortality remains so satisfactory, because it is only of late years that Infant Mortality has been satisfactory in the district. Although the figure is slightly above that of last year, it is hardly above what may be called the figure for non-preventable Infant Mortality, and therefore it is the more satisfactory. It is also a point for congratulation that the rate remained so low in a year following a record figure, like that of 1907."
186. As regards Zymotic diseases, 21 deaths were registered from the seven principle Zymotic Diseases. They were as follows:—Whooping Cough 3, Typhoid Fever 2, Diphtheria 6, Scarlet Fever 3, and Diarrhœa 7.
187. Smallpox was completely absent from the district during the year.
188. As regards Scarlet Fever, the total number of cases notified was 189. Of these, 21 occurred in Public Institutions. He notes the fact that the Medical Officer of the Hospital reports that the type of the disease has been generally more severe than for some time past.
189. As regards Measles, he says:—"For the fourth year in succession this disease has, for the most part, been absent from our midst. Not a single death has been registered from it during the year; and but very few cases have occurred."
190. Referring to Diphtheria he says:—"I have for several years pointed out that one of the curiosities in a sanitary sense, of the Erdington District is a tendency to throat illness of a diphtheritic type. Many of these cases do not appear to be true diphtheria, because swabs are frequently sent to the Pathological Department of the University of Birmingham, which yield a negative result; but no doubt, in many cases, true specific diphtheria occurs; and during the year under review 32 cases altogether were reported. Six of these proved fatal; therefore we have had an increase in the number of cases, and also some increase in the severity of the type."

"I personally visited the houses in which the cases occurred, making full inquiries as to their probable origin."

"The disease was chiefly prevalent in the Short Heath and Bromford Wards, 21 out of the 32 cases occurring in these Wards."

"In the cases of 8 patients, I could clearly trace direct importation of the Disease from outside Districts. In several others, the patients either worked in districts, or attended school, outside our Boundary, and it was evident that these were the only persons in the household infected."

"In one case I believe infection could be traced to a diseased cat. Everything was done by the Sanitary Staff to limit the spread of the disease, and thorough disinfection was carried out at the end of each of the cases."

"I am very gratified to find that there is a greater tendency for practitioners in the District to avail themselves of the County Council scheme for the examination of swabs from suspected throats; but I cannot again refrain from calling attention to the importance of examination of swabs when a patient has apparently recovered, before the case is definitely certified to be free from disease."

"Evidence has accumulated so that the matter is now beyond dispute that patients apparently well may be the hosts of virulent diphtheria bacilli; so that before a child is allowed to mix with others, an examination of one or more swabs from the throat should be made, with the object of proving the absence of virulent bacilli. Great good would result to the sanitary condition of the district if, in many instances, other persons in the household were also examined, because "carriers" are known to exist, that is persons who, without suffering from the disease at all themselves, may carry bacilli about in their mouths and thus be the innocent means of infecting others."

191. One of the most satisfactory features of the Report is the small incidence of Typhoid Fever, for only five cases out of the district proper were reported, and of these, four were imported into the district suffering from the preliminary symptoms of the disease. In the other case, the infection was attributed to the eating of oysters.

192. Diarrhoea was not particularly prevalent, the number of deaths only showing an increase of two on 1907, when the summer was cold and wet.

193. The Report records an increase in the mortality from consumption, the numbers being 23 compared with 15 and 17 in 1907 and 1906 respectively. The percentage of the total deaths was therefore 9.

194. The Report states that in every case occurring, disinfection was offered of clothes of patients and of rooms, by the inspector.

195. The Report deals also with the water supply and states that looking at the importance of pure water as regards the dairying industry, that every farm in the district will shortly be supplied with the pure Welsh water from the Corporation mains.

196. It also states that when certain extensions of water mains now in progress are completed, there will not be more than six surface wells in the whole of the District.

197. As regards other improvements, special attention has been paid to street widening and sewerage works, while the scavenging and removal of house refuse has been carried on in an excellent manner.

198. Dr. Bostock Hill emphasises the importance of replacing ashpits by sanitary iron bins, and further says:—"I should like again to state that I have been greatly pleased with the excellent way in which the Scavenging and Removal of Refuse has been carried on, and I have little doubt that the very excellent statistics recorded in the district are largely due to the increased cleanliness in and around houses on account of good administration in the Surveyor's Department."

"In addition to the work done in the Surveyor's Department, the Inspector reports that 23 midden privies were converted into water closets, and at the present time I am pleased to be able to report that there is hardly a privy midden remaining in the district in a place where it is possible for water-closets to be fixed and suitably drained."

199. The systematic inspection of the District has been carried on continuously throughout the year by the Sub-Inspector.

200. The Report also deals with the work done as regards maintaining proper conditions in Cowsheds and Milkshops, and Factories and Workshops.

201. In conclusion, Dr. Bostock Hill says:—"It is important in summing up the results of the work to point out the directions in which future improvements should lie, but the district is in such an excellent state as regards its sanitation, that the points to which attention requires to be given are comparatively minor."

#### VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
28,560	25.90	8.72	0.72	91

## KENILWORTH.

202. Dr. WILSON estimates that the population of this district is now 5,060.
203. The Birth-rate was a very low one, namely, 19.6 compared with 26.2 in the previous year, while the Death-rate was higher than in the previous year, being 12.6, this however, is below the average rate of the previous ten years.
204. The rate of Infant Mortality was 111 per 1,000 Births registered, being double that of the previous year.
205. The Zymotic death rate was 0.98 as compared with 2.0 in the previous year.
206. Among the causes of death, 3 were attributed to Whooping Cough, 1 to Diphtheria, 1 to Enteric Fever, 5 to Phthisis, 3 to Cancer, 13 to other Lung Diseases, and 9 to Heart Disease.
207. The total number of cases of infectious disease notified under the Act was 24, of which 14 were Scarlet Fever, 5 Diphtheria, 1 Enteric Fever, and 4 Erysipelas.
208. With the exception of an outbreak of Whooping Cough in June, which caused 3 deaths among infants, Dr. WILSON considers the Vital Statistics for the year to be on the whole very satisfactory.
209. Dr. WILSON reports that the scavenging has been well attended to, and to obviate nuisance on transit, covered carts are now employed instead of the open carts as formerly. The sewers have been well flushed and ventilation attended to. Twenty-nine new houses were erected and certified, and with one exception all were supplied with water from the mains of the Water Co. Ten polluted wells were closed, and the Company's supply laid on to the premises.
210. Bakehouses, slaughterhouses and cowsheds and dairies were regularly inspected, and any defects which were discovered attended to, and the same careful supervision was exercised in respect to factories and workshops.
211. Appended to the Report is one from the Surveyor and Sanitary Inspector, giving details of the work done for the removal of nuisances, of the sewerage, scavenging, and inspection of those buildings which the Sanitary Authority have power to regulate.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality. per 1,000 Births.
5,060	19.6	12.6	0.98	111

## LEAMINGTON.

212. Dr. BROWNE in commencing his Report says he is gratified in being able to congratulate the Borough upon a year of progress, sanitary fitness, and a large freedom from preventible disease.
213. He reports a Birth-rate of only 15.7, as far as I know, the lowest ever recorded, at all event during the last ten years, and no less than 3.2 per 1,000 below the previous year. As regards Wards, it was much lower in the West Ward than in the other three into which the town is divided.
214. The Death-rate is 1.19 higher than in the previous year and in some respects must be considered rather high for a town like Leamington.
215. Referring to the Infantile Death-rate he is able to report very satisfactorily, and says that the Deaths under one year are almost one-half of the numbers shown annually since 1890; and about 30 per cent. below 1907.
216. The Infantile Death-rate is set down as 84.1, while the average for the last ten years was 126.1. Referring to this, he says:—"The Summer was cool, and no diarrhoeal diseases existed. I believe that the efforts of the Lady Health Visitors in our midst for the past three years are bearing fruit, and parents are finding out that sanitation is worth study and application.
217. He also refers to the high mortality in those of mature years and the aged, coming under the headings of Broncho-pneumonia, Heart Disease, and Cancer.

218. Scarlet Fever was by no means markedly prevalent, but Diphtheria caused 40 cases.
219. One case of Typhoid Fever only was reported. A sanitary defect was discovered in connection with the soil pipe at the house.
220. A mild attack of Measles occurred in the early part of the year, and five schools were closed in consequence of it.
221. Referring to Phthisis, he says 21 people died of this disease, but only two cases were reported. He states that offers of disinfection are made in these cases, but most people refuse to accept such offers and resent interference in any way. Leaflets as to spitting have been distributed at the houses where these patients are.
222. He states that there is no provision in Leamington for the treatment of Consumption except in Warwick Union Infirmary.
223. Under the head of General Remarks, he refers to the free supply of Diphtheria anti-toxin, and says that the results have been good.
224. The Report also refers to work done in connection with Factories and Workshops, the Food and Drugs Acts, Cowsheds, Dairies and Milkshops.
225. Appended to it are the Reports of the Inspectors for both No. 1 and No. 2 Districts.
226. House-to-house Inspection appears to have been carried out by both Inspectors.
227. As regards overcrowding in No. 2 District, the Inspector says:—"Five cases of overcrowding were abated during the year. Owners and neighbours are very willing to report this form of nuisance by large families in order to get rid of them. However, no undue pressure is ever used, and each case is dealt with on its merits. Poor people are not indifferent to overcrowding, but have great difficulty in getting larger houses."
228. It appears to be customary in Leamington for books found in houses where infectious diseases exist, to be disinfected. This is a custom which might be followed with advantage in other districts.
229. A case is noted where 91-lbs. of unsound and unwholesome strawberries were seized and destroyed. Police Court proceedings resulted in the defendant being sent to prison for fourteen days in default of paying a fine of £1.
230. Certain small quantities of meat, fish and fruit were voluntarily destroyed by their owners on request.
231. As regards Bakehouses, it would appear from the Report of the Inspector of No. 1 District, that there are four underground but certified by the Sanitary Authority as fit for use as Bakehouses. I am of opinion that great attention should be paid to these.
232. Mr. ANDERSON, the Inspector under the Food and Drugs Act, reports that 86 samples of Food, etc. were taken for analysis. Six samples of Milk were found to be adulterated. He refers to the sale of samples of condensed Milk, marked "Full Cream" and "Machine Skimmed" respectively. He points out that while the "Full Cream" milk was of good quality, with a full percentage of cream, the "Machine Skimmed" on analysis was found to contain no fat. He calls attention to the fact that the tins are marked in small letters, "This Milk is not to be given to infants or invalids." He says:—"I know that it is often the only Milk used in small houses where there are young children, and think it is a very great pity that such milk, as it is called, should be allowed to be sold as it is for food. The tins should be marked in such a manner that the poor quality of the article contained could not be overlooked."
233. A Meteorology Table is appended which is of considerable value.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
27,217	15.7	14.99	0.33	84

## NUNEATON.

234. Mr. PEACOCK estimates the population to have increased by over 1,100 persons during the year.
235. He estimates the Birth-rate to have been 34.5 and increase of 4.4 on the previous year.
236. The Death-rate is a very excellent one, namely, 10.5, which is 1.5 lower than in the previous year.
237. There has been a great improvement in the Infant Mortality, the figure being 95 compared with 134 for the previous year.
238. As regards Infectious Diseases, 43 cases of Scarlet Fever were reported, as against 60 in the previous year. 36 of these were removed to Hospital and not a single death from the disease took place.
239. Diphtheria was but little prevalent, only 8 cases with 1 death being notified.
240. Measles was but little prevalent, only one fatal case occurring.
241. Whooping Cough caused no less than nine deaths.
242. Enteric Fever was but slightly prevalent and only 11 cases were reported. Referring to this he says:—"Two cases in Windsor street were due to direct contagion."
243. The disease appears to have been particularly malignant as of the eleven cases five proved fatal.
244. Referring to bacteriological Examinations, Mr. PEACOCK says:—"On September 19th, 1900, the Council decided to fall in with the suggestion of the County Council in purchasing outfits for Bacteriological Examination in suspected cases of Diphtheria and Enteric Fever. Letters were sent to each Medical Practitioner stating that they could be obtained at the Council Offices. I regret to say very little use has been made of them. Anti-Diphtheritic Serum is now supplied to local medical men free of cost."
245. He records that the slaughterhouses, cowsheds, dairies, milkshops, bakehouses, and canal boats have been periodically examined by the Inspector and himself, and generally found satisfactory.
246. He also reports that the application for a loan for the erection of an Abattoir was granted.
247. He also reports that the Factories and Workshops are kept in a satisfactory state.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
33,706	34.5	10.5	1.0	95

## RUGBY.

248. Dr. WILSON does not consider that the population has much increased in this district during the year. The Birth-rate he calculated to be 20.5, compared with 20.6 in the previous year, and 3.1 below the average of the previous ten years. The net Death-rate he estimates at 9.9, 0.5 above that of 1907, but 1.1 below the average of the previous ten years. As regards the age, 37 of the deaths occurred in infants under one year, giving the low rate of infant mortality of 79 per 1,000 registered births.
249. Among the causes of death, 1 was attributed to Scarlet Fever, 4 to Diphtheria, 21 to Phthisis, and 13 to Cancer.
250. There were no deaths attributed to either Whooping Cough, Measles or Typhoid Fever, and consequently, the Zymotic Death-rate was only 0.39 per 1,000.
251. The Scarlet Fever cases were of a very mild type and at no time was there any threatened prevalence of the disease.
252. The majority of the cases of Diphtheria were also of a mild type. Five of the cases occurred among the van children, during the fair. The van and the children were removed to a corner of the market, and the end of an adjoining shed was partitioned off, cleansed and lime washed, and furnished as a temporary sick-ward. Complete isolation was in this way secured. The children made a good recovery, and when thorough disinfection of bedding, clothing, etc., had been carried out, the van with its inmates was allowed to depart.

