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Northamptonshire County Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

For the Year 1902,

INCLUDING A

Summary of the Annual Reports of the District

Medical Officers of Health,

BY


CHARLES E. PAGET,

County Medical Officer of Health.

Northampton:—

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1903



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NORTHAMPTONSHIRE COUNTY COUNCIL.

Annual Report of the Medical Officer of Health
FOR THE YEAR 1902.

I herewith have the honour to present the Sixth Annual Report of the Medical Officer of Health to the County Council of Northamptonshire, including a Summary of the Annual Reports of the Medical Officers of Health for Districts within the Administrative County.

I have adhered to the general plan of report originally adopted, by which the various matters dealt with are arranged under subject-headings, as experience has shown that by this method the relative progress which has been attained in different Districts is more readily seen than if each District were dealt with separately.

There were 19 **Inquiries held by the Local Government Board** during the year 1902 relating to sanitary matters in the Administrative County. Several of these were the outcome of action taken by the Public Health Committee in respect of River Pollution, and work is in progress in many of the schemes referred to.

Date.	Sanitary District.	Subject	Amount of Loan.	Result.
Jan. 14th	Brixworth Rural	.. Provl. Order for land, Great Creaton		Withdrawn
" "	" "	.. Provl. Order for land, Maidwell		Withdrawn
Feb. 26th	" "	.. Sewerage and Sewage Disposal at Brixworth	£950	Sanctioned
Apl. 22nd	Wellingborough Urban	.. Motor Van for Collecting Refuse	£650	Sanctioned
23rd	Kettering Urban	.. Provision and Erection of a Refuse Destructor	£5,100	Sanctioned
" 24th	Rothwell Urban	.. Cemetery Purposes ..	£1,700	Sanctioned
May 29th	Wellingborough Rural	.. Sewerage at Great Doddington	£200	Sanctioned
" 30th	Wellingborough Urban	.. Sewerage. (Pollution of "The Cut")	£1,000	Sanctioned
June 24th	Wellingborough Rural	.. Sewerage and Sewage Disposal at Little Harrowden	£500	Sanctioned
" "	Borough of Daventry	.. Water Supply ..	£7,500	Under consideration
July 18th	Thrapston Rural	.. Sewerage and Sewage Disposal at Ringstead	£2,500	Sanctioned
" 30th	Oundle Rural	.. Infectious Diseases Hospital ..	£2,000	Sanctioned
Oct. 21st	Kettering Rural	.. Water Supply at Burton Latimer	£3,000	Part sanctioned
" 22nd	Brixworth Rural	.. Sewerage and Sewage Disposal at East Haddon	£610	Referred back
" "	" "	.. Additional Tank for Water Tower at East Haddon	£90	Sanctioned
" 24th	Hardingstone Rural	.. Sewerage and Sewage Disposal at Yardley Hastings	£2,000	Under consideration
Nov. 4th	Borough of Daventry	.. As to Propriety of certain works of Water Supply		Under consideration
" 25th	Wellingborough Rural	.. Sewerage and Sewage Disposal at Wilby	£940	Under consideration
" 26th	Thrapston Rural	.. Water Supply at Brigstock	£2,400	Under consideration

There was thus a larger number of these Inquiries during 1902 than in any of the preceding four years, the numbers being 7 for the year 1898, 8 for 1899, 15 for 1900, and 12 for 1901. These figures may, in my opinion, be fairly taken as indicative of increased sanitary activity within the County.

In continuation of the record in my last Annual Report on the progress of the work of preventing **River and Stream pollution** in the County, I am glad to be able to say that distinct progress has been made in several districts to abate pollutions either by initiating works of sewage disposal or by improving the working conditions of such works already in existence. I regret, however, to report that the **NORTHAMPTON CORPORATION** had not at the end of the year acquired the additional land requisite for the erection of

Sewage Disposal works, as distinguished from their existing farm, although the County Council has been assured by the Town Clerk that negotiations are going on with that view. It is also a matter of regret that the Sewage Disposal works at KETTERING have not proved successful during the year in preventing very serious pollution of the River Ise. It appears to me that the amount of land available there for the treatment of the sewage effluents from the settling tanks is much less than is required, and the attention of the Urban District Council has been drawn to this matter. Pollution of the River Welland, too, has been justly complained of in connection with the sewage effluents from the sewage farm at MARKET HARBOROUGH and with the discharge of sewage at several points from the village of LUBENHAM, both of which are situated within the Administrative County of Leicestershire. I put myself into communication with the neighbouring County Medical Officer of Health, and he has commenced to deal with these matters. Continuing the system, initiated two years since, of proceeding with the abatement of river-pollution in sections of water-sheds, I reported that schemes for dealing with sewage outfalls were necessary at BADBY, NEWNHAM, EVERDON, DODFORD, WEEDON, and FLORE in the Daventry Rural District, and at HARPOLE, KISLINGBURY, BUGBROOKE, and NETHER HEYFORD in the Northampton Rural District. The Councils of both these Rural Districts were communicated with, in order that they might proceed without delay to carry out such work as might be necessary to ensure proper effluents passing into the River Nene.

A good deal of attention was paid during the year 1902 to the subject of **Isolation Hospital Accommodation**. Some of this was due in part to the power granted to County Councils under the Isolation Hospitals Act, 1901, to contribute to certain expenses of hospitals built under the Public Health Act, 1875, and in part to the fears occasioned by the prevalence of small-pox throughout the country. I have already referred

in my last Annual Report to the fact that applications were received towards the end of the year 1901 from the Hardingstone Rural District Council and the Kettering Joint Hospital Board for annual contributions to the "establishment expenses" of their Hospitals, and to the conditions prescribed by the County Council to secure efficiency in respect of any Hospital before they considered the question of the amount to be granted as an annual contribution. I submitted my Report on the two hospitals named to the Public Health Committee on 8th March, 1902. I was able to report so favourably of the HOSPITAL OF THE KETTERING JOINT HOSPITAL BOARD that the County Council decided to make the fullest grant under their Resolutions dated 18th January, 1900, and so contributed one-half of the establishment expenses to this Board for the year ending 31st March, 1902, namely, £364 6s. 0d. In the case of the HARDINGSTONE HOSPITAL, which was built of wood and iron, I was able to report favourably only within certain limits, while fully recognising that since it was erected in the year 1894 it had served a most useful purpose for the purely rural district in which it was placed. After careful consideration of all the circumstances of this case, the County Council decided, subject to the approval of the Local Government Board as the hospital was built otherwise than out of borrowed money, to make a contribution amounting to one quarter of the establishment expenses. Application was accordingly made to the Local Government Board for leave to make this contribution, and, as the subsequent proceedings may prove to be useful to other Local Authorities in this County in informing them of the views and requirements of the Board, I have thought it well to set them out as briefly as possible. On 8th May, 1902, the Local Government Board desired, before further considering this application, to be informed how far the hospital in question complied with the following conditions :—

1. The hospital should not be used for the treatment of cases of small-pox, if the population within $\frac{1}{4}$ mile and $\frac{1}{2}$ mile from the site exceeds 200 and 600 respectively.
2. The hospital should not be used for the treatment of cases of small-pox at the same time as cases of other diseases.
3. All buildings which are to contain infected persons or things should be at least 40 feet from each other and from the boundary of the site.
4. The site should be enclosed by a sufficient fence, usually a wall or close fence at least 6 feet 6 inches high.
5. Sufficient accommodation should be provided for the staff in a building distinct from the wards; a separate laundry, mortuary, and other offices should also be provided.
6. The wards should have a capacity of 2,000 cubic feet, and a wall space of 12 feet per bed.
7. The wards should be permanent structures.
8. A sufficient supply of wholesome water, and means for disposing of the sewage of the hospital should be provided.