253. Dr. WILSON states that the public scavenging and the removal of nuisances and other sanitary defects have received constant attention.
254. Appended to the Report is one by the Surveyor—Mr. MACDONALD—dealing with the question of buildings, district sewers, water supply, etc. Referring to sewage, he says:—"The Low Level part of the Rugby New Sewage Purification Works at Bilton, dealing with 520,000 gallons of sewage per day has been completed and at work since the 3rd October last. The contractor hopes to complete the High Level Works, dealing with 186,000 gallons per day, by about the end of February next."
255. All the sewers in the town are reported as having been well flushed during the year.
256. As regards water supply, Mr. MACDONALD says:—"The quantity of water pumped at the Avon Water Works was 201½ million gallons. The analyses and reports of the various samples have been satisfactory, and have shown the water to be of good quality. The filter beds have been regularly attended to, and the whole of the town has been well looked after as regards waste of water. The hydrants have been kept well flushed and in good order."
257. In the Report of the Sanitary Inspector it is stated that four beasts were condemned as unfit for food, and afterwards destroyed, but as all were voluntarily given up, there was no wilful evasion of the law.
258. The Inspector reports that the Dairies, Cowsheds, and Milkshops have been frequently inspected, and generally found to be fairly well kept.
259. Twenty samples of Food were submitted to the County Analysts during the year, and all were found to be genuine.
260. In the Common Lodging Houses during the year, 6,069 males, and 1,606 females found accommodation.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
22,530	20.5	9.9	0.39	79

## STRATFORD-ON-AVON.

261. Dr. THOMSON records a population practically the same as the average for the last ten years.
262. He records a considerable increase in the number of births the rate being estimated at 22.6, compared with 17.5 in the previous year.
263. The Death-rate, though slightly below the average, was considerably above the figure for 1907.
264. The notifications of infectious diseases have been comparatively few, only 20 all told, of which 14 were Scarlet Fever 4 Diphtheria, and 1 Typhoid Fever.
265. As usual there was but little mortality from Diarrhoeal diseases, though Phthisis and other tubercular diseases accounted for 11 deaths, or one-tenth of the total number.
266. Referring to Phthisis, Dr. THOMSON says:—"At the present time the public are generally aware that Phthisis can be contracted by close association with those suffering from that disease, and bedding used by phthisical cases is sent from time to time to the Joint Hospital for disinfection. The public press has also made a knowledge of the advantages of fresh air in consumption pretty universal, and this has been a benefit also to the friends of consumptives by ensuring free ventilation of the sick-room. What we can do in pursuance of the requirements of these regulations is practically as follows:—To disinfect premises and bed clothing, etc., where a death has occurred from Tuberculosis (Pulmonary). To offer to house at the Union Infirmary any case where the premises occupied by a bed-ridden patient are such as to render infection of other occupants likely. To improve, where possible, the housing of cases of consumption in the direction especially of free ventilation of the occupied premises, calling upon owners to improve the facilities for opening windows. (With reference to this last, the window opening outwards on hinges is an objectionable arrangement in a cottage, as it does not admit of any variation in the degree of opening, and during high winds often acts like a wind scoop, as used in ships, and directs a terrible draft inwards). Finally, leaflets, giving information on Pulmonary Tuberculosis can be distributed, and pocket expectoration vessels for cases going at large could be provided at a small cost."
267. No schools were closed on account of Infectious Diseases during the year.

268. Referring to schools, Dr. THOMSON says:—"The adequate ventilation of schools, without draughts, is indeed a problem. There are already open-air schools in several places under the County Council of London, and these were anticipated a century ago in Ireland, where in fine weather the school was accustomed to migrate to the open air. If some genius would discover a material for the construction of school walls which would allow absolutely free entrance and exit of air and which would warm (or cool) such air in transit, the question of school ventilation would be solved. A double walled tent, such as is made for Hospital purposes, is the nearest approach to an ideal schoolroom."
269. Referring to Sewage Works, he says that they have continued to satisfactorily carry out the work of rendering an effluent fit to discharge into a water course.
270. He reports that the water supply has on the whole been satisfactory as far as Chemical Analysis can show, and further says:—"Chemical Analyses of water are useful up to a certain point, but the real safeguard to the purity and safety of water gathered from a given area of upland (such as supplies Stratford-on-Avon) is the careful exclusion of everything from that area which may pollute the water, such as drainage from any occupied dwelling on the area, manures and the droppings of animals. If such precaution is taken rigorously the presence of such elements in an analysis as free ammonia or nitrates are of trifling importance."
271. He deals also with the question of Slaughterhouses, and suggests it might be useful to fit up a slaughter-house as a limited public abattoir, which he says might pave the way to the adoption of a system which, on right lines, is a convenience and benefit to the trade, and would be a great advance in sanitation to a town generally.
272. Referring to the Cowsheds of the District, he says that as regards lighting and ventilation, they may be described as fair, the space per cow as a rule is adequate, but the ventilation he speaks of as primitive.
273. He further says:—"Some of the larger premises in the trade have gas laid on to the sheds, which in the winter must be conducive to greater cleanliness in milking, for milking in a half dark shed is not likely to be a tidy process."
274. Referring to the cleanliness of milk vessels, he says:—"I have reason to believe, as the result of inspection, that this is a matter generally well attended to in the District. The protection of milk from infection and contamination concerns every detail in the milk trade, from the actual milking to the delivery of the milk to customers. Most of the milk sold in the town comes direct from the cow-keeper to the customer, but a proportionally small amount is stored either by the cowkeeper or on premises in the town where the milk is sold. With reference to these last, some have satisfactory accommodation, others are not up to a good standard. I think it would be a reasonable requirement to place no milk purveyor on the Register unless the milk storage accommodation was a place separate and apart and used for milk storage only. It may be contended that this is a nicety, unreasonable to demand from persons whose daily trade is only a few quarts; but on the other hand, once the principle is admitted that milk may be stored as other articles of food may be, the risk of contamination increases. For instance, it is presumably no detriment to store potatoes in a cellar where there is a leaky gas pipe, whereas milk subjected to coal gas infection would very likely set up sickness in a child drinking it. The organic emanation from the breath and skin of human beings are readily taken up by milk, and consequently the milk storage is unsuitably placed if in an unventilated pantry or cupboard adjoining the living room of a dwelling. Where there is no cellar to a house where milk is sold, and proper accommodation cannot be had in the house for storing milk, it might often be possible to arrange for a safe, closed in with fly-proof gauze, out of doors, as far away from any gully trap or privy as possible. This would be placed out of direct sunshine and fixed against a wall, and would be much such a contrivance as is sold to keep meat in. In conclusion, the chief recommendation I have to make to your Council is that before we register a cowkeeper or milk-shop premises the evidence should be forthcoming that we are satisfied that the premises are suitable for the trade."
275. In conclusion he reports that he has not made any representation to the Council under the Housing of the Working Classes Act.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
8,310	22.6	13.8	0.6	122

## SUTTON COLDFIELD.

276. Dr. BOSTOCK HILL reports that the population, though it has increased considerably, shows an increase of only 561, compared with 1,044 in the previous year, the population being estimated on the number of inhabited houses at the end of the second quarter.
277. The Birth-rate has further fallen, and while in 1907 it was the lowest on record, in 1908 it had still further fallen 2 per 1,000 of the population.
278. In the two Central Wards, the Birth-rate fell to 16.3 and 15.0 per 1,000 respectively.
279. The Death-rate was a very satisfactory one, though slightly higher than the previous year, but 1.5 per 1,000 below the average of the last ten years.
280. Referring to Infant Mortality, he shows that of the 203 deaths, 38 occurred in children under one year of age. This gives a satisfactory rate of Infant Mortality, namely, 95 per 1,000 registered Births. This rate is higher than last year, when it probably reached the minimum to which the Infantile death rate can fall.
281. He shows that the causes from which Infantile Deaths were registered, were as follows:—Whooping Cough, 2; Diarrhœa, 3; Premature Birth, 9; Debility, 4; Convulsions, 2; Bronchitis, 2; Tubercular Meningitis, 3; Pneumonia, 3; Congenital Defects, 3; Enteritis, 2; other Tubercular Diseases, 2; other causes 3.
282. He also further says:—"The unsatisfactory feature of these figures is the large number of deaths from Premature Birth and Congenital Defects, pointing almost certainly to a deficient vitality in many of the mothers."
283. The Zymotic Mortality was quite satisfactory, there being only 20 deaths registered from the principal Zymotic diseases, and of these 3 were due to Scarlet Fever, 1 to Measles, 5 to Diphtheria, 1 to Typhoid Fever, 6 to Whooping Cough, and 4 to Diarrhœa.
284. Not a single case of Smallpox was notified.
285. Sixty-three cases of Scarlet Fever were reported, compared with 44 and 14 in the two previous years. Dr. BOSTOCK HILL, referring to this says:—"Looking at the fact that our population exceeds 20,000 there is not the slightest doubt that the number of Scarlet Fever cases notified of late years has been remarkably few, fewer indeed than we have any right to expect, and I am of opinion that although the number of cases notified has been considerably higher than of late years, yet that on the whole the figure is satisfactory."
286. Measles is reported to have been but little prevalent, although four schools were closed during the year owing to its tendency to spread.
287. Whooping Cough was responsible for six deaths out of the total of 20.
288. Referring to Diphtheria he shows that 28 cases were notified in the Borough, of which 5 proved fatal. This is an increase both in number of cases and deaths on the previous year. He points out that as in the previous year, the majority of the cases occurred in Hill Ward. Referring to this he says:—"In many of the cases, particularly in Hill Ward, drains in an unsatisfactory state were found. In one house, where three cases occurred, it was found that the drains were full of sewage backed up from a dumb well, and considerable difficulty was found in remedying this and also preventing its recurrence. It is with satisfaction, therefore, that I can record that a scheme for the drainage of this Ward has been drawn up, and an Enquiry has been held by the Local Government Board for the purpose of granting a loan for carrying out the work.
289. I am very pleased to be able to state that in many instances at the present time there is a growing tendency for medical practitioners to make use of the provision of the County Council, whereby swabs from Diphtheria cases can be tested. Not only is this of great advantage in forming an opinion as to whether or not a suspicious throat is one of true Diphtheria, but there is a still greater advantage to be derived from keeping the patient under observation until one or more swabs have been taken which on examination give a negative result. In several instances during the year this procedure has been adopted to the great advantage of the patient and the public at large.