The Rural District Council having furnished the information required, the hospital was subsequently inspected, in company with myself, by Dr. R. Deane Sweeting, one of the Medical Inspectors of the Local Government Board, on 8th July, 1902. In the meantime, in consequence of an outbreak of small-pox in the village of Wootton, cases of small-pox had been isolated in the hospital and also in some railway carriages put upon another part of the site by the District Council. Between the hospital and the railway carriages ran a public footpath, more than 40 feet it is true from either, but across which there was constant communication between the two establishments.

The result of the inspection amounted to this that, before the Board would be prepared to further entertain the application made to it, the following improvements would have to be carried out by the Hardingstone Rural District Council :—

1. The diversion of the public footpath so that it shall not cross the site.
2. The enclosure of the site by a suitable close fence at least 6 feet 6 inches high.
3. The provision of a proper and safe method of sewage disposal.
4. The reduction of the number of beds in the present pavilion so as to bring the space available for each patient up to the standard of the Board's usual requirements.
5. The provision of better administrative accommodation, especially proper sleeping accommodation for the nurses apart from the ward pavilion.

Under these circumstances, and pending negotiations as to the possibility of diverting the footpath in question, the Rural District Council decided to withdraw the application made by them to the County Council for the present.

I have thought it all the more desirable to give these facts for the information of other Authorities in the County because they ought to be carefully considered in any future scheme of hospital provision, particularly if such be made out of current rate, and because they must affect largely at least one proposal made early in the year by the BOROUGH OF DAVENTRY jointly with the DAVENTRY RURAL DISTRICT. In response to an application from the Medical Officers of Health for the Borough and Rural District, I met a Joint Committee of the two Authorities on 6th February, 1902, to discuss a proposal to improve their wooden hospital, which I

condemned in the year 1899 as "of the poorest and most crude character." I visited the hospital with several members of the Committee, and found its external appearance at least had been improved; but, after a careful examination of the woodwork of the interior walls of the wards, I was unable to modify my previously expressed opinion of the unfitness of the building for the proper isolation and treatment of successive cases of different infectious diseases. I gave it as my opinion that, though the present buildings might serve some useful administrative purposes, they were not worth spending any more money on for maintaining them as Isolation wards, that the isolation bed-accommodation for the Borough and Rural District combined ought not to be less than for twelve adult patients, and that such beds should be so arranged in two sets of wards that eight patients could be accommodated in one set, and four patients in the other. I hope that the result of the further consideration of this matter by the two Authorities may be the formulation of a scheme of hospital provision sufficient and satisfactory for both.

In consequence of a request from the Medical Officer of Health for the **IRTHLINGBOROUGH URBAN DISTRICT** for my opinion as to the suitability of certain cottages, adjoining the main road between Irthlingborough and Addington, in regard to their position, for the purpose of isolating any case of small-pox that might arise in the district, I met him and several members of the Urban District Council at these cottages on 11th February, 1902. One end of these cottages was only about 6 feet from the roadside hedge; they were otherwise well isolated, being about one mile from Irthlingborough and Addington respectively. I suggested to the Committee that the cottages might possibly be used for Administrative purposes if Isolation Wards were erected about 100 yards from the road, but, in the end, no anticipatory hospital provision was made and the Authority was fortunate in escaping an invasion of small-pox.

I took the opportunity, when meeting so many members of the Irthlingborough Urban District Council, to express my opinion that their District and other adjacent Urban Districts were remarkably well situated for the purpose of combination for the formation of a Hospital District, and the erection of a permanent and well-appointed Isolation Hospital. The Public Health Committee, agreeing with this view, passed the following resolution on 8th March, 1902 :—“ That in the opinion of the “ Committee, the BOROUGH OF HIGHAM FERRERS and the “ Parishes of RUSHDEN, IRTHLINGBOROUGH, FINEDON, and “ RAUNDS are suitably situated to be formed into a Hospital “ District, and the Committee direct the Medical Officer of “ Health to confer with the Local Authorities of these places “ with a view to application being made to the County Council “ for the formation of such a District.” In accordance with this resolution I attended a Conference of Delegates from the aforementioned Districts at the Town Hall at Higham Ferrers on 2nd May, 1902, at which also the Chairman of the Public Health Committee and the Deputy Clerk of the County Council were present. The Mayor of Higham Ferrers presided over the Conference, and, after pointing out the grounds for considering that the Districts named were suitably situated for the purpose of combined hospital accommodation, I stated that it was open to the Local Authorities (*a*) either to provide hospital accommodation singly or jointly under the Public Health Act of 1875, or (*b*) to promote the formation of a Hospital District, and Committee by which that accommodation might be provided, under the Isolation Hospitals Act, 1893. I urged that, in my opinion, the most probably serviceable and economical arrangement for all five Local Authorities would be in the formation of a Hospital District. I then went into the question of the size and cost of a Hospital which might be considered suitable for the combined area, and suggested that a hospital having 30 beds to serve a population of about 28,000 would be satisfactory.

The cost I estimated at, but not exceeding, £12,000, and to include building, furnishing, provision of ambulance and steam-disinfector, architects' charges, and price of land. An informal discussion followed my address, and many questions were asked, after which the following Resolution was carried without dissent :—

“That, in the opinion of this Meeting, the Borough of Higham Ferrers, and the Urban Districts of Rushden, Irthlingborough, Finedon, and Raunds, are suitably situated to be formed into a Hospital District, and that those present pledge themselves to bring the matter fully to the notice of their respective Councils, and hereby undertake on their behalf that a definite decision shall be come to at an early date, and that this meeting stand adjourned to a future date to be arranged.” In spite, however, of this favourable conclusion of the Conference, the subsequent consideration of the proposal by the respective Councils did not give it confirmation, for, while the Borough of Higham Ferrers and the Urban District of Raunds favoured the scheme in a modified form, and the Rushden Urban District did not wholly reject it, the two Urban Districts of Irthlingborough and Finedon appeared to have decided objections to combination with the other Districts. Under these circumstances, I did not think it reasonable to ask the Delegates to meet again in conference until the matter had been further considered by them, especially as the suggested modification emanating from the Higham Ferrers Borough Council was well worthy of local discussion and each of the five Authorities was engaged in large schemes of water supply. The Public Health Committee, after discussion, urged on the respective Councils the desirability of their further considering the question of Isolation Hospital accommodation for their infectious sick, with a view either to the re-assembling of the Conference or to independent action on their part, whether singly or jointly; but, fully recognising the magnitude of the schemes now

being undertaken by all the Local Authorities concerned to procure wholesome and abundant Public Water Supplies, they, at the same time, intimated their decision not to initiate further action for a period of twelve months. I trust, therefore, that steps will be taken to reconsider the matter.

In reference to the agreement, announced in the Annual Report of the Medical Officer of Health for the CRICK RURAL DISTRICT for 1901, entered into between the Councils of the Rugby Urban, Rugby Rural, and Monks' Kirby Rural Districts, situated in Warwickshire, and the Crick Rural District, situated in Northamptonshire, in regard to Isolation Hospital accommodation, I attended a meeting of delegates at Warwick convened by the Warwickshire County Council on 26th July, 1902. It appeared from the discussion which took place that the combination of the districts named for hospital purposes was voluntary and under the Public Health Act, 1875, and that, under the Provisional Agreement, the composition of the Hospital Committee and the proportion of capital and maintenance charges was as follows :—

Rugby Urban	represented by 6 Members	and bearing	$\frac{9}{16}$	of charges		
„ Rural	„ „ 3	„ „	$\frac{5}{16}$	„ „		
Monks' Kirby Rural	„ „ 1	„ „	$\frac{1}{16}$	„ „		
Crick Rural	„ „ 1	„ „	$\frac{1}{16}$	„ „		

It further appeared that the erection of a Small Pox hospital at Lawford Heath had been decided on by the Joint Hospital Committee, and that the question of hospital accommodation for other infectious diseases would be early considered by the Committee, though a site had not then been determined on. Seeing how difficult it would be for the Crick Rural District to bear hospital charges single-handed or to be combined for hospital purposes with any other district in Northamptonshire, I cannot but think that the arrangement entered into by it with adjacent districts in Warwickshire for the isolation of its infectious sick is a very suitable and satisfactory one.