290. Only three cases of Typhoid Fever were notified, of which one proved fatal. In one case there was undoubted association with oyster poisoning, because the Sutton case was associated with that of a personal friend in Birmingham, who also after the consumption of oysters at the same time, became infected with the disease.
291. Phthisis showed a small decreased Mortality, the number of deaths being 12, compared with 13 and 16 in the two previous years. The percentage of the total deaths, namely, 6.4 is a satisfactory one.
292. The Mortality from Cancer and Malignant disease was practically the same as in the previous year.
293. Disinfection is reported to have been well carried out whenever necessary, 95 houses having been disinfected, and clothing, bedding, etc., from them sent to the disinfecting station.
294. As regards Sewage and Sewage Disposal, Dr. BOSTOCK HILL says:—"I should like to say how much I appreciate the fact that application has been made for a loan, and an Enquiry held for the purpose of draining the Streetly District. I have long pointed out how important it is for this district to be put in reasonable sanitary order, and I may further state that it is impossible for a district to be considered reasonably satisfactory when its population becomes comparatively dense, and it has to rely on dumbwells and cesspits for taking its refuse and waste water. I hope, therefore, that during the current year, this work will be completed, to the great advantage of the northern part of the Borough."
295. He refers also to the removal of house refuse, and says:—"It is a matter of regret that I cannot yet chronicle the fact that a start has been made in commencing operations to this end. Many difficulties have cropped up, and although I am informed vans have been purchased, yet that owing to the fact that the Local Government Board has not yet sanctioned the loan for the purchase of a depot, actual removal has not commenced. That the matter is urgent I am convinced. I have several times during the year found evidence of refuse deposited immediately around dwellings, on walks, and on garden patches close to the house, and as owing to the present system many landlords are in the habit of ordering the removal of waste to be delayed as long as possible, there is a marked tendency to improper collection of refuse for long periods near houses, and also a very marked tendency to allowing overflow from receptables in which it is placed."
- "Though I cannot yet state that a periodical public removal has commenced, I am gratified to be able to state that a much larger number of ashpits have been regularly emptied. The number of such receptables emptied under the scheme by order of the Inspector has been 6,387, compared with 2,962 in the previous year. To a considerable extent this increase has been due to two of the property owners in the Borough making arrangements with the Inspector for periodical removal at their own expense."
- "I am very pleased to record also that no less than 38 old fashioned privies have been altered to waterclosets, and the Inspector tells me that over the whole area of the Borough not more than 50 of these insanitary arrangements are now left. I would urge, therefore, that the attempts to get those existing substituted by waterclosets be still maintained until the last one is removed."
296. Particulars are given as to measures taken to test the quality of the public Water Supply, and of Surface Wells.
297. Reference is also made to the work done for the inspection of Slaughterhouses, Offensive trades, Dairies and Cowsheds, Factories and Workshops, and in all respects the work done has been satisfactory.
298. The usual Meteorological Table is annexed, and the Meteorology of the year reviewed for this portion of the County. In conclusion he says:—"Speaking generally, the Borough is thoroughly well equipped, and the Report proves that the more urgent matters requiring attention will be attended to in the near future. Still, bearing in mind all that I have said, I feel that it is necessary to keep under observation certain urgent matters that require attention, and these are:—  
 First.—The carrying out of the scheme of public scavenging already adopted.  
 Second.—The early completion of the sewerage of the Streetly District.  
 Third.—The complete abolition in the Central Wards of the remaining privy middens."

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
20,952	17.74	9.5	0.93	95

## WARWICK.

299. Dr. WILSON reports a very slight increase of population in this Borough, namely 110.
300. The Birth-rate was practically identical with that of 1907 namely 23·3, this however is below the average for the previous ten years which was 24·7.
301. The Death-rate was also practically identical with the previous year, namely 14·7, and almost the same as the average for the previous ten years.
302. The infant mortality-rate was somewhat high, namely 121 per 1,000 births, as compared with 90 in the previous year, and 115 during the previous ten years. Dr. WILSON suggests that this is due to the more than average number of infants prematurely born, and to deaths from bronchitis.
303. Among the causes of death, 7 were due to Measles, 1 to Diarrhœa, 3 to Diphtheria, 14 to Phthisis, and 41 to other forms of Lung Disease.
304. Seven of the deaths from Measles occurred during the first quarter, and the outbreak necessitated the closure of the Coten End School, and also the Borough Church of England School.
305. Of the three deaths attributed to Diphtheria, 1 occurred in Victoria street, and the other two in the Heathcote Sanatorium, the patients having being removed respectively from Bridge Row and Wallace street.
306. There were no deaths recorded as due to either Scarlet Fever, Whooping Cough, or Enteric Fever.
307. The number of cases of Infectious Diseases which were notified during the year amounted to 79, a number considerably below the average. Of these, 44 were cases of Diphtheria, 24 of Scarlet Fever, and 11 of Erysipelas. Dr. WILSON says:—With the exception of the three fatal cases, the Diphtheria cases were mostly of a mild type, and were distributed in scattered fashion, both as to date and locality—17 having been notified in the eastern part of the Borough, 12 in the central, and 15 in the western part; but that there was nowhere any threatened spread of the disease. The Scarlet Fever cases were also of a mild type, and in respect to these, too, there was nowhere any tendency to spread. Of the 24 cases, 19 were removed to the Heathcote Sanatorium, and 30 out of the 44 Diphtheria cases were also removed, the others being treated at their own homes. There was no notification of any case of Typhoid Fever in any part of the Borough during the year.”
308. As regards works of a public nature, and new buildings, the Borough Surveyor supplied Dr. WILSON with the following particulars:—
- “ Only nine new houses were completed and certified, compared with 23 in the previous year.
- “ A new and commodious lavatory for both men and women has been constructed on Castle Hill.
- “ The entire length of the intercepting sewer, from Emscote to Mill end, has been cleaned out, repaired, and much improved by the addition of manholes.
- “ Owing to the additional supply from the Woodloes Well, the public water supply has been maintained at constant and satisfactory pressure, and this has permitted of more effective flushing of the sewers.
- “ A sum of £2,000 is being expended on important improvements to various streets in the town which had not been properly paved or kerbed. The surface of the various streets and main thoroughfares throughout the Borough have received much attention, and generally are in good order and repair.
- “ An increased amount of scavenging has been carried out, and as far as possible means have been provided for the more frequent removal of domestic refuse.”
309. Appended to the Report is one from the Sanitary Inspector, which deals *inter alia* with the work done under the Sale of Food and Drugs Acts, water supply, inspection of canal boats, common Lodging houses, and Factory and Workshops Acts.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
12,420	23·3	14·7	0·89	121

## RURAL DISTRICTS.

## ALCESTER.

310. Dr. BROWNE considers the population to have remained about the same as in the previous year.
311. He reports a Birth-rate of 23·3, practically identical with last year, and slightly below the average of the last ten years.
312. The Death-rate has been considerably above that of 1907, and also 1·1 above the average of the last ten years. He attributes this chiefly to an increase in the number of deaths in infants and persons between 25 and 65 years of age.
313. The Zymotic mortality has been very satisfactory, only 5 deaths having been registered.
314. The infant mortality figure is not so good, being 109 compared with 95·2 for the last ten years.
315. He mentions that 13 out of the 19 deaths were due to premature birth, congenital defects, or debility from birth.
316. The incidence from Infectious Diseases has been very satisfactory, only 57 cases being notified, as against 80 in the previous year.
317. One case of Smallpox occurred, the patient being a soldier who came home from India on a troopship, on which the disease broke out during the voyage. Information of this was conveyed by the Medical Staff to the District Authority, and the man was found to have acquired the disease, and he was removed to the District Hospital.
318. Dr. BROWNE says:—"I re-vaccinated twenty contacts including the nurse and attendant in all of whom the vaccination was successful. The house was fumigated and lime-washed, the clothes disinfected by steam, and there was no further spread of the disease."
319. Only 24 cases of Scarlet Fever were reported and these were practically all sporadic, occurring in many different parishes. All except two were isolated at the Scarlet Fever Hospital.
320. Twenty-three cases of Diphtheria were notified, more than double the number of the previous year. Twenty of these occurred in Alcester parish, the remaining three at Oldberrow.
321. Dr. BROWNE says:—"I investigated these cases and could not find a common cause to account for them: a sanitary defect in most of the premises is that the water-closets are hand-flushed, but this is common throughout the town except in the better class houses."
322. Bacteriological examinations of swabs from the throat were made in 75 cases, including repeats, and Dr. BROWNE records the fact that in some instances bacilli were found in the throat for periods of three or four months, the individual being apparently quite well. He says:—"In such instances I have in the case of children, advised exclusion from school, till an examination with a negative result has been obtained."
323. A very satisfactory feature in the report is that no case of Typhoid Fever occurred.
324. Whooping Cough appears to have been prevalent generally over the district in the early part of the year.
325. Diarrhoea in an epidemic form was also present.
326. Referring to Phthisis, Dr. BROWNE says:—"Eleven deaths have been registered from this disease during the year, 4 in persons between 15 and 25 years of age, and 7 in persons between 25 and 65 years. Eight out of the eleven were in the Feckenham sub-district, which includes Studley, four being needle workers. Your inspector called and disinfected and gave instructions as to the cleansing of the premises where the fatal cases occurred."
327. As regards water supply, Dr. BROWNE says there have been no changes during the year, however, 36 fresh connections were made with the water mains at Studley. He further says:—"The Alcester supply has not been increased. Complaints are made by the water Co. of the waste of water that goes on. The Secretary informed me that on one occasion recently when six feet of water was pumped into the reservoir at night it was found to be empty in the morning."

328. This appears to be a very serious matter, both for the district and the Company, and points to the necessary measures being taken to discover the cause of the waste, and afterwards to prevent it.
329. The sewers at Alcester appear to have got into an unsatisfactory state, as Dr. BROWNE says:—  
“The Inspector informs me that the sewers become blocked more frequently than formerly and that he shortly intends to ask for sanction for a thorough overhaul and cleansing of them, a course I strongly recommend to be adopted.”
330. I should like to say in connection with this, that the matter is of such grave importance to the District, that no time should be lost in commencing the investigation.
331. He calls attention to the question of the disposal of the Crabbs Cross Sewage, which appears to have been somewhat neglected, “Some of the drains being broken and faulty,” and “the necessary amount of labour has not been expended in dealing with the sewage.”
332. He states that the scavenging at Alcester has been satisfactory, and also at Studley, since a fresh contractor has been appointed.
333. Dr. BROWNE further says:—“I have often referred to the insanitary method of scavenging which is general throughout the district, except in the principal street of the town of Alcester, namely, that of wheeling out the ashes and refuse and depositing them in heaps on the road, which are afterwards collected by cart. The method that I have advocated is that the scavenger should shovel the ashes into receptacles that can be carried or emptied direct into the carts. In hardly any cases are portable ash bins provided by property owners, and in only a few cases can the carts be brought close up to the ash-pits. The argument used against the method I advocate is, that even if two carts are used, unless the places where the ashes are tipped is close at hand there is a great waste of time and consequently the method is more expensive. It is as well to consider this when you are making fresh contracts, as there is no doubt which is the better method.”
334. He records that four houses unfit for habitation have been closed at Bidford, and notices served in eight cases for overcrowding.
335. Referring to Dairies, Cowsheds, and Milkshops, he says:—“In accordance with instructions from the Local Government Board, I reported to you in August that there were twenty-five premises in your district liable to registration under the Order of 1885, that twenty were registered and five were not. That no steps had been taken to revise or correct the register for some years till the present year. That the regulations in force in the district were not up to date, and that a few years ago you decided to adopt the model bye-laws of the Local Government Board, but had not done so. That I now advise you to take the necessary steps to enforce the registration and to adopt the model bye-laws. You decided to do this, and had the necessary advertisements inserted in the newspapers, and copies of the bye-laws printed, dated 11th November, and circulated.”
336. “I also reported in regard to the sanitary condition of the premises at the last inspection, but there is not sufficient attention paid to the cleanliness of the premises, and that they are not lime-washed often enough. Structurally the premises are on the whole good, air space is sufficient and they are well ventilated.”
337. The Report deals with the work done in regard to Factories and Workshops, and also with the work of the Vaccination Officer. On the whole this latter is fairly satisfactory though I regret to note that 43 Certificates of conscientious objection to vaccination were granted.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
11,400	23·3	15·0	0·43	109

## ATHERSTONE.

338. Mr. MEARS estimates the population to have increased to a small extent, and records a Birth-rate calculated on the estimated population of 32·6. This is 2·5 higher than in the previous year.
339. The Death-rate is 13·06, which is 1·03 higher than in 1907.
340. The Zymotic death-rate has fallen to 1·3 which may be regarded as quite satisfactory, but I regret that the rate of Infant Mortality has risen from 108 in 1907, to 125 in the year under review.