Two circumstances during the years 1901 and 1902 have led to a revival of the consideration of the subject of hospital accommodation in the BOROUGH OF BRACKLEY, and the RURAL DISTRICTS OF BRACKLEY and MIDDLETON CHENEY. It will be remembered that in December 1901, a case of small-pox occurred at Helmdon in the Brackley Rural District and that for the isolation of this case an empty house had to be hurriedly prepared for its reception. Early in 1902 an outbreak of small-pox at Banbury in Oxfordshire, on the borders of the Middleton Cheney Rural District, impelled the District Council to temporarily acquire two semi-detached cottages at Warkworth for the purpose of isolating any case of small-pox that might arise. The District Council were then threatened with an application for an interim Injunction to restrain them from using the cottages for the purpose named. Having made certain recommendations which the District Council undertook to carry out in the event of their having to isolate a case of small-pox, I made an affidavit in support of their action. The application for an interim Injunction was heard on 30th July, 1902, and, in consequence of the undertakings of the District Council referred to, the Injunction was refused. These two methods of securing temporary hospital accommodation in times of peril only are, however, unsatisfactory and not unfrequently lead to unnecessary litigation and expense. I, therefore, urged that the three Local Authorities named, whose areas adjoin, should approach each other for the purpose of seriously considering the advisability of their securing mutual protection against the spread of infectious sickness by means of isolation hospital accommodation, and they have been requested to do so by the Public Health Committee.

In my Annual Report for the year 1900, I referred to the fact that a provisional agreement had been come to between the Oundle Urban and Rural Districts for the provision of an isolation hospital to serve the two Districts. In my Report

for 1901, however, I had to report that this arrangement had unfortunately fallen through. Now, I am glad to be able to say that on 30th July, 1902, an Inquiry was held by an Inspector of the Local Government Board into an application of the OUNDLE RURAL DISTRICT Council to borrow the sum of £2,000 for the erection of an infectious diseases hospital, and to report that this loan has been sanctioned. I earnestly hope that some action will be taken before long by the Oundle Urban District Council to put itself in as good a state of preparedness as the Rural District Council has, and it is a matter for very serious regret that other Rural District Councils in the County have not so far followed the example of the Oundle Rural District Council.

A proposal that the OXENDON RURAL DISTRICT should agree to a joint scheme for an Isolation Hospital with the Market Harborough Urban District situated in Leicestershire, which was prominently brought forward by the District Medical Officer of Health, and had much promise of success, was also unfortunately defeated by a single vote. It is to be hoped that further consideration of the matter may ultimately have a different result.

The question of the provision of special means of isolation in regard to small-pox was forced upon the WELLINGBOROUGH URBAN DISTRICT Council by an outbreak of that disease, which at one time threatened to assume dangerous proportions. It may be remembered that there is an Isolation Hospital at Wellingborough fitted for the reception and treatment of cases of both sexes suffering from the same disease ; but, since its erection, the town has grown very considerably in its direction, so that at the present time there is a population estimated at over 200 within some 300 yards of the hospital. It is, therefore, manifestly unfit for the reception and isolation of cases of small-pox, and I was accordingly consulted by the Urban District Council on 6th June, 1902, as to the best measures to

be taken for the further isolation of small-pox cases. At that time, there had been altogether eight cases of the disease in Wellingborough, of which the five last had occurred in a period of 12 days, the last being notified on 31st May. Although, as it happened, no further case arose, it could not be denied that there was a strong likelihood of other cases occurring, and so, while confirming the action of the District Council in isolating some of the cases in some vacant cottages on the outskirts of the Councils' large sewage farm at a place called "Spike Island," I urged them to consider the advisability of taking measures to improve the site and establish there a permanent small-pox hospital. The matter has since then been continuously under discussion, and some action may be anticipated before long.

Originating in a recommendation from myself that precautions should be taken in the WELLINGBOROUGH RURAL DISTRICT to provide for the possible importation of cases of small-pox, the Council have had under consideration the desirability of making some hospital provision, and by the end of the year had nearly decided on a site for the same between Irchester and Wollaston. It is to be hoped that the hospital when built will be of such a permanent nature as to compensate for the outlay and justify some contribution towards its establishment expenses from the County Council.

Action has been taken during the year, in continuance of that commenced in 1900, to bring about a greater appreciation of the necessity for supervising and regulating the various **Dairies, Cowsheds, and Milkshops** in the different districts of the County. It has on more than one occasion been very apparent that the character of the Dairies, Cowsheds, and Milkshops Orders of 1885, 1886, and 1899 has been incorrectly understood. An idea has evidently prevailed in some districts that these Orders are *adoptive*, which is the reverse of the case, and that Registration of persons carrying

on the trade of cow-keeper, dairyman, or purveyor of milk is *optional*, which it is not. These views have led to some confusion, but I hope that now the facts are correctly appreciated. The only thing which is optional in the Orders is the making of Regulations by a local authority for certain purposes set out therein. A brief resumé of the present position of the matters in this County may now be of interest. On 16th June, 1900, there were 14 Urban Districts of which 4 only had any Regulations, viz. Desborough, Kettering, Oundle, and Rothwell. Since that date, the Districts of Far Cotton, St. James' (N'ton.), and Kingsthorpe were absorbed into the Borough of Northampton and the Brixworth Rural District which had Regulations, and the Parish of Irthlingborough was converted into an Urban District out of the Wellingborough Rural District which also had Regulations. By 19th April, 1902, there were, therefore only 12 Urban Districts in the County instead of 14, but 7 of these had Regulations instead of 4. In the meantime, there had been no change in regard to the adoption of Regulations in the Rural Districts; the number of districts remained at 16, of which 7 only had Regulations. In regard to Registration, in view of my foregoing remarks, this was not enforced in 1 Urban and 5 Rural Districts, moreover, in the Brixworth Rural District, though there were Regulations they were utterly inoperative owing to most inefficient Registration. Under these circumstances, the County Council at its meeting on 1st May, 1902, passed the following resolutions and directed that a copy of the same be sent to every District Council :—

“(a) That the attention of the authority in every district of
 “ the County where there is no registration of Dairy-
 “ men, be called to the provisions of Article 6 of the
 “ Dairies, Cowsheds and Milkshops Order of 1885,
 “ which makes imperative the registration of persons
 “ carrying on the trade of cowkeepers, dairymen, or
 “ purveyors of milk.

“(b) That the urgent necessity of adopting Regulations
 “ under the Dairies, Cowsheds and Milkshops Orders
 “ be strongly impressed upon those districts who have
 “ not yet adopted them.”

The fact that, shortly before the passage of these resolutions in support of the contentions of the Public Health Committee as to the necessity of Registration being properly enforced and of efficient Regulations being adopted, a most serious outbreak of Enteric Fever in the County Borough of Northampton was traced to the distribution of contaminated milk from a Dairy situated in a District where the one was neglected and the other ignored, lent emphasis to the action of the County Council. I wish that I could report more favourably of the result ; but the fact remains that by the end of the year only one more Urban and one more Rural District adopted Regulations, though there was a good prospect of another Rural District following suit. There were thus at the end of the year 12 Urban Districts, of which 8 had Regulations, and 16 Rural Districts, of which 8 had Regulations. In regard to Registration of Dairymen and others, however, this was ordered to be put into operation in every district except the Finedon Urban and the Towcester Rural Districts, and, therefore, the County Council at its meeting on 23rd October, 1902, and at the instance of the Public Health Committee, passed the following resolution :—

“ That the attention of the Local Government Board be called
 “ to the default of the Urban District Council of Finedon and
 “ the Rural District Council of Towcester in failing to require
 “ Registration of persons carrying on the trade of cowkeepers,
 “ dairymen or purveyors of milk, under Article 6 of the
 “ Dairies, Cowsheds and Milkshops Order, 1885.”

The action of the Local Government Board in reference to this representation is awaited with interest.*

* While this Report was in the Press, information has been received from the Local Government Board that both these District Councils have decided to enforce registration.

The passage of the **Midwives Act, 1902**, has brought additional powers and responsibilities to the County Council. At the instance of the Public Health Committee I have reported fully upon the duties imposed by the Act on the County Council as the Local Supervising Authority over Midwives within the area of the County. It is important to remember that, under this Act,

- (1) from and after April 1, 1905, no woman unless certified under the Act may take or use the name or title of 'midwife', under penalty not exceeding £5,
- (2) from and after April 1, 1910, no woman may habitually and for gain attend women in childbirth otherwise than under the direction of a qualified medical practitioner unless she be certified under the Act, under penalty not exceeding £10,
- (3) a woman can only be certified after compliance with the rules and regulations laid down in pursuance of the Act,
- (4) a certified woman cannot employ an uncertified one as her substitute, and
- (5) her certificate as a midwife confers no rights on her under the Medical Acts or power to grant a death-certificate.

Under the Act, the Council of every County or County Borough in England and Wales become on April 1, 1903, the Local Supervising Authority over midwives practising within such area, with this proviso, however, that they may delegate their powers to the several District Councils within the Administrative County. I have advised strongly against this delegation of powers, and the following may be taken as some of the reasons against such delegation :—

- (a) Probable unequal efficiency in various parts of a County,

- (b) The payment by a County Council of the expenses of the District Councils,
- (c) The difficulty of fixing a limit to the expenses of the District Councils without any experience as to what should be the maximum cost,
- (d) The delegating Authority not being freed from legal responsibility,
- (e) The probability that the labour and expense of administering the Act efficiently through the District Councils would be greater than if carried out by the County Council,
- (f) The uncertainty, at the present time, of what amount of additional work may be placed upon Supervising Authorities by the Rules—yet to be framed—of the Central Midwives Board, and
- (g) Powers once delegated are difficult to recall.

At the meeting of the County Council on 15th January, 1903, it was, therefore, definitely resolved as follows :—

“That the County Council do not delegate their powers and duties under the Midwives Act, 1902, to the District Councils.”

The further action of the County Council will consequently be the subject of further report after the Act comes into operation on April 1, 1903.

The Public Health Committee have on more than one occasion had under their consideration the matter of the **Qualifications of Sanitary Inspectors**. It is obvious that, with the growth of public opinion in regard to the importance of taking well-founded measures for the promotion and preservation of the general health of a community,

the appointment of well-qualified officials should be secured in the best interests of the rate-payers. The creation of the office of Inspector of Nuisances by Act of Parliament was not with a view to provide employment for anyone but a competent person, and the time has certainly fully arrived to emphasise this point. At the meeting of the County Council on 15th January, 1903, it was, accordingly resolved

“That, in the opinion of this Council, it is most desirable
 “that, in all future appointments of Inspectors of Nuisances
 “by Borough and Urban and Rural District Councils, the
 “persons appointed should possess the qualifying certificates
 “of the Sanitary Institute, or such other body as may be
 “approved by the Local Government Board, and that this
 “resolution be communicated to the Local Government Board,
 “and to each Borough and District Council in this County.”

It is greatly to be hoped that the principle embodied in this resolution will receive confirmation by the Local Government Board in its veto or approval of future appointments, especially as contributions are made to the salaries of the Inspectors through the County Councils out of Exchequer Funds.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

There has been a marked improvement in the character of the majority of the reports sent in during the last five years, though some are still drawn up without apparent regard to the object of such reports, namely, the giving of “not only definite
 “general information, but record also of particular changes of
 “condition that are occurring incidentally or by action of the
 “local authority,” as requested by the Local Government Board. The improvement to which I have referred has certainly followed the issue of the Board’s Memorandum on the subject of such reports in December 1900.

The following table shows the dates on, and the form in, which the respective Annual Reports were received by me:—

NAME OF DISTRICT.	DATE OF RECEIPT.	FORM.
Brackley Rural	... January 13th, 1903 ...	Auto-copied.
Borough of Brackley	... ,, 15th ,, ...	Typed.
Daventry Rural	... ,, 17th ,, ...	MS.
Kettering Urban	... ,, 21st ,, ...	Printed.
Kettering Rural	... ,, 29th ,, ...	..
Finedon Urban	... ,, 29th ,, ...	..
Northampton Rural	... February 2nd ,, ...	..
Hardingstone Rural	... ,, 4th ,, ...	..
Thrapston Rural	... ,, 5th ,, ...	..
Borough of Higham Ferrers	... ,, 6th ,, ...	..
Raunds Urban	... ,, 10th ,, ...	..
Irthlingborough Urban	... ,, 11th ,, ...	..
Desborough Urban	... ,, 17th ,, ...	MS., Printed later.
Middleton Cheney Rural	... ,, 19th ,, ...	Typed.
Potterspury Rural	... ,, 19th ,, ...	Printed.
Oundle Rural	... ,, 24th ,, ...	..
Oxendon Rural	... ,, 25th ,, ...	..
Rothwell Urban	... ,, 25th ,, ...	..
Rushden Urban	... ,, 25th ,, ...	..
Wellingborough Rural	... ,, 25th ,, ...	..
Oundle Urban	... ,, 27th ,, ...	..
Crick Rural	... March 2nd ,, ...	MS., Printed later.
Wellingborough Urban	... ,, 6th ,, ...	Typed.
Easton-on-the-Hill Rural	... ,, 6th ,, ...	MS.
Brixworth Rural	... ,, 17th ,, ...	Printed.
Gretton Rural	... ,, 17th ,, ...	..
Borough of Daventry	... ,, 18th ,, ...	MS., Printed later.
Towcester Rural	... ,, 23rd ,, ...	MS., Printed later.

I cannot but again regret that there are still so many reports not printed for circulation and distribution within the districts to which they relate.

AREA AND POPULATION.

Now that the Report of the Census of England and Wales in 1901 has been issued, it is possible to give the most recent official figures in regard to both the Area and the Population of the Administrative County. After the date of the Census, an alteration took place in the area of the Wellingborough Rural District through the creation of the Irthlingborough Urban District, but this has been the subject of notes in the Census Report published in 1902, and the corrected figures have been given. There are now, as stated in my last report, twenty-eight Districts within the Administrative County of Northampton, of which 12 are Urban Districts and 16 are Rural Districts. According to the Census Returns, these Urban Districts have a total area of 40,032 acres, instead of 41,308 as given in my last report, and the Rural Districts have 541,647 acres, instead of 540,684, making together a total of **581,679** acres, instead of 581,992, for the Administrative County.

AREA IN ACRES OF URBAN DISTRICTS.

<i>Name of District.</i>	<i>No. of Acres.</i>	<i>Name of District.</i>	<i>No. of Acres.</i>
Borough of Brackley	3,489	Kettering	... 2,814
„ „ Daventry	3,633	Oundle	... 2,228
„ „ Higham		Raunds	... 4,460
„ „ Ferrers	1,945	Rothwell	... 3,638
Desborough	... 2,400	Rushden	... 3,777
Finedon	... 3,661	Wellingborough	... 4,265
Irthlingborough	... 3,722		

AREA IN ACRES OF RURAL DISTRICTS.