341. Referring to epidemic disease, Mr. MEERS says:—"On the whole, the district has been remarkably free from epidemic disease during the year. No deaths have occurred from Measles or Typhoid Fever: only one case of the latter being notified showing a marked improvement from years ago, when Typhoid Fever was hardly ever absent, especially in Atherstone."
342. The number of case of Infectious Diseases notified was very small, only 41, of which 23 were from Scarlet Fever, and of these 14 were removed to the isolation Hospital.
343. The mortality from Cancer was exactly the same as in the previous year, but the deaths from Phthisis were increased to 19, compared with 13 in the previous year.
344. Mr. MEARS deals with the general Sanitary conditions under headings as suggested in the memorandum from the Local Government Board, and referring to the housing accommodation, he says:—"The housing accommodation in Atherstone especially is inadequate. There are many crowded courts, and certainly great deficiency of open space. Considerable improvement has been made during the last ten years. The owners of property have gone to considerable expense in providing water-closets and in paving the yards, but in spite of this, the inhabitants themselves neglect to keep their surroundings clean. In Baddesley, too, the house accommodation has been very inadequate, but I am glad to see now many new houses are being erected. Strict supervision is exercised over the erection of new houses. Action is promptly taken under the Working Classes Act. One house at Dordon, under this Act, was reported as unfit for habitation in 1908."
345. Referring to the water supply, Mr. MEARS says:—"The District as a whole is remarkably well supplied with water, eight out of the eleven parishes having a complete public water supply while the remaining three are supplied partly from private mains and partly from the mains of the Council. The Council own two sources of supply, consisting of deep wells and bore-holes with pumping stations, service reservoirs, and over 45 miles of water mains. Water is purchased from a Colliery Company for supplying five of the parishes, and this water is periodically analysed. The water is all deep-well water, somewhat hard, and is free from organic pollution. No plumbo-solvent action has been noticed."
346. As regards the Milk supply he says:—"The District is a large milk-producing area, and supplies milk to the adjacent towns. In pursuance of the Dairies, Cowsheds, and Milkshops Order, 1886, the premises dealing with the production of milk have had systematic inspection, and on the whole have been found in good condition. Where necessary, notices have been served for cleansing, lighting, etc., and have been readily complied with. No case of infectious disease has occurred on any registered premises. Your late Inspector, Mr. Wilkinson, introduced a new intimation notice in regard to limewashing and cleansing, and each registered person received a notice, spring and autumn. This was found to have a beneficial effect in the direction desired; bills were also posted, drawing attention to the requirements of the law regarding registration. No action has been taken in regard to tuberculous milk."
347. As regards sewerage and drainage, he says:—"A scheme for the complete re-sewering of the village of Polesworth, including the provision of disposal works with septic tanks and percolating filters, has been submitted to the Local Government Board. The Local enquiry was held in November last, and the Council are now awaiting the sanction of the Local Government Board to a loan before proceeding to carry out the works. The sewers throughout the district are kept under periodical inspection, and also the house drains.
348. Referring to Pollution of Rivers, he says:—"At Polesworth, the existing sewers discharge into the River Anker, and it is with the object of preventing the pollution that the works above mentioned are to be carried out."
349. As regards scavenging, he reports:—"The house refuse in Atherstone, Polesworth, and Hartshill is removed by public scavengers. In Baddesley, a temporary trial is being made of removal of refuse by a farmer. In other parts of the district the occupiers of the houses are responsible for the removal of the refuse. These premises are periodically visited by the Sanitary Inspector, and, if necessary, notices are served on the occupiers to remove such refuse. Portable bins have been provided in many parts, and these receptacles are emptied weekly."
350. Under the heading—Nuisances: proceedings for their abatement, he says:—"The late Sanitary Inspector has during the year done very good work, and I enclose his report for printing with my Report. There is one subject which I think calls for urgent attention, and that is the abatement of the smoke

nuisances from the factories. The prevention of the pollution of the air by smoke is one of the duties imposed upon Sanitary Authorities by section 91 (Sub-sections 7 and 8), 92 and 102 of the Public Health Act, 1875. Rural District Councils have the same powers and the same duties as Urban Councils as regards smoke prevention. Now there is no doubt that some of the factories in Atherstone are very great offenders in this matter, and that the dense black smoke is a nuisance. There is no reason why this should not be prevented. More careful stoking would not only lessen the nuisance, but would be more economical. There is no doubt that it is prejudicial to the public health and also very much so to the vegetable world."

351. Referring to the sanitary condition of the schools, he says:—"Generally speaking, I should say that the sanitary condition and water supply of the Public Elementary Schools is satisfactory with the exception of the following:—On October 15th, 1907, I reported, after a case of diphtheria had occurred, that I had visited the Infants' School and Nethersole School, Polesworth, and reported 'The sanitary arrangements at both are not satisfactory. At the Infants' School, a privy is provided with six seats running into a cess-pit privy, which is cleaned out, as far as I was able to ascertain, about every six months. At the Nethersole school, two old privies are provided, both of them abutting on the school wall close to the window. These also drain into cess-pit privies.' I believe these nuisances have not been abated, but are waiting until the Polesworth Sewerage Scheme is carried out."

352. As regards Hospital Isolation he says:—"Scarlet Fever, Typhoid, and Diphtheria cases are removed to the Isolation Hospital at Mancetter. The Isolation Hospital at Mancetter has done, during the last twenty years, good work, many cases of Smallpox, Scarlet Fever, Typhoid Fever, and Diphtheria having been treated there with very satisfactory results; but it certainly is not an up-to-date Hospital. It was originally acquired when there was an outbreak of Smallpox in the district, and consisted of an old barn and a cottage. Two additions have been made to it—a large ward abutting on the barn, and during an extensive epidemic of Scarlet Fever some years ago, another very good up-to-date ward, capable of holding eight patients, was put up. Still, it is not in many respects all that could be desired. There is no water supply. The administration block is quite inadequate. The drainage is not satisfactory; and lastly, when the London and North Western Railway Company open their other lines, it will be too dangerously near the railway. In consideration of these facts, the Council some five years ago acquired a fresh site in the parish of Grendon for a new Isolation Hospital, but up to the present time a start has not been made on the building of it. Various plans have been laid before the Council. I may say the Board of Guardians have recently erected an excellent up-to-date Hospital at the Workhouse, and, in my opinion, if the District Council would erect an Isolation Hospital of a similar character, it would ultimately prove to be the truest economy."

353. He describes the arrangements for disinfection as very unsatisfactory, and says:—"I have frequently pointed out to the Council that simple disinfection with Sulphur Dioxide after infectious disease is not sufficient, and have urged them to obtain a steam Disinfecting Apparatus, especially as under the Midwives Act, the clothing, etc., of midwives has to be thoroughly disinfected. At the present time, the only means I have of dealing with such cases is to send the clothing to the Nuneaton Urban District Council's disinfecting apparatus."

354. As regards Tuberculosis, he says there is no direct method of control, but when a death is reported the Sanitary Inspector disinfects the house. Referring to this, he says:—"I think it would be very much more satisfactory if all cases of Phthisis were included in the Notification of Diseases, so that the Medical Officer of Health and the Sanitary Inspector could give directions during the life-time of the patient for preventing the spread of the disease in the family of the patient. The cost would be very small, and the saving of life very great. In this District there is no hospital accommodation for treating cases of Pulmonary Tuberculosis."

#### VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
18,282	32.6	13.06	1.3	125

## BRAILES.

355. Dr. FINDLAY still considers the population to be decreasing and estimates it at the middle of 1908 as 5,946.
356. The Birth-rate was 19·5, and is the lowest yet recorded, and considerably below that of last year which was 23·2.
357. The Death-rate was rather higher than the average of the last ten years, and in fact was 15·1 per 1,000 of the population. In the Stretton Locality it was as high as 34·4.
358. The Infant Mortality rate was entirely satisfactory being only 51 per 1,000 births registered, and much below the average of the last ten years.
359. The Zymotic Death-rate was also very satisfactory, and below the average.
360. Diphtheria appears to have been somewhat prevalent, 20 cases having been notified, compared with 9 in the previous year. At Ilmington the infection was brought to the house by a summer visitor. At Lower Tysoe and at Halford, the disease was associated with blocked drains.
361. Scarlet Fever was moderately prevalent, 35 cases being reported compared with 22 in the previous year. The disease was not confined to any particular part of the District, most of the cases being sporadic.
362. Not a single case of Typhoid Fever was recorded, and only one case of Puerperal Fever, and this was not due to any insanitary conditions of the premises.
363. Whooping Cough and Measles caused little trouble, though Chickenpox attacked Tysoe in January.
364. Epidemic Influenza was less prevalent than in former years.
365. As regards Consumption, only three deaths were registered, which was below the usual average for the district.
366. Cancer again caused considerable mortality, due as has been previously pointed out, to the very large number of aged persons resident within the District, compared with the County at large.
367. Referring to the general conditions, Dr. FINDLAY says:—"I consider, that the general health of the community in the district has been fairly maintained. In a purely agricultural district, such as this, where a great many of the young men and young women leave the district for the towns, the general population consists of the very young and those advanced in years, so that the death-rate is sure to be rather high. The birth-rate this year has fallen very considerably, being nearly four per 1,000 less than the average for the last ten years, but there has also been a very small mortality among infants under one year old. I think this improvement in the infantile mortality is in great part due to the supervision and registration of the midwives under the Midwives Act, and also to the District Nursing Association which now embraces practically the whole district, and whose nurses attend on maternity cases under a medical man. The great majority of infants, in this neighbourhood are breast-fed, at any rate for some time, and this materially lowers the death-rate from diarrhoeal troubles."
368. As regards action taken to prevent the spread of disease, the Report records school closure at Cherrington on account of an outbreak of Scarlet Fever; at Tysoe on account of the prevalence of Chicken Pox; at Pillerton for Scarlet Fever, and at Whichford for suspicious sore throats.
369. Dr. FINDLAY records also that he requested the superintendents of the various Sunday schools in the villages to close their schools for the same time as the Elementary schools, and these requests have been invariably complied with.
370. The schools after being closed, were disinfected by the Sanitary Inspector, by spraying with formalin, etc., according to the scheme of the County Medical Officer of Health. Disinfectants have also been distributed free of cost in all cases to people as desired.
371. The Report also states that the price of the serum anti-toxin used by the medical men in the treatment of Diphtheria, has been refunded by the Council, and further, Dr. FINDLAY says:—"I am sure, that this has given an impetus to the use of this method of treatment, which undoubtedly is the means of shortening the course of the disease, and thus tends to prevent the spread of the infection."

The Bacteriological examinations made at the University of Birmingham of swabs taken from suspected cases of Diphtheria have been very useful in confirming the diagnosis of doubtful cases, and have been used in nearly all the different outbreaks in the district."

372. He speaks highly of the value of the Isolation Hospital in the treatment of Scarlet Fever, and says:—"I am sure, that considering the number of times the infection was brought into the district, there would have been a far greater spread of the disease if there had not been the means of promptly isolating those cases which could not be isolated at home."
373. He also records that he has made house-to-house inspections at Stretton, Whatcote, and Pillerton, and says:—"We have taken special notice of the pantries. These places are often very dirty, even when the house is otherwise fairly clean, and food is kept in these places close to dusty rubbish. I have tried to explain to these people the necessity of keeping these places clean and allowing plenty of ventilation."
374. He records also that the Council have on his recommendation resolved to adopt a number of the sections of the Public Health Act Amendment Act, 1907.
375. The Report deals with the action taken as regards Dairies and Cowsheds, and referring to these says:—"I feel sure that several of those who sell milk, and are not on the register, saying they only do so in small quantities, should really be on the register."
376. The Report also deals with the sanitary work contemplated or required in the various constituent parishes, and shows that attention has been given to the water supply of Upper Brailes, Halford, Idlicote and Ilmington. At the latter place the main has been extended near the school, and a tap erected nearer some houses there. Attention has also been given to sewers and drains.
377. It is only fair that I should state that the Report is an excellent record of much good work, and does a great credit to the Sanitary Staff of the District.

#### VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
5,946	19.5	15.1	0.5	51

#### CASTLE BROMWICH.

378. Dr. BOSTOCK HILL estimates an increase of about one hundred in the population of this district during the year.
379. The Birth-rate was almost identical with that of the previous year, though 1.2 below the average of the past ten years.
380. The Death-rate though higher than in 1907 may be considered perfectly satisfactory.
381. The number of infants deaths registered was eight, giving a rate of Infant Mortality of 119 per 1,000 registered births, which is not particularly satisfactory for a small Rural District.
382. As regards Zymotic Diseases, 21 cases were notified altogether, of which 13 were Scarlet Fever, 5 Diphtheria, and 2 Typhoid Fever.
383. Referring to the prevalence of Diphtheria he says:—"There was a marked diminution in the number of cases of Diphtheria notified, in fact the number was 5, compared with 11 in the previous year. All the cases were very mild, and it was impossible—although efforts were made to do so—to discover the origin of any of them."
384. Only one death was registered as due to Consumption and this was in a person in a travelling van, and therefore had nothing to do in reality with the district.
385. As regards sewerage, drainage and removal of refuse, Dr. HILL says:—"The sewers throughout the District generally have been well flushed, and no reports have reached me of nuisance arising from the manholes."
386. "Four more middens have been converted into water closets. But few houses are left at the present time within the legal distance of the sewers, unconnected with them, and supplied with water closets."

387. "During the year the collection of house refuse from the water Orton District was well maintained and a marked improvement in the condition of the District has been observed."
388. He also calls the attention of the Council to the desirability of commencing public scavenging of the Castle Bromwich portion of the District, and says:—"I am quite sure that such regular attention would not only promote the health of the inhabitants, but it would, when it was once adopted, receive the approval of tenants and ratepayers of all sorts."
389. Systematic Inspection of the district was continued, the Inspector devoting his attention to the contributory District of Curdworth.
390. As regards Cowsheds and Dairies, the Report states that the Inspector notices a considerable improvement in the way these are kept.
391. The Report also deals with Workshops, Water supply, and general Sanitary work, and referring to Vaccination, Dr. BOSTOCK HILL says:—"I regret to have to state that the Vaccination return is much less satisfactory than in the preceeding year, for while the number of births has been larger, the number of cases of successful vaccination has materially decreased. This year, only 52 cases are reported as successfully vaccinated out of 76 births, while no less than ten certificates of conscientious objection were obtained, though not a single one was applied for in the previous year. This to my mind is a very serious matter. In the past, this district has been practically immune from Smallpox, largely due, undoubtedly, to the fact that it has been a well vaccinated district, and it is absolutely certain that if the percentage or quality of vaccination deteriorates, the immunity so long enjoyed will become less apparent."