<i>Name of District.</i>	<i>No. of Acres.</i>	<i>Name of District.</i>	<i>No. of Acres.</i>
Brackley ...	42,440	Middleton Cheney	13,888
Brixworth ...	63,647	Northampton ...	16,228
Crick ...	18,547	Oundle ...	58,677
Daventry ...	60,877	Oxendon ...	34,491
Easton-on-the-Hill	6,341	Potterspury ...	19,914
Gretton ...	12,310	Thrapston ...	36,836
Hardingstone ...	32,542	Towcester ...	42,457
Kettering ...	49,337	Wellingborough ...	33,115

POPULATION.—The figures given in my last Annual Report as to the populations of the Administrative County, and the Districts contained in it, were taken from the Preliminary Report of the Census, 1901. These figures were very nearly correct, but not quite so, the total urban population being 3 more, and the total rural population 15 more, than was then given. For this reason it seems desirable to give now the final figures relating to the Administrative County. The present is also a favourable opportunity to make certain comparisons as to the increase or decrease of population in particular Districts, and as to the proportion of males and females therein. I have, therefore, compiled the following table from which it may be observed

1. That only 3 Urban Districts show no increase of population in the decade 1891—1901, namely, the Boroughs of Brackley and Daventry, and the Oundle Urban District,
2. That only 3 Rural Districts show an increase of population in the decade 1891—1901, namely, those of Kettering, Northampton, and Wellingborough,
3. That there is an excess of males in 6 Urban Districts out of 12, and in 8 out of 16 Rural Districts, but

4. That the total excess of females over males in the County amounts to 725, or 3·5 per 1,000 of the total population, and
5. That the average number of persons in each house varies from 3·8 in the Crick, Middleton Cheney, and Oxendon Rural Districts to 5·0 in the Kettering and Rushden Urban Districts, is 4·8 for the total Urban District population, 4·17 for the total Rural District population, and amounts to 4·4 for the total population of the Administrative County.

The following references to the subject of the populations in their respective Districts appear in the reports of the Medical Officers of Health :—

DESBOROUGH URBAN.—“At the taking of the Census in 1901, the population was 3,573. To the middle of 1902, I have estimated the population as 3,671.”

FINEDON URBAN.—“There are 860 inhabited houses and 48 uninhabited houses in the township, and I estimate the population at 4,214.”

IRTHLINGBOROUGH URBAN.—“I estimate the population at the end of the year at 4,612, but for statistical purposes it is usual to base calculations on the population at the middle of the year, and I estimate that it was at that time 4,526.”

KETTERING URBAN.—“You will remember that, at the census of 1901, the population of the town was 28,653; and, although the increase of the population has not been so rapid since that time as it was at one time, I shall be well within the mark at placing the population of Kettering at 29,000 in the middle of the year.”

RAUNDS URBAN.—“The estimated population, calculated in the usual way, is now 4,031, or an increase of 130 since the last census.”

Table showing the Population in the County at the Censuses 1891 and 1901, together with the Sexes and Inhabited Houses at the latter Census.

URBAN DISTRICTS.	1891.	1901.		Total 1901.	Increase or Decrease.	Excess of		Inhabited Houses.	Average No. of persons in each House.
		Male.	Female.			Males.	Females.		
Boro' of Brackley ...	2,591	1,196	1,271	2,467	—		75	548	4·5
„ „ Daventry ...	3,939	1,784	1,996	3,780	—		212	869	4·3
„ „ Higham Ferrers..	1,810	1,273	1,267	2,540	+	6		555	4·5
Desborough ...	2,872	1,788	1,785	3,573	+	3		748	4·7
Finedon ...	3,197	2,085	2,044	4,129	+	41		853	4·8
Irthlingborough ...	2,998	2,182	2,132	4,314	+	50		896	4·8
Kettering ...	19,454	14,123	14,530	28,653	+		407	5,659	5·0
Oundle ...	2,667	1,182	1,222	2,404	—		40	512	4·7
Raunds ...	3,055	1,965	1,846	3,811	+	119		832	4·5
Rothwell ...	3,378	2,079	2,114	4,193	+		35	902	4·6
Rushden ...	7,443	6,314	6,139	12,453	+	175		2,492	5·0
Wellingborough ...	15,068	9,067	9,345	18,412	+		278	3,873	4·7
Totals and Means	68,472	45,038	45,691	90,729	+	394	1,047 653	18,739	4·8
RURAL DISTRICTS.									
Brackley ...	7,779	3,574	3,608	7,182	—		34	1,818	3·9
Brixworth ...	12,247	5,857	5,972	11,829	—		115	2,876	4·1
Crick ...	2,427	1,086	1,198	2,284	—		112	601	3·8
Daventry ...	13,709	6,744	6,681	13,425	—	63		3,275	4·0
Easton-on-the-Hill ...	1,635	735	727	1,462	—	8		353	4·1
Gretton ...	1,701	778	785	1,563	—		7	372	4·2
Hardingstone ...	8,421	3,922	3,924	7,846	—		2	1,889	4·1
Kettering ...	10,561	5,882	5,792	11,674	+	90		2,623	4·4
Middleton Cheney ...	2,606	1,208	1,206	2,414	—	2		626	3·8
Northampton ...	6,363	3,232	3,188	6,420	+	44		1,290	4·2*
Oundle ...	7,919	3,422	3,437	6,859	—		15	1,727	3·9
Oxendon ...	4,734	2,031	2,171	4,202	—		140	1,084	3·8
Potterspury ...	5,930	2,733	2,639	5,372	—	94		1,282	4·1
Thrapston ...	10,457	5,258	5,090	10,348	—	168		2,453	4·2
Towcester ...	11,960	5,294	5,426	10,720	—		132	2,633	4·0
Wellingborough ...	12,297	6,586	6,570	13,156	+	16		3,033	4·3
Totals and Means	120,746	58,342	58,414	116,756	—	485	557 72	27,935	4·1*
Total for County	189,218	103,380	104,105	207,485	+		725	46,674	4·4*

* Berry Wood Asylum population excluded for purposes of this calculation.

RUSHDEN URBAN.—“The Rushden Urban District contains an estimated population of 12,961, as against last year when it was 12,585; being an increase of 376. The number of inhabited houses is 2,663, an increase of 88 from last year.”

WELLINGBOROUGH URBAN.—“The population of the town of Wellingborough at the last census was 18,412. The number of inhabited houses being 4,047, giving an average number of persons per house of 4.5. The number of inhabited houses now is 4,294, being an increase of 247 and giving a population at the same rate per house of 19,400.”

DAVENTRY RURAL.—“There is no reason to think that any change has taken place in the population of the District, and in the middle of the year I would estimate it to be 13,425.”

HARDINGSTONE RURAL.—“In estimating the population of the district for the year, I have assumed it to be stationary. I do not think the population is now decreasing in the villages so much as in the previous ten years, and some show slight signs of increase.”

KETTERING RURAL.—“At the census of 1901, the population of the District was 11,674; the increase in population has chiefly occurred in Burton Latimer, and was in the middle of the year probably about 12,000.”

NORTHAMPTON RURAL.—“In estimating the population for the year, I have assumed it to be stationary—the slight increase during the previous ten years was caused by extensive building operations in Duston; during the last year there have not been so many cottages built here, and I think my estimate is about correct.”

OUNDLE RURAL.—In reference to the birth-rate being considerably in excess of any year since 1894, “This certainly

“does not seem to point to any continued decrease in our Rural population. It is quite possible we may have come to the end of the depopulation of our villages, a fact which has attracted my attention of late, and the population may now begin slowly to increase.”

TOWCESTER RURAL.—“In the past year it is estimated that the Population of the District has diminished from 11,836 in 1892 to 10,608 in 1902, namely at the rate of 112 per annum, which is slightly lower than that which obtained in the decade ending 1901.”

BIRTHS.

For the purpose of proper comparison, the whole of the Birth and Mortality Rates have been revised for the past seven years by means of the census returns for 1891 and 1901. They refer, moreover, to the present area of the Administrative County, the Urban Districts of Far Cotton, St. James' (N'ton.), and Kingsthorpe, in so far as they became part of the County Borough of Northampton in 1900, being excluded. The latter remark applies also to the cases of infectious sickness, where comparisons are made with previous years. This revision has entailed a large amount of independent re-calculation of rates, but it was necessary if a true comparative statement were to be made. During the inter-censal period of 1891—1901 it was found that the population in many Districts had been over-estimated by the Medical Officers of Health, but there are now means for enabling them to check this tendency, especially in calculating their populations in connection with the number of inhabited houses in each year. It has, however, to be noted in reference to the Statistical Tables under discussion, that the figures for the Urban District of Raunds, which formed part of the Thrapston Rural District until towards the end of the year 1897, are included in those for the Combined Rural Districts for the years 1896 and 1897, and that the figures for the Urban District of Irthlingborough,

CHART SHEWING RATES OF BIRTHS AND CERTAIN MORTALITIES, &c.



[†] INCLUSIVE OF DEATHS FROM DISEASES NOT NOTIFIABLE

* THE NOTIFICATION OF INFECTIOUS DISEASES ONLY BECAME COMPULSORY IN ALL DISTRICTS ON JAN. 1 1900.

which formed part of the Wellingborough Rural District until towards the end of the year 1901, are similarly treated for the years 1896—1901. It has not been found possible to compile reliable statistics for years previous to 1896, owing to incomplete returns and changes in area of Districts, but the foundation is now laid for accurate future comparisons.

I have for the first time included a graphic chart illustrating the progress of events in regard to the Births and certain Mortalities for the County as a whole during the past seven years, based on the re-calculations referred to, and I think it will be useful in the demonstration of certain facts.

First and foremost, it will be seen that the Birth-rate of the Administrative County as a whole is a falling one, and as shown in the subsequent tables belonging to this Section of the Report it will be seen that this tendency is more marked among the Urban than the Rural Districts. During the year 1902, there were 5,453 births registered in the Administrative County; of these 2,601 were in the Combined Urban Districts, and 2,852 in the Combined Rural Districts.

The average birth-rate of the whole Administrative County per 1,000 of population, and of the Combined Urban and Rural Districts respectively, for the years 1896—1902, is shewn in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the 76 large towns in England and Wales, taken from the Registrar-General's Returns.

Areas.	1896	1897	1898	1899	1900	1901	1902
Administrative County ...	29·08	29·62	29·14	28·54	27·33	27·15	25·96
Urban Districts ...	33·12	33·73	33·0	32·15	30·62	30·38	27·88
Rural Districts ...	26·75	27·18	26·61	26·10	25·04	24·08	24·43
England & Wales.	29·7	29·6	29·4	29·2	28·9	28·5	28·6
* Large Towns in England & Wales.	30·7	30·7	30·3	30·2	29·4	29·2	30·0

* It is to be noted that the group of large towns numbers 76 for the year 1902, it consisted of 33 towns in preceding years.

The birth-rate varied in the Urban Districts from 12·0 per 1,000 of the population in the Oundle District to 36·7 per 1,000 in the Finedon District, while in the Rural Districts the variation was between 21·4 per 1,000 in the Oxendon District and 34·9 per 1,000 in the Oundle District. This is the sixth successive year in which the Oundle Urban District has shewn the lowest birth-rate of any District in the County, and this year the rate is lower than in any of the preceding five years with the exception of the year 1900. On the other hand, the birth-rate for the Oundle Rural District shows for the year 1902 a remarkable increase on the like rate for that District during any of the preceding five years, and for the first time heads the list of the Rural Districts in that respect.

Arranged in the order of their birth-rates the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Finedon	... 36·7	Desborough	... 27·5
Irthlingborough	... 34·9	Rothwell	... 27·2
Rushden	... 31·4	Wellingborough	... 22·5
Kettering	... 30·5	Higham Ferrers	
Raunds	... 28·5	Borough	... 22·0
Brackley Borough	27·5	Daventry Borough	18·5
		Oundle	... 12·0

The position of the Rural Districts in respect of their birth-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Oundle	... 34·9	Crick	... 24·1
Easton-on-the-Hill	30·7	Brixworth	... 22·9
Middleton Cheney	26·9	Brackley	... 22·5
Wellingborough	... 26·6	Gretton	... 22·5
Potterspury	... 26·0	Hardingstone	... 22·5
Northampton	... 25·6	Towcester	... 22·4
Kettering	... 25·2	Daventry	... 21·7
Thrapston	... 24·9	Oxendon	... 21·4

DEATHS.

General Mortality.—It will be seen from the accompanying chart that, though the fall in the general mortality-rate has not been as regular as has been the fall in the birth-rate, there has been an effective lowering of this rate in the Administrative County during the last few years. The rate is on the whole a low one, but it is in my opinion capable of further reduction : it is satisfactory to record it as below 13·0 per 1,000 of the population for the year 1902, while the average for the previous six years was about 15·0 per 1,000, and I hope that it may yet be reduced to 12·0 per 1,000.

The total number of deaths registered in the Administrative County during the year 1902 was 2,785; of these 1,129 occurred in the combined Urban Districts, and 1,656 in the combined Rural Districts. Included in the gross number of deaths for the combined Rural Districts, however, are the deaths which were recorded in the Berry Wood Asylum in the Northampton Rural District, and also those in the Infectious Diseases Hospital of the County Borough of Northampton which is situated in the Brixworth Rural District; of the former, 52, and of the latter, 11, were of persons not belonging to the Administrative County, and these have, therefore, been excluded in working out the nett mortality-rate for the Administrative County in the subjoined table.

Districts.	1896	1897	1898	1899	1900	1901	1902
Administrative County ...	15·02	16·13	15·11	15·13	14·96	13·05	12·96
England & Wales.	17·1	17·4	17·5	18·3	18·3	16·9	16·3
Large Towns in England & Wales.	18·9	19·0	19·0	20·2	19·5	18·6	17·4

On the subject of the general mortality of the several Districts of the County, the following are the most important

references to be found in the Annual Reports of the District Medical Officers of Health :—

DAVENTRY BOROUGH.—“Of the 22 deaths at the Work-
“house, 16 belonged to the Rural District, and the remaining
“6 to the Urban, the death-rate is therefore reckoned on 53
“(i.e. 47 + 6). The death-rate is 14·02 as compared with
“14·28 for 1901.”

HIGHAM FERRERS BOROUGH.—“The death-rate is
“exactly what it was for 1901, and much below the average
“of that for all the urban districts of the whole county. If
“you examine the statistical tables I have compiled, and
“which show the annual death-rate for the last ten years,
“you will find much to encourage you in your well-directed
“efforts to improve the sanitary condition of the town. The
“average death-rate for the first five years of that time is 15·4,
“while that for the last five years is only 11·2 per 1,000 of
“the population.”

DESBOROUGH URBAN.—“The total number of deaths
“registered was 34, viz., 16 males and 18 females. This is
“equivalent to a death-rate at all ages of 9·26 per 1,000
“living. The nett average number of deaths and the average
“death-rates for the years 1892—1901 were 43 and 14·3
“respectively. Thus it will be seen that the death-rate of 9·2
“for 1902 is an extraordinarily low one, and hence a matter
“for congratulation. It may perhaps be too much to expect
“that this standard will be maintained, but at any rate it is
“significant of what can be attained in this district; and there
“is little doubt that, if all measures for the benefit of the
“public health be carried out, a low death-rate will be the
“rule and not the exception.”

FINEDON URBAN.—“The number of deaths registered
“during the year was 48, giving a rate of 11·3 per thousand

“per annum. This is the lowest rate (with the exception of
 “the year 1900, when it was 10·5 per thousand per annum,)”
 “since the formation of the Council and must be considered
 “very satisfactory.”

KETTERING URBAN.—“I have again to record a very low
 “Death Rate. That of 1901 was the lowest ever recorded,
 “being only 11·02; this year it is very little higher, being
 “only 12·2.”