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
3,000	22.3	9.6	0.6	119

## COVENTRY.

392. Mr. ILIFFE says:—"That locality on the east of the London and North-Western Railway, known as Pinley, has undergone a complete transformation. The huge works of the Humber Co. Ltd., with its various sections devoted to the manufacture of Motor Cycles, are now complete, and several thousands of workmen are now employed."
393. "Building of house property is now going on, and land is being acquired for similar purposes. The roads are being put in excellent order, and there is little doubt Pinley will very soon become a popular and populous locality."
394. He states that the health of the Rural District has been exceptionally good, the Death-rate being lower than in the preceding year.
395. No cases of Infectious Diseases were reported, and the whole of the district is from a Sanitary point of view satisfactory.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
550	5.45	3.63	Nil.	Nil.

## FARNBOROUGH.

396. Dr. JOHNS reports a considerably increased Birth-rate, namely, 27.9 compared with 17.3 in the previous year.
397. The Death-rate also shows an increase, being 14.9 compared with 13.3.
398. Only three of the deaths occurred in children under a year, giving a satisfactory rate of infant mortality.
399. Two deaths were due to Zymotic Diseases, namely, Scarlet Fever and Whooping Cough, and two to Consumption.
400. Altogether 10 cases of Infectious Disease were notified.

401. All the houses in which Scarlet Fever cases occurred were thoroughly disinfected.
402. The Diphtheria cases all occurred at the Convent School, Avon Dassett, and this School has since been thoroughly disinfected.
403. Dr. JOHNS says:—"I have from time to time visited the various parts of the District and am able to report that it is at present in a thoroughly satisfactory condition. The Bakehouses, Slaughterhouses, Dairies, Workshops and Workplaces, Drainage, Sewage Disposal, which is chiefly of the conservancy system, have been inspected. There are no factories in the District.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,540	27·9	14·9	1·3	69

## FOLESHILL.

404. Dr. ORTON estimates that the population has increased about 290 during the year.
405. The Birth-rate is a very satisfactory one, namely, 38·3 considerably higher than last year, indeed the highest recorded for the last twenty years. Speaking of this, Dr. ORTON says:—"In view of a falling Birth-rate throughout the Country generally, we can regard this as a very gratifying fact."
406. The Death-rate is a trifle higher than in the previous year, but lower than the average for the last twelve years.
407. The Infant Mortality Death-rate is not so satisfactory, having gone up from 125 to 133. The increase has been largely due to an increased number of deaths from Diarrhœa, while premature birth accounted for 23.
408. The Zymotic Death-rate is particularly satisfactory, being only 1·5, compared with 2·0 in the previous year, indeed only three deaths occurred from Infantile Diseases.
409. The return as to Enteric Fever and Diphtheria is extremely satisfactory.
410. The District was remarkably free from Scarlet Fever, only 10 cases being notified in all and 5 of these were in one house at Binley.
411. Measles was not epidemic during the year and caused no Mortality.
412. As referred to before, Epidemic Diarrhœa and Zymotic Enteritis were responsible for 20 deaths, 17 being in children under one year, and of these no less than 15 occurred in Bedworth. Dr. ORTON says:—"This is the one disease which causes me dissatisfaction; it is at a much higher figure than it should be. With a view to diminishing, if possible, this mortality, I obtained permission from your Council to get warning Notices printed and circulated in Foleshill and Bedworth."
413. He also calls attention to flies as being one of the chief causes of this disease, and "trusts that the next twelve months will see a considerable reduction in the still great number of middens, which are the great breeding place of flies."
414. Sixteen deaths were registered as due to Phthisis and other Tubercular Diseases. The number is less than in the two preceding years.
415. Cancer was responsible for 18 deaths, a slightly lower figure than last year, though still rather high.
416. Referring to overcrowding, Dr. ORTON says:—"Although Mr. WINDASS reports only 5 cases of overcrowding that have specially come to his notice, we are of opinion that this does not represent the exact state of affairs, as we consider that a great many occupiers take in lodgers for which they have not adequate sleeping accommodation, but owing to the scarcity of the smaller tenementary property in the district, it is difficult to obviate more than one family living in a dwelling house."
417. Only one school was closed on account of Infectious Disease during the year, and Dr. ORTON reports that before it was re-opened it was thoroughly disinfected according to the Schedule of the Warwickshire Education Committee.

418. Referring to water supply, it is stated that at Bedworth: "The public supply still continues satisfactory, and practically all the houses, Mr. WINDASS reports, that are within the area of the town mains, are now supplied with the Town water."
419. He also calls attention to the desirability of periodic analyses of the water being made.
420. As regards Foleshill he says:—"The water supply from the North Warwickshire Company continues to give every satisfaction but there are still a few parts of the district to which it is most desirable that the mains should be extended in Foleshill. Hawkesbury Stop and Henley Green stand in greatest need of this attention. I reported last year that the Canal Company at Hawkesbury Stop has sunk a fresh well for the supply of the boat population, but I regret to say, this has not proved satisfactory."
421. Referring to Exhall, he says:—"The part of the parish in the neighbourhood of the "Lord Raglan" Inn, where the population is most concentrated, badly requires a water supply, the water in the wells in this locality being of a doubtful character."
422. He also calls attention to the fact that the Potters Green part of the Walsgrave-on-Sowe parish also stands in need of a supply.
423. The work at the Sewage Works at both Bedworth and Foleshill, is said to have been satisfactory.
424. Dr. ORTON also refers to the fact that he has inspected on two occasions carcasses of meat destined for human consumption. In one, the whole carcass was condemned, but in the second, parts only of the carcass were destroyed.
425. Three offensive trades are said to exist in the district, one horse slaughtering business having been established during the year. The premises were inspected by Dr. ORTON and his Inspector and were found to be satisfactory.
426. The report concludes with the statement that the Factories and Workshops have been visited and in eight instances defects were found, which have been remedied.
427. The Report of the Inspector is appended and he refers *inter alia* to the scavenging of the district, which he says has been fairly well carried out during the year. He further says that owing to the large number of water closets and the consequent removal of the ashpits, the men are now enabled to dispense with about half the night work, and empty the dry ashes in the day time from ash bins.
428. He further says:—"Once again I have to complain of the small assistance I receive from the people in the parish of Bedworth in this respect. Although for some time a box, in which a note may be placed when an ashpit requires emptying, has been fixed, easy of access to all, and Notices have been published broadcast, it is very seldom used; but they expect me to find out each time the ashpits require attention, which is quite impossible in a large district like this, with the increased amount of work."

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
19,296	38.3	16.01	1.5	133.

## MONKS KIRBY.

429. Dr. O'CONNOR reports a Birth-rate of 21.3 per 1,000 and a Death-rate of 8.6 per 1,000. The Zymotic Death-rate was nil, and the Infant Mortality rate was the very low one of 31 per 1,000 registered Births.
430. Dr. O'CONNOR says:—"Although but little importance is attachable to the mortality and birth-rates for a single year in so small a population, it is worthy of note that all the above figures are below the average for your district. It is, moreover, always satisfactory to record a nil Death-rate."
431. There were two deaths from Phthisis, and in connection with these he advises as a matter of routine, cleansing and disinfection of infected premises to be carried out after death from Phthisis.

432. The only two cases of notifiable Infectious Diseases were one of Scarlet Fever and one of Erysipelas.
433. He records that the extension of the sewers in the parish of Monks Kirby was undertaken during the year, and that the Dairies, Cowsheds and Milkshops were well inspected having regard to their Sanitary requirements. One old Cowshed was demolished and replaced by one constructed in accordance with modern hygienic principles, while two sheds have been structurally altered throughout, in order to comply with the regulations.
434. There are 5 Workshops in the District, 4 of which are Bakehouses.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,500	21.3	8.6	Nil	31

## NUNEATON.

435. Dr. WOOD estimates the population has increased to 1,935, the increase being chiefly in the villages of Astley and Arley.
436. The Birth-rate is a very satisfactory one, being no less than 36.6, compared with 28.8 in the previous year.
437. The Death-rate is a fairly satisfactory one, being 13.9 though it is 2.7 higher than in the previous year.
438. The Infant Mortality was distinctly unsatisfactory, the figure being 169 per 1,000 births registered, which is much above the average. Seventy-five of the deaths occurred in the village of Arley. Dr. WOOD says:—"I reported the matter to the County Medical Officer of Health, and the Health Visitor has investigated the cases and given advice to the mothers."
439. There has been but little infectious disease. One fatal imported case of Typhoid occurred at Arley. The only other cases notified were Scarlet Fever 1, and Erysipelas 2.
440. Contamination of water in three wells at Arley has been remedied.
441. Plans have been approved by the Council for 11 houses, 7 at Astley and 4 at Arley.
442. There are only two workshops in the District, viz:—Bakeries, and these are said to be in a satisfactory condition.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
1,935	36.6	13.9	1.5	169

## STRATFORD-ON-AVON.

443. Dr. THOMSON compares this district with the other 15 Rural Districts of Warwickshire, and shows that the population is only 116 per square mile compared with 199 for the rest of the Rural Districts. He also shows that while the Birth-rate was 3.6 less than their average, the Death-rate was 1.0 per 1,000 more than their average, while the Infant Mortality rate was in the proportion of 50 to 91. He suggests therefore that the age and sex distribution of the population vary considerably from the normal for England and Wales, owing to the constant migration of young adults to town life.
444. He estimates the population to be the same as for 1907.
445. The Birth-rate is 1 per 1,000 lower than that of the previous year, but only up to the average of the last ten years.
446. The Death-rate, 14.1, is almost identical with that of last year.
447. As regards infectious disease, Dr. THOMSON says:—"The past year was eventful as having a number of Diphtheria cases much in excess of our average amount. There were 24 cases in all, and of these 12 occurred in Kineton."

448. He is inclined to associate the occurrence of these cases with the surface ventilating grids in the streets, and suggests that it would be well to close up these and substitute ventilating shafts.
449. The cases were spread over a number of months. The first one being in January, one in April, one in May, three in June, and six in August.
450. He reports that the premises occupied by the cases have in each instance been disinfected.
451. Scarlet Fever continues to show a falling off compared with previous years. Only 12 cases occurred, and of these 10 were sent to hospital, and disinfection of the premises occupied was carried out.
452. Whooping Cough was prevalent in Wolverton, Snitterfield and Wootton Wawen.
453. Referring to Sewerage and Drainage, he says:—"During the year the question of dealing with the sewage of Henley-in-Arden with Wootton has come under consideration, the idea being to abandon the disposal works at Henley and pipe the sewage from Henley through the Western end of Wootton Wawen (picking up the sewage of that part of Wootton Wawen by so doing) to a new site near the railway line south of Wootton, and at a proper distance from that village. This is a scheme that ought to go through, as the present sewage disposal works at Henley are not coping with the sewage effectually, the volume of the sewage being too great for the osier beds to deal with. If Henley-in-Arden succeeds in this scheme, the levels are so good, and the distance away of the disposal works so great (about two miles), that it will be one of the best sewered towns imaginable."
454. Referring to Wellesbourne, he says:—"Wellesbourne sewage disposal has given rise to much discussion during the year, and with an enquiry about to take place concerning it, I may confine my remarks to what seem to be indisputable facts on the matter. The drainage arrangements generally of the place are not of good condition, as much work has been deferred pending the matter. It is also clear that to discharge unclarified sewage at various points into the brook as it runs through the village, as is the case at present, is not a matter that can be allowed to continue. This last is not entirely a question of polluting the River Avon by means of Wellesbourne brook, but also that it is an insanitary state of affairs for a sluggish brook in the middle of a thickly populated place to be converted into a stream of dilute sewage."
455. He also refers to the new disposal works at Kington, and says that the work would be more effectually carried out if the beds were worked to their full capacity.
456. In Ullenhall, Ettington, and Snitterfield, the sewage disposal works are referred to in terms of praise as regards their operation, and he suggests that the sewage of Claverdon should be dealt with in the same way.
457. Referring to scavenging, he says he has noticed defects in the parish of Ettington, where there are a number of premises served by pail closets. He says:—"The benefit of pail closets over ordinary middens should be in the more frequent removal of offensive matter from the proximity of dwellings, but where the pail contents are buried in adjacent ash-heaps at Ettington, instead of being taken away weekly, all advantage is lost. A cottager who has got a certain amount of garden ground about his dwelling, has to dispose of an amount of refuse which cannot be put in a pail closet, and as a consequence a system of public scavenging is absolutely essential under such conditions.
458. He says that all public water supplies are analysed annually, and also the public wells of Hampton Lucy.
459. He reports that he represented to the Council the unsatisfactory condition of premises occupied as a milk shop at Henley-in-Arden. Since then the dwelling has undergone reconstruction and it remains to be seen if the business will be carried out properly. He hopes during the coming year to make a complete survey of the premises in the district engaged in the milk trade and to report on the matter.
460. He states that a representation under the Housing of the Working Classes Act, was made by him in April last with reference to a block of three houses in Market square, Kington, but action was delayed in order to decide upon the ownership of the property.

461. He says:—"A great deal more whitening or limewashing of interiors of cottages, especially of bedrooms, might be done by the occupants. The usual answer to an inquiry as to why such work is not done, is a vague suggestion by the tenant that it is a duty devolving on the Landlord."
462. He further says:—"If it were possible in the village, for lime to be had at cost price, and the use of brushes obtained gratis, there would be less excuse for the dirty walls and ceilings frequently seen in the poorer cottages. This is a subject the County Health Visitors might forward much in their visits among cottagers."
463. In conclusion, Dr. THOMSON refers to the subject of vaccination, and deals with its importance and the invalidity of the argument frequently urged that as sanitation increases, vaccination becomes unnecessary.

## VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
10,589	21.3	14.1	0.4	53

## TAMWORTH.

464. Dr. FAUSSET records a Birth-rate which is nearly 6 per 1,000 higher than in the previous year. The Death-rate is also slightly higher, though not materially, and when corrected, is estimated to be 13.4
465. The Infant Mortality is slightly lower than in the previous year, while the Zymotic death-rate is almost identical. As regards the action taken with reference to Zymotic Disease, he states that 66 cases of Scarlet Fever were notified, as compared with 72 in the previous year. Of these 66 cases 55 were removed to the Isolation Hospital and made good recovery.
466. Diphtheria was not materially prevalent, 16 cases being notified in all, showing a very marked diminution compared with that of the previous year, when 86 cases were reported.
467. Only three cases of Typhoid Fever were reported, and one case of Puerperal Fever.
468. Measles appears to have been very prevalent during the first three months of the year and in October, and 7 cases ended fatally.
469. Altogether, 99 cases were notified under the Infectious Diseases Act.
470. At the Isolation Hospital he records many sanitary improvements, such as cleansing, and the fixing of a new sink in the ward kitchen. He also reports that the cottage kept in readiness for all cases of Smallpox, has been thoroughly cleaned down and has been frequently inspected, and kept properly aired.
471. As regards sanitary improvements effected during the year, he deals with the various villages within the Council's area, and *inter alia* says that at Bolehall and Glascote numerous inspections of houses and cottages, various structural and other improvements were effected, overcrowding abated and nuisances remedied. He says that the improvements required to a number of house drains can only be carried out when the newly constructed sewers are available.
472. At Kingsbury he says that the Hurley brook course has been cleaned out from Camp Lane to the river Tame and the culverts repaired. He also reports that the new scheme of sewerage and sewage disposal for the village of Kingsbury is being carried out, most of the sewers being laid and the filter beds in course of construction. At Shuttington new main drains have been laid and all house drains connected; general structural repairs carried out and offensive ditches cleaned out. At Wilnecote and Castle Liberty, improvements have been carried out, principally in connection with the re-laying of house drains and connecting to new sewers laid as part of general scheme, and overcrowding has been abated.
473. As regards water supply, he says:—"The parishes of Amington and Stonidolph, Bolehall and Glascote, and Wilnecote and Castle Liberty, derive an excellent supply from the Tamworth and District Waterworks, and part of Shuttington, and the hamlet of Dosthill in the parish of Kingsbury have their supply by arrangement from this same source. The village of Kingsbury and the hamlets of Bodymoor Heath, Cliff, Coton, and Halloughton are supplied by gravitation from the reservoir fed by the Dumble Springs, and Hurley, Hurley Common, Wood End, Edge Hill, and Whateley are supplied with water from their well at Baxterley by arrangement with the Dugdale Trustees."

As regards sewerage and sewage disposal, he says:—"All the sewers in Bolehall and Glascote have been completed, those in Wilnecote are nearing completion, and a good start has been made at Fazeley. All the connections yet remain to be made; but it is hoped that considerable progress will be made during the current year towards the completion of this work."

474. He says that in the Warwickshire portion of the district there is a demand for dwellings, and that plans for 67 houses and 33 cottages have been approved.
475. He notices that the draft form of bye-laws as approved by the committee, has been submitted to the Local Government Board, and that the Council also considered the provisions of the Public Healths Act Amendment Act, 1907, and have made application for certain portions to be adopted by the Council for the District.
476. Referring to Pulmonary Tuberculosis, he says:—"Voluntary notification of Pulmonary Tuberculosis has been in operation in the district for the last two years and has been fairly satisfactory in its working. It is possible in these cases to exercise some supervision, parchment sputum cups have been supplied free of charge to sufferers, and hints on the prevention of the disease and the best ways of fighting it have been distributed. The houses and cottages in which deaths from this disease have resulted were disinfected, and the walls lime-washed and renovated, and the premises thoroughly cleaned, the cost being divided between the owner of the property and your Council in each case."
477. Referring to the County Council's arrangements for bacteriological examinations, he says:—"As an aid to accuracy of diagnosis, the bacteriological examinations in suspected cases of Diphtheria, Pulmonary Tuberculosis and Enteric Fever, conducted by the University of Birmingham have proved of great value, and have been much appreciated and advantage taken of by medical practitioners in the district."
478. He also refers to the work of the Health Visitor as follows:—"The Health Visitor of the Warwickshire County Council has accomplished much useful and instructive work in the district by spreading information as to the proper tending and feeding of infants, and drawing the attention of mothers to the great importance of doing everything they can to promote the health of their families and the cleanliness of their homes. There is every reason to hope that as in former years, good results will follow the efforts made in this direction for the preservation of infant life."
479. In conclusion he says:—"There are at least six important questions which will require your careful attention during the present year, viz.:-
- 1.—The carrying out of the remainder of the scheme for dealing with the weirs.
  - 2.—The carrying to a completion of the new scheme of sewerage for the parishes of Bolehall and Glascote, Wilnecote and Castle Liberty, Fazeley, and parts of the parishes of Wiggington and Amington and Stonidolph, and, in conjunction with the Borough of Tamworth, of a scheme of sewage disposal for these parishes and for the Borough of Tamworth.
  - 3.—The completion of the new scheme of sewerage and sewage disposal for the village of Kingsbury.
  - 4.—The provision of an improved supply of water for the parishes of Croxall and Edingale, and part of Clifton.
  - 5.—The continuation of the measures already undertaken with regard to the prevention of pollution of the River Tame.
  - 6.—The revision of the Bye-laws."

#### VITAL STATISTICS.

Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
14,372	35.3	13.4	1.11	122

RURAL DISTRICTS IN THE MID-WARWICKSHIRE COMBINED DISTRICT, INCLUDING  
MERIDEN, RUGBY, SOLIHULL, SOUTHAM AND WARWICK.

MERIDEN.

480. Dr. WILSON records a slightly increased Birth-rate, and a Death-rate practically identical with the previous year, and 0·7 below the average of the previous ten years.
481. Among the causes of death, 4 were attributed to Diphtheria, 5 to Phthisis, 25 to other forms of Lung Disease, and 14 to Cancer.
482. There was no Mortality from Measles, Whooping Cough, Scarlet Fever, Enteric Fever, or Diarrhœa, so that the Zymotic Death-rate was a very low one, namely, 0·33.
483. The rate of Infant Mortality was equally satisfactory being only 58 per 1,000 Births, compared with an average of 93 per 1,000 for the previous ten years.
484. As regards Diseases notified, altogether 65 cases occurred; of these, 28 were from Scarlet Fever, 20 Diphtheria, of which 12 occurred in Fillongley. Only one case of Enteric and one of Continued Fever were notified.
485. Fourteen of the Scarlet Fever cases occurred in the Marston Green Homes. Eight of the cases were removed to the Coventry Isolation Hospital.
486. Both the Fillongley and Nether Whitacre Schools were closed on account of disease; Fillongley on account of Diphtheria, and Nether Whitacre on account of Measles.
487. As regards works of a public nature, drainage schemes for Coleshill and Fillongley received very careful consideration during the year. For the Coleshill scheme an engineer was called in who prepared plans for a complete scheme to convey the whole of the sewage to one outfall.
488. Appended to the report is one from the Surveyor and Sanitary Inspector, which shows that considerable attention was given to water supply. Thirty-four samples were analysed, twenty-four of which were found to be unfit for use.
489. Slaughterhouses and Butcher's Shops in the district were all visited, and are reported to be well kept.
490. Two carcasses of beef were inspected at the request of the owners and being found diseased were destroyed.
491. The Factories and Workshops were also inspected. Four workshops have been newly registered during the year.

RUGBY.

492. Dr. WILSON reports a slight increase in the Birth-rate of this district, which is satisfactory, while the Death-rate is again down 1·0 per 1,000, and is 11·5. This figure is 3·1 below the average of the previous ten years. Thirty-two of the deaths occurred among infants so that the rate of infant mortality is 68 per 1,000 registered births, a very satisfactory figure and in fact, practically down to the minimum attainable.
493. Among the causes of death, 1 was attributed to Measles, 1 to Whooping Cough, 1 to Diphtheria, 11 to Phthisis and 6 to Cancer.
494. There was no mortality from Scarlet Fever or Typhoid Fever, and only 1 death was registered from Diarrhœa. This being so, we get the exceedingly low Zymotic Death-rate of 0·24 per 1,000.
495. The prevalence of infectious disease was exceedingly small, only thirty-five cases being notified altogether. Of these, 14 were due to Scarlet Fever, 7 to Diphtheria, 6 to Typhoid Fever and 1 to Puerperal Fever.
496. Two schools were closed during the year, namely, Marton for Whooping Cough, and Church Lawford for Influenza.
497. Dr. WILSON says:—"Taken altogether, the vital statistics show a very satisfactory record for the year."

498. As regards works of a public nature, it is stated by the Surveyor, that "Improvements have been made at the outfall field, New Bilton; new sewer land in Stretton-on-Dunsmore; and extension of Rugby water mains to Bilton. A new scheme for the disposal of the Bilton Sewage was submitted to the Local Government Board, and a public enquiry held."
499. Appended to the report is one from the Sanitary Inspector who refers among other matters, to the work done under the Food and Drugs Act, the inspection of Slaughterhouses, and Bakehouses, measures put in operation under the Factories and Workshops Act and the Canal Boats Act. It also deals with the work done in supervising the Dairies, Cowsheds, and Milkshops, and the public scavenging of the parish of Bilton. Referring to this, the Inspector says:—"57 additional loads of ashes were collected and deposited on the road leading from the sewage farm at New Bilton, making a total of 787 loads as against 770 for the year 1907."

#### SOLIHULL.

500. Dr. WILSON in this district also records a slightly increased Birth-rate, namely 21·8, compared with 20·1 in the previous year. The Death-rate, however, is higher namely, 13·5, compared with 11·4. Twenty-nine of the deaths occurred among infants under one year of age, giving the satisfactory rate of infant mortality of 77 per 1,000 births.
501. Among causes of death, 3 were attributed to Scarlet Fever, 12 to Diphtheria, 12 to Phthisis and 20 to Cancer.
502. The 3 fatal cases of Scarlet Fever occurred in the Joint Isolation Hospital.
503. Of the Diphtheria deaths, 2 belonged to Tamworth, 4 to Balsall, 2 to Shirley, and 1 each to Solihull, Hockley Heath, Packwood and Bentley Heath. Altogether 43 cases of Diphtheria were notified, so that the fatality-rate per cent., namely 33·9, was very high.
504. A very satisfactory feature of the Report is the statement that there was no notification of any cases of Typhoid Fever.
505. Owing to the prevalence of Measles in April the Solihull Infants' department of the School was closed, and the Infants' department, for Whooping Cough, in June. There were no deaths from either of these two diseases. The same remark applies to Diarrhoea, so that though the rate for Diphtheria was somewhat high, the total Zymotic Death-rate was not excessive, being only 0·88 per 1,000.
506. In respect to works of a public nature, Dr. WILSON says:—"It is gratifying to be able to report that the plans for the extensive scheme of drainage for Solihull, Blossomfield, and Shirley, which were prepared by the Surveyor, were in due course submitted to the Local Government Board, and after a public inquiry was held, have received the Board's approval. The works will no doubt be commenced at an early date, and be carried out as expeditiously as possible."
507. Appended to the Report is that of the Surveyor, which deals with the work of scavenging in Solihull and Knowle; the maintenance of sewers; street watering; and plans submitted for new buildings. It shows that during the year plans for 95 houses were submitted, of which 54 were in the parish of Solihull.
508. The Report of the Sanitary Inspector shows that excellent work was done in the removal of nuisances, examination of water supplies, and the Inspection of Slaughterhouses, Factories and Workshops, and Canal Boats during the year.