RAUNDS URBAN.—“The deaths from all causes and at
 “all ages numbered 48, exactly the same number as in 1901 ;
 “this gives a death-rate of 11·9, which I consider very favour-
 “able indeed, the death-rate last year being 12·3.”

WELLINGBOROUGH URBAN.—“The registered number
 “of Deaths during the year was 216 resident and 5 non-
 “resident, total 221, giving the lowest death-rate on record in
 “the Wellingborough Urban District, viz. 11·1. This is
 “highly satisfactory and a matter for congratulation, as, in
 “spite of a very decided increase in the population, the actual
 “number of deaths is considerably less, viz. in 1901, 232, in
 “1902, 216, and of these deaths 66 were in persons over 65
 “years of age, and 56 in children under one year, leaving
 “only 94 deaths to be attributed to the conditions prevailing
 “in the town.”

BRACKLEY RURAL.—“The death-rate during this period
 “has been 13·5 per 1,000 of the population, the number of
 “deaths registered being 97. This is below the average of
 “the six previous years, but, as I have had occasion to remark
 “before, too much importance must not be attached to these
 “figures as, the district being a small one, a few deaths
 “occurring at the beginning or end of any year considerably
 “alter the rates.”

BRIXWORTH RURAL.—“Total deaths registered in the District during 1902 were 177, of which 11 occurred in Northampton Borough Hospital, and were non-residents, therefore the nett deaths of our District were 166, as against 157 for 1901, showing an increase of 9 or 0·76 per 1,000. The natural increase of births over deaths during 1902 was 105.”

CRICK RURAL.—“The deaths numbered 33, and consisted of 15 males and 18 females, representing the comparatively low annual death-rate of 14·4 per 1,000. No deaths belonging to the district occurred in the Union Workhouse, or Hospital of St. Cross, Rugby, during the year.”

DAVENTRY RURAL.—“The number of deaths registered at all ages was 179; Males, 94, Females, 85. This gives a Death-rate of 13·3 per 1,000, which is slightly lower than in the previous year, and may certainly be considered as satisfactory.”

EASTON-ON-THE-HILL RURAL.—“The number of deaths registered as occurring in and belonging to the District was 28, equal to a death-rate of 19·1 per 1,000 of the population.”

GRETTON RURAL.—“I have re-estimated the Populations and Death Rates for each year since 1895, and I find that the average rate of mortality during that period was 14·9, a figure with which the rate for 1902 very favourably compares. It is, further, satisfactory to be able to report that, on the basis of accurately estimated populations, the Death Rate for 1902 is the lowest of which I possess a record.”

HARDINGSTONE RURAL.—“The total number of deaths at all ages was only 94, giving a death-rate of 11·9 per 1,000. In 1900, the number of deaths was 93, and these two years are considerably lower than any other of the preceding ten

“years. The average for the ten years is 116, and the highest number of deaths was 152 in 1897. There were no less than 22 deaths in persons over 80 years of age.”

MIDDLETON CHENEY RURAL.—“The deaths reported amount to thirty-seven, an increase of fourteen on the previous year, and giving a death-rate of 15·32 per 1,000. Two deaths were from Scarlet Fever, two Phthisis, three Cancer, three Pneumonia, one Pleurisy, seven Heart Disease, and nineteen from age and various other causes.”

NORTHAMPTON RURAL.—“The total number of deaths during the year was 186, giving a rate of 29·4 per 1,000. Of these deaths, however, 121 occurred in Berry Wood Asylum, so that, by deducting these as deaths of non-residents, there are only left 65 deaths of persons really resident in the district, with the small death-rate of 12 per 1,000. This is the smallest number of deaths during the last ten years, the next lowest being 71 in 1900, whilst in 1897 it was 98. The deaths in the Weston Favell district were exceedingly small (only 8), whilst in the Duston district they were 19, which is above the average, and in the Kislingbury district again they were 10 below the average of the last ten years.”

OXENDON RURAL.—“The total number of Deaths is above the average, which it exceeds by 10, thus giving a higher death-rate than usual, and exceeding that of any year during the previous seven recorded. The large number of Deaths in aged people apparently accounts for the increased Death Rate.”

The nett death-rate varied in the Urban Districts from 9·2 per 1,000 of the population in the Desborough District, to 14·0 per 1,000 in the Borough of Daventry. In the Rural Districts the variation in the death-rate was from 9·6 per 1,000 in the Gretton District, to 19·1 per 1,000 in the Easton-on-the-Hill District.

Arranged in order of their nett death-rates the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Desborough ...	9·2	Brackley Borough...	11·7
Higham Ferrers Borough ...	10·2	Kettering ...	11·8
Rushden ...	10·2	Rothwell ...	12·1
Wellingborough	11·1	Raunds ...	12·4
Finedon ...	11·3	Irthlingborough ...	13·2
Oundle ...	11·6	Daventry Borough...	14·0

The position of the Rural Districts in respect of their nett death-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Gretton ...	9·6	Oundle ...	13·8
Wellingborough ...	10·9	Brixworth ...	14·0
Hardingstone ...	11·9	Crick ...	14·4
Northampton ...	11·9	Potterspury ...	14·8
Kettering ...	12·0	Middleton Cheney ...	15·3
Towcester ...	13·0	Thrapston ...	15·8
Daventry ...	13·3	Oxendon ...	17·1
Brackley ...	13·5	Easton-on-the-Hill ...	19·1

Infantile Mortality.— The most striking diminution in mortality as illustrated by the chart is that relating to infants under one year of age. During each of the years 1896—1901 it is shown to have been always more than ten per cent. of the births—in one year as much as thirteen per cent.—; but in the year 1902 it amounted to less than ten per cent., and an uninterrupted fall in this mortality is shown after the year 1899. This is a very satisfactory state of things, and, in my opinion, is in great measure due to the increased efforts made in many districts to induce more care in the feeding and treatment of infants on the part of their parents.

It is greatly to be hoped that such efforts will be continued, and that the infant mortality in any district of the county may in a short time never exceed ten per cent. of the births.

The average infantile death-rate for the whole Administrative County per 1,000 births, and of the Combined Urban and Rural Districts respectively, for the years 1896—1902, is shewn in the following table, together with, for purposes of comparison, the corresponding rates for England and Wales, and for the large towns in England and Wales, taken from the Registrar-General's Returns :—

Districts.	1896	1897	1898	1899	1900	1901	1902
Administrative County ...	118	130	127	129	109	102	98
Urban Districts...	131	137	151	143	126	109	116
Rural Districts ...	108	125	107	118	95	96	80
England & Wales.	148	156	160	163	154	151	133
Large Towns in England & Wales.	168	176	178	181	172	168	145

It will be seen from this table that, though there has been a fair decrease in this mortality in the combined Urban Districts, the substantial fall recorded for the year 1901 has not been maintained, while the fall in the combined Rural Districts is a very considerable one. It is plain that efforts should be strongly directed in many of the Urban Districts to try and secure greater reductions in the infantile mortality.

The following are the most important references to this subject to be found in the Annual Reports of the District Medical Officers of Health :—

HIGHAM FERRERS BOROUGH.—“ I am glad to find that “the infantile death-rate is again a very low one, only 53·5 “per 1,000 births.”

DESBOROUGH URBAN.—“I have already congratulated
 “you upon the remarkably low death-rate, and now have
 “pleasure in again doing so with respect to the Infantile
 “Mortality, which stands at the exceptionally low figure of 49
 “deaths to 1,000 births registered, whereas the average for the
 “years 1892—1901 was 144. In 1901 there were 10 deaths
 “below the age of one year; in 1902 there were five. It
 “appears to me that a reasonable inference to be drawn from
 “a consideration of the foregoing figures is that a healthy and
 “rational opinion is being developed in regard to the feeding
 “and care of infants and young children. That this salutary
 “state of affairs may grow and flourish is devoutly to be
 “wished.”