#### SOUTHAM.

509. Dr. WILSON reports a Birth-rate nearly 3 per 1,000 above that of the previous year, and a death-rate 0·6 above that of 1907. Twenty-two of the deaths occurred among infants under one year of age, giving an Infant Mortality-rate of 76 per 1,000 births.
510. Among causes of death, 2 were attributed to Measles, 5 to Whooping Cough, 1 to Diphtheria, 10 to Phthisis, and 11 to Cancer.
511. Owing to the prevalence of Measles it became necessary to close the Roman Catholic Schools in February, and the other schools in April. The disease also necessitated closure of the schools in Bishop's Itchington and Ladbroke in the same month.

512. The single death attributed to Diphtheria, occurred in the Heathcote Isolation Hospital, Warwick, the patient having been removed from Chadshunt, but this was the only case of the disease notified.
513. The Zymotic Death-rate was only 0·80 and therefore quite satisfactory.
514. The total number of cases of infectious disease notified during the year was 64, of which 54 were Scarlet Fever. Of the total cases of Scarlet Fever notified, 19 were removed to the Heathcote Isolation Hospital, as was also the Diphtheria case referred to above.
515. Concerning work of a public nature, Dr. WILSON reports that drainage improvements have been carried out in several villages and that the old sewage tanks at Southam have been converted into septic tanks, and a new storm overflow constructed on the outfall sewer before discharging into the tanks, to prevent any serious pollution of the brook.
516. As regards water supply, Dr. WILSON says:—"Special attention has been given to the public water supplies of villages so supplied, and also to well water supplies. The question of formulating a conjoint scheme for Southam, Harbury, Stockton, and other villages referred to in previous reports, has received further consideration, and last May, I accompanied Professor Lapworth, the well-known Geologist, who was called in on my recommendation, on a tour of inspection to inquire into possible sources of supply. As he was of opinion that no sufficient supply could be obtained by sinking a well in the new red sandstone close to Long Itchington, which I previously had thought possible, or indeed within a radius of some five miles of the district, except at great depth, which would render the cost prohibitive, I took him to inspect the large mill-dam or pool close to Chesterton, and the rather limited gathering ground there. The small brook which feeds the dam was gauged later on in the summer, and was found to flow at the rate of 80,000 gallons in the twenty-four hours. Probably in times of severe drought this amount would be considerably curtailed, and as it would require close on this quantity to yield about 15 gallons per head per day, the storage to be provided by cleaning out and deepening the upper parts of the dam or pool should equal at least a three months' supply. Further, the costs of purchasing mill, pool, and other rights, constructing all other necessary works, as well as of pumping to a water tower on Harbury Hill, would in all likelihood render this scheme prohibitive, even if a sufficient supply of good quality could be assured.

"We next inspected the flow of water in the culvert running through the Harbury railway cutting at the various manholes. The water in this culvert represents the drainage of the grey lias beds intersected by the railway, and though the amount might be sufficient to supply Harbury alone by providing storage at the Leamington end of the cutting, there would be no surplus for the other localities and for this small scheme, pumping plant and a water tower for distribution would also be required.

"In respect to the available sources of supply at Southam, the quantity yielded by the Tom Well Spring and the Holy Well especially in dry seasons, would in all probability prove insufficient for Southam alone, unless a large amount of storage was provided by constructing a reservoir on the high ground above the Workhouse, and in this instance two pumping plants would be required. For Stockton and the other villages, there are no available separate sources of supply beyond the public wells, which have been provided, and private wells. In times of average rainfall the yield from these in all the localities obviates any wide-felt scarcity, though a good many tenants are obliged to carry their water considerable distances. During continuous seasons of more than average rainfall, complaints of scarcity are few, and fortunately the clayey subsoil which everywhere prevails, is in itself a great safeguard against surface pollution.

"I need not make any further reference to the large Napton reservoir as a source of supply for a conjoint scheme, because the Canal Companies have absolutely refused to entertain it. For such a small scattered population, therefore, any conjoint scheme is beset with great difficulties on account of the outlay, and this also applies in great measure to separate schemes. If the population were a continuously increasing population, the problem could be solved by sinking a well in the water-bearing sandstone formation in the neighbourhood of Weston, and pumping to a reservoir to the summit of Napton Hill, as was proposed by the North Warwickshire Water Company, but the cost of laying a rising main some eight miles in length to Napton Hill, would render any such scheme prohibitive for an inclusive and scattered population of only about 5,000."

517. Eleven new houses were erected during the year.
518. Appended to the Report is one from the Surveyor and Sanitary Inspector, dealing with the public drainage, water supply, factories and workshops, dairies, cowsheds and milkshops, and referring to these latter he says:—"There are now 32 registered premises, no case of infected milk has come under notice, and in many cases considerable improvements have been carried out."

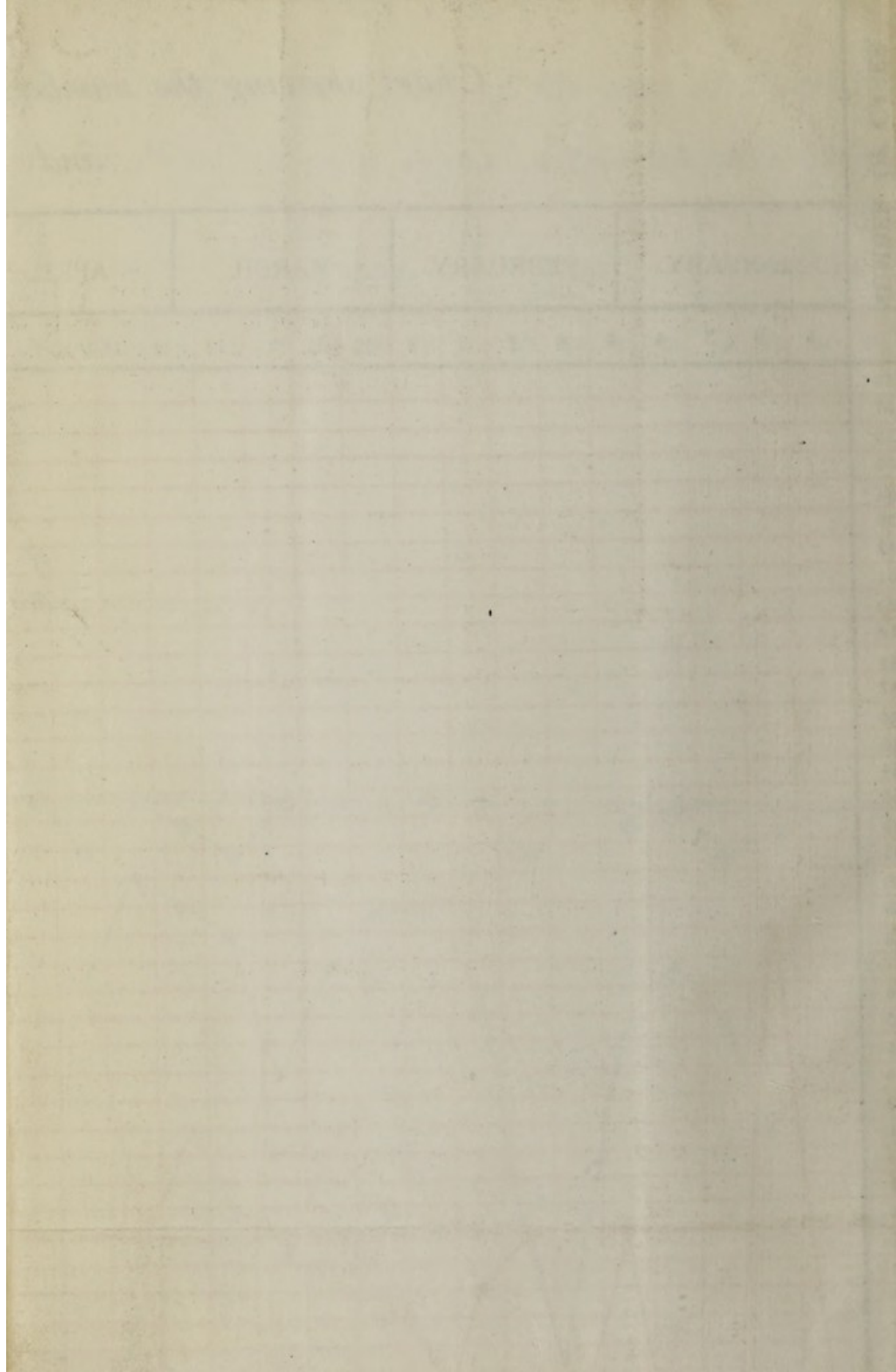
#### WARWICK.

519. Dr. WILSON records a slight decrease in the Birth-rate, and also a slight decrease in the death-rate. As regards age, 21 of the deaths occurred among infants under one year of age, giving an Infant mortality rate of 91 per 1,000 births.
520. Among causes of death, 1 was attributed to Scarlet Fever, 1 to Diphtheria, 1 to Measles, 1 to Whooping Cough, 8 to Phthisis, and 8 to Cancer. This shows that the Zymotic death-rate was very low and therefore very satisfactory.
521. Only 54 cases of infectious disease were notified, namely, 27 Scarlet Fever, 21 Diphtheria, 1 Typhoid Fever, and 5 Erysipelas.
522. The Diphtheria cases appears to have been distributed somewhat widely, viz:—4 in Stoneleigh parish, 7 in Tachbrook, 2 each in Barford, Budbrook, and Norton Lindsey, and 1 each in Cubbington, Wasperton and Whitnash.
523. The possibilities of isolation were taken good advantage of, no less than 25 of the 27 cases of Scarlet Fever, and 17 out of the 21 cases of Diphtheria being removed.
524. As regards the removal of nuisances and sanitary defects, these are dealt with in a report of the Sanitary Inspector and Surveyor, from which it appears that 13 polluted wells were open and cleansed, 24 new drains provided, 75 closets cleansed, and 12 privies converted into sanitary closets. 46 houses or parts of houses and 2 schools were fumigated after infectious disease.
525. The Inspector further reports:—"A complaint was received during the latter part of the year that the smells arising from the Coventry sewage farm at Baginton were most offensive and dangerous to the health of the inhabitants of the village. I have constantly visited the district, but have never been able to find any cause for complaint. No complaints arising from the state of the rivers in the district have been received during the year."
526. The report also deals with the improvement of the water supply, the Inspection of Factories and Workshops and Canal Boats, and states that plans for the erection of 31 new houses, or extensions to present houses have been passed by the plans Committee.

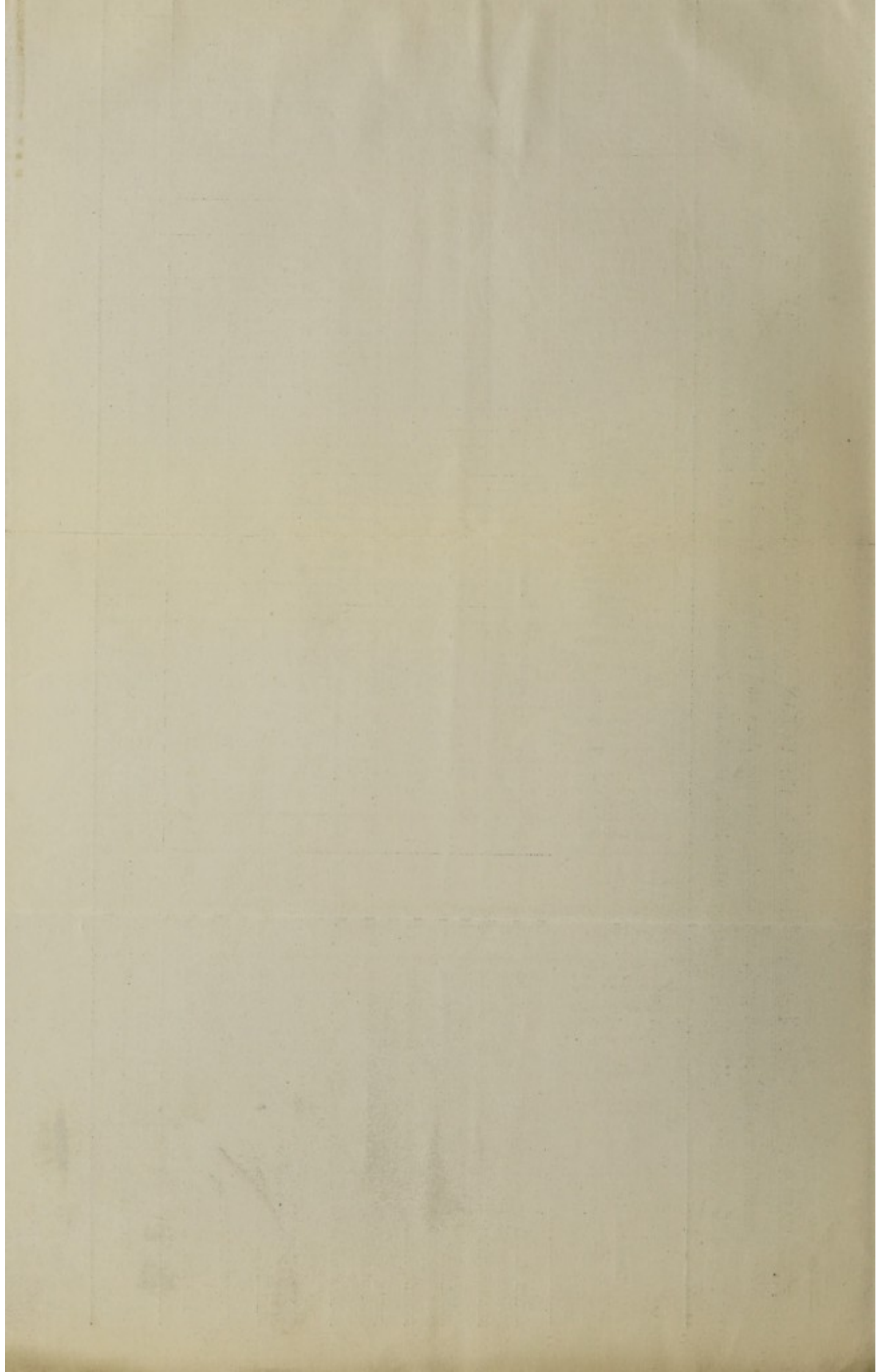
#### VITAL STATISTICS.

	Population.	Birth-rate.	Death-rate.	Zymotic Death-rate.	Infant Mortality per 1,000 Births.
Meriden	12,050	21·3	13·0	0·33	58
Rugby	16,750	28·0	11·5	0·24	68
Solihull	17,110	21·8	13·5	0·88	77
Southam	9,980	29·0	15·0	0·80	76
Warwick	11,860	19·4	12·9	0·36	91























I. RETURN, shewing the number of Births Registered, together with the number of such cases successfully Vaccinated or otherwise disposed of in the Districts of the COUNTY OF WARWICK during the year ending 30th June, 1908.

VACCINATION DISTRICTS.	No. of Births registered during the year ending 30th June, 1908.	No. of these cases successfully Vaccinated.	Inausceptible of Vaccination.	Died before Vaccination.	No. of Conscientious Certificates.	Cases under Postponement.	Removals to other Districts out of the Union.	No. of cases not to be found.	Number of cases remaining Unvaccinated at date of this Return.
<b>URBAN DISTRICTS.</b>									
Aston Manor... ..	2,244	1,477	18	214	40	102	20	308	65
Bulkington ... ..	60	36	...	2	18	1	...	3	...
Erdington ... ..	733	632	7	34	20	15	8	13	4
Kenilworth ... ..	92	65	...	7	14	...	...	...	6
Royal Leamington Spa	492	344	1	30	79	2	8	6	22
Nuneaton ... ..	1,075	394	...	92	522	25	9	27	6
Rugby ... ..	489	138	1	37	125	24	23	21	120
Stratford-on-Avon ...	195	134	1	11	34	3	4	...	8
Sutton Coldfield ...	404	324	2	25	28	10	7	6	2
Warwick ... ..	303	229	1	28	31	5	3	6	—
<b>RURAL DISTRICTS.</b>									
Alcester ... ..	267	199	...	15	43	6	2	1	1
Atherstone ... ..	595	361	...	56	95	40	3	15	25
Brailes ... ..	98	63	...	2	30	...	2	1	...
Castle Bromwich ...	76	53	...	10	10	1	...	1	1
Coventry ... ..	6	4	...	...	1	1	...	...	...
Farnborough... ..	39	17	...	...	20	2	...	...	...
Foleshill ... ..	742	441	...	71	206	6	7	11	...
Meriden ... ..	239	187	...	11	16	7	5	11	2
Monks Kirby ... ..	37	23	...	1	8	4	1	...	...
Nuneaton ... ..	69	55	...	5	4	...	...	4	1
Rugby ... ..	496	238	...	15	141	28	16	17	41
Solihull ... ..	352	298	2	22	21	2	2	1	4
Southam ... ..	287	175	...	24	80	1	2	1	4
Stratford-on-Avon ...	78	56	1	4	11	...	1	3	2
Tamworth ... ..	452	361	1	38	31	6	3	4	8
Warwick ... ..	110	89	...	7	11	1	...	1	1
<b>TOTALS ...</b>	<b>10,030</b>	<b>6,393</b>	<b>35</b>	<b>761</b>	<b>1,639</b>	<b>292</b>	<b>126</b>	<b>461</b>	<b>323</b>

	Miss Lowe.	Miss Mackenzie.	Miss Swallow.	Miss Colles.	Miss Morrison.	Miss Freeburne.	Mrs. Lord.	Mrs. Moore.	Miss Chouffon.	TOTAL.
No. of Visits made ... ..	1,079	119	137	243	611	1,033	670	288	305	4,485
Health Talks to School Children, etc. ...	8	17	1	11	5	8	9	...	...	59
VENTILATION—										
Windows to be regularly opened ...	22	...	8	20	21	67	54	35	65	292
Windows not made to open ... ..	...	...	...	...	22	2	13	8	12	57
Chimneys to be unstopped ... ..	7	1	3	2	20	17	3	3	15	71
Bedrooms without Chimneys ... ..	...	...	24	1	1	14	25	26	6	97
Bedrooms without Windows ... ..	...	...	...	...	...	2	...	1	1	4
Pantry ventilation to be attended to	1	...	...	...	2	...	2	...	...	5
Pantries without ventilation ... ..	...	...	4	...	14	10	4	10	4	46
Cellars ... ..	...	...	...	...	5	1	1	...	...	7
CLEANLINESS—										
Of rooms ... ..	29	2	7	19	37	93	48	28	31	294
Bedding washed or destroyed ... ..	28	1	1	4	...	25	1	14	3	77
Of yards ... ..	3	...	...	...	...	1	...	4	9	17
Pantries to be whitewashed ... ..	...	...	...	...	5	...	1	...	...	6
Houses in which there was no pantry	...	...	1	8	7	3	3	...	...	22
Slops to be emptied ... ..	12	...	1	5	27	36	6	17	21	125
DISEASES—										
Consumption ... ..	2	...	...	4	3	3	7	3	...	22
Diarrhœa ... ..	13	2	...	3	8	11	1	3	2	43
Ulcerated heads ... ..	53	1	1	3	3	32	2	33	1	129
Other cases of sickness in which medical advice was urged ... ..	51	2	2	7	8	39	18	1	4	132
Cases of notifiable disease discovered ...	85	...	...	...	...	...	...	1	...	86
Wasting babies ... ..	11	3	4	3	13	9	5	6	10	64
Babies improperly clothed ... ..	34	6	2	2	1	22	3	2	1	73
Babies improperly fed ... ..	52	6	9	3	16	48	50	15	25	224
Babies neglected ... ..	22	3	2	1	8	14	...	2	5	57
Babies over 12 months to be weaned ...	26	2	9	2	4	26	17	2	2	84
Neglected children ... ..	29	4	...	1	7	51	13	18	3	126
Babies to be vaccinated ... ..	1	...	1	...	...	6	...	4	...	12
Cases of overcrowding ... ..	5	...	4	...	7	10	7	5	15	53
Damp houses ... ..	2	...	2	2	14	18	5	1	3	47
Other defects ... ..	13	...	...	...	29	93	36	6	15	192

**K. METEOROLOGICAL OBSERVATIONS** taken at the Park Lodge and Council House, Sutton Coldfield, during the Year ending 31st December, 1908, by the Park Forester (Mr. H. HARLOND).

Lat. : 52 deg. 33 mi. 22 sec., N.      Long. : 1 deg. 49 mi. 42 sec., W.  
 Height of Rain Gauge above Sea Level, 370.5 feet.

MONTH.	RAINFALL.			BAROMETER.		THERMOMETERS.								SUNSHINE.		MONTH.				
	Total Depth in inches.	Number of days on which Rain fell.	Greatest fall in 24 hours.	Highest Corrected Readings.	Lowest Corrected Readings.	In Shade.		Mean Temperature for the Month.		Highest Readings in Sun.		Lowest Readings on Grass.		Hours.	Mins.					
			Depth.	Inches.	Date.	Inches.	Date.	Highest Readings.	Date.	Lowest Readings.	Date.	Degrees.	Degrees.	Degrees.	Degrees.	Date.	Degrees.	Date.		
January ..	0.66	13	.15	30.566	21st	29.436	8th	55.2	28th	11.6	12th	34.2	74.3	28th	11.0	12th	51	42	January	
February ..	1.26	15	.29	30.572	7th	29.210	28th	51.8	18th	22.5	13th	40.4	95.0	19th	20.0	2nd	57	48	February	
March .....	2.97	18	.63	30.072	27th	29.150	6th	56.8	3th	24.5	20th	41.4	102.8	31st	21.2	18th	62	38	March	
April .....	2.89	16	.89	30.426	11th	29.568	3rd	60.5	10th	23.3	8th	42.5	109.4	17th	22.5	8th	113	21	April	
May .....	3.24	14	1.53	30.716	20th	29.510	6th	76.2	28th	33.5	24th	54.2	125.8	18th	30.5	24th	154	50	May	
June .....	2.76	10	1.34	30.391	25th	29.780	16th	80.0	4th	34.5	22nd	57.4	131.0	4th	29.8	22nd	211	4	June	
July .....	3.12	11	.60	30.436	29th	29.408	17th	83.6	4th	40.2	8th	60.2	131.0	3rd	38.6	8th	163	13	July	
August .....	2.69	14	.67	30.397	3rd	29.687	23rd	82.5	4th	36.4	17th	56.4	128.7	8th	33.4	17th	146	55	August	
September ..	1.83	14	.43	30.222	14th	29.470	9th	72.5	30th	31.7	13th	55.7	113.0	30th	29.4	13th	92	0	September	
October .....	2.31	12	1.01	30.515	22nd	29.886	28th	77.2	1st	26.0	25th	51.9	118.0	1st	23.7	25th	88	53	October	
November ..	1.47	11	.38	30.367	30th	29.770	14th	56.0	12th	16.0	10th	41.9	84.6	9th	12.8	10th	61	11	November	
December ..	2.11	20	.40	30.357	2nd	28.913	11th	55.0	22nd	10.0	28th	36.8	72.8	12th	8.4	28th	20	27	December	
<b>TOTALS</b>	<b>27.34</b>	<b>168</b>										<b>47.8</b>			<b>TOTAL</b>		<b>1223</b>	<b>42</b>		

W. A. H. CLARRY, Borough Surveyor.

L. METEOROLOGY TABLE OF LEAMINGTON, 1908.

Month.	Means of Barom. at 10 a.m.	Means of Ther. at 10 a.m.	AIR TEMPERATURES.								RAINFALL.	
			Means of		Absolute Temperatures.				Direction of the Prevailing Wind.	Inches.	Days.	
			Max.	Min.	Max.	Date.	Min.	Date.				
			Max.	Min.	Max.	Date.	Min.	Date.				
January ...	29.97	41	41.51	34.16	55	27th	20	4th	S.E.	.93	12	
February ...	29.89	44	48.65	38.10	55	20th	31	1st, 4th	N.W.	1.23	12	
March ...	29.65	42	46.38	37.09	55	23rd, 24th, 27th	32	17th, 19th, 20th	S.W.	2.96	20	
April ...	29.78	45	53.50	39.50	62	8th, 29th, 30th	30	23rd	N.E.	3.32	15	
May ...	29.85	56	68.93	50.25	86	31st	42	10th, 22nd	S.W.	1.78	12	
June ...	29.97	59	79.13	52.16	98	28th	45	13th, 20th	N.E.	1.65	7	
July ...	29.89	63	78.12	54.96	95	2nd, 3rd	50	8th, 11th, 31st	N.W.	2.52	12	
August ...	29.88	60	70.13	53.16	93	2nd	46	11th	N.W. and W.	2.50	16	
September ...	29.81	56	61.46	50.53	78	30th	40	11th	W.	2.11	15	
October ...	29.99	55	60.19	47.16	76	1st	34	25th	S.E.	.78	13	
November ...	29.88	49	52.20	43.70	58	5th, 7th, 12th	28	10th	E.	.41	12	
December ...	29.73	43	43.54	37.19	54	13th	20	30th, 31st	W.	1.35	23	
TOTALS ...	358.29	613	703.74	537.96	...	...	...	...	...	21.54	169	
MEANS ...	29.85	51	58.64	44.83	...	...	...	...	...	1.79	14	

1909.

—  
Warwickshire County Council.  
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*ANNUAL REPORT*

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OF HEALTH,

*For the Year 1908.*

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