FINEDON URBAN.—“The total number of deaths included
 “23 children who died before attaining the age of 1 year,
 “which gives an infantile death-rate of 148 per thousand
 “births registered. This is as usual a very high rate, and due
 “to the great prevalence amongst infants of Bronchitis and
 “Pneumonia during the last month of the year.”

IRTHLINGBOROUGH URBAN.—Referring to the mortality-
 rate of 132·9 per 1,000 births, “This is rather a high death-rate,
 “but considering the cold and late spring, and sunless
 “summer, and the prevalence of Whooping Cough and
 “Influenza throughout the whole year, this result need not be
 “wondered at. Diarrhœa, which generally figures amongst
 “the causes of Infantile Mortality, did not account for a single
 “death. This disease is very often due to errors of feeding
 “in children brought up by hand, and to putrefactive changes
 “set up in milk and other articles of food, owing to want of
 “cleanliness, especially during very hot weather.”

RAUNDS URBAN.—“The infantile mortality was higher
 “than last year, being 104·34 as against 59·32; this is rather
 “higher than any year since 1898, when it reached 130·4. Of

“the 12 children who died under 1 year old, no fewer than 9
 “were under the age of 3 months, and nearly all these deaths
 “were due to pulmonary affections—Bronchitis, Pneumonia,
 “and Whooping Cough. These affections, so deadly to infants,
 “were due to the very severe weather at the beginning and
 “end of the year.”

BRACKLEY RURAL.—“The infant death-rate is the
 “lowest I have recorded, 80·2 deaths to 1,000 births registered.”

CRICK RURAL.—“The deaths among infants under one
 “year of age represent a rate of infant mortality of 145 per
 “1,000 births. This is a high rate, but no significance attaches
 “to it, as it follows a very low average rate for the previous
 “three years, and there were no deaths among children over
 “one and under five years.”

DAVENTRY RURAL.—“The Infant Mortality under one
 “year was 82·1 per 1,000 Births; this is also lower than in
 “1901, and may be looked upon as satisfactory.”

HARDINGSTONE RURAL.—“The number of deaths in
 “children under one year of age was only 11, giving a rate
 “per 1,000 births registered of 62. This is the lowest number
 “of deaths during the last ten years, but if there are so many
 “less children born we must expect fewer deaths.”

NORTHAMPTON RURAL.—“The number of deaths in
 “children under one year of age was only 17, giving a ratio
 “per 1,000 births registered of 122. Last year there were 18
 “deaths in this class, and in the previous year 15; these three
 “years represent the smallest number of deaths during the
 “last ten years, whilst in 1895 there were 30 deaths in
 “children under one year.”

OXENDON RURAL.—“The Infant Mortality Rate is
 “again considerably below the average for the District.”

The infantile-mortality rate varied in the Urban Districts from 49·5 per 1,000 births in the Desborough District, to 148·3 per 1,000 births in the Finedon District. In the Rural Districts the variation in this mortality was from 46·1 per 1,000 births in the Middleton Cheney District, to 145·4 per 1,000 births in the Crick District.

Arranged in order of their infantile-mortality rates the Urban Districts stand thus :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Desborough	... 49·5	Rushden	... 122·8
Higham Ferrers Borough	... 53·5	Wellingborough	... 127·8
Oundle	... 68·9	Irthlingborough	... 132·9
Brackley Borough..	88·2	Rothwell	... 136·7
Raunds	... 104·3	Daventry Borough	142·8
Kettering	... 112·7	Finedon	... 148·3

The position of the Rural Districts in respect of their infantile-mortality rates is as follows :—

	<i>Per 1,000 Births.</i>		<i>Per 1,000 Births.</i>
Middleton Cheney	46·1	Brackley	... 80·2
Oundle	... 52·4	Daventry	... 82·1
Gretton	... 57·1	Brixworth	... 88·5
Wellingborough	... 61·7	Kettering	... 92·4
Hardingstone	... 62·1	Thrapston	... 108·9
Potterspury	... 65·2	Easton-on-the-Hill	111·1
Oxendon	... 66·6	Northampton	... 122·3
Towcester	... 79·8	Crick	... 145·4

Phthisis Mortality.—Although the continuous fall in the phthisis mortality which had taken place from the year 1899 was not maintained, it is still satisfactory to note that the rate for the year 1902 was ·07 per 1,000 of population less

than the average rate for the preceding six years. There has, therefore, been a sensible reduction in the mortality from phthisis during the period of seven years 1896—1902 as shown in the chart. This is a matter for congratulation, and I hope that every effort will be made in the several districts of the County to still further check the growth and spread of this disease by improved housing conditions and the advocacy of a healthy mode of living. The total number of deaths registered as due to phthisis in the Administrative County during the year 1902 was 214. Of these, 88 occurred in the combined Urban Districts, and 126 in the combined Rural Districts. Included in the latter number, however, are 15 deaths which occurred in Berry Wood Asylum, and these have been allowed for in estimating the true phthisis-mortality rate for the Northampton Rural District. Of the total deaths from phthisis 3·27 per cent. were of children under five years of age, as against 2·8 per cent. in 1901, 5·02 per cent. in 1900, 5·34 per cent. in 1899, 9·6 per cent. in 1898, 5·85 per cent. in 1897, and 8·15 per cent. in the year 1896.

The following table shows the number of deaths from phthisis and the rate per 1,000 of the population for the whole Administrative County for the seven years 1896—1902 :—

Area.	Phthisis.	1896	1897	1898	1899	1900	1901	1902
Administrative County.	No. of Deaths.	233	222	229	243	219	178	214
	Rate per 1,000...	1·17	1·10	1·13	1·19	1·06	0·85	1·01

In regard to the comments on the subject of this mortality, which are to be found in the Annual Reports of the District Medical Officers of Health, the following are the most important :—

HIGHAM FERRERS BOROUGH.—“ I am glad to have to record a low death-rate from phthisis. Only one death from

“this disease occurred during the year. This gives a death-
 “rate of $\cdot 39$ per 1,000, which is below the average. Possibly
 “the increase in building that has been going on in the town
 “for the last few years has had a good effect by lessening the
 “tendency to overcrowding, which is a fertile cause of
 “consumption, and providing dwellings possessing health
 “conditions superior to some of the older structures. For it
 “should be borne in mind that it is in healthy surroundings,
 “both in dwellings and workshops, that our best hope lies of
 “preventing the spread of this formidable disease.”

DESBOROUGH URBAN.—“The death-roll from Phthisis,
 “I regret to state, is exceedingly high, six deaths having been
 “registered as due to this disease, giving a death-rate of $1\cdot 67$
 “per 1,000.”

IRTHLINGBOROUGH URBAN.—“Phthisis or Consumption
 “of the Lungs caused 7 deaths, 5 between the ages of 15 and
 “25, and 2 between 25 and 65. This gives a death-rate from
 “this disease of $1\cdot 54$ per 1,000, compared with $\cdot 85$ for the
 “Administrative County, and 1 for the combined Urban
 “Districts. Other Tubercular diseases caused 6 deaths, and
 “of these 4 were under 1 year of age, 1 between 1 and 5, and
 “1 between 15 and 25. This gives a total of 13 deaths from
 “Tubercular diseases, and a rate of $2\cdot 8$ per 1,000. . . .
 “I would most strongly advise all those young people who
 “have a Tubercular family history to avoid if at all possible
 “factory work, and rather seek out-door employment of some
 “kind. If parents, or those in charge of boys who are not
 “over strong would think more of the establishment of their
 “health, and less of their wage earning capacity, and send
 “them to work, say, on a farm for a few years, I am sure
 “neither the one nor the other would ever regret it. Large
 “printed cards published by the Local Branch of the Associ-
 “ation for the Prevention of Consumption, and giving
 “directions how to deal with the spit of Consumptives, have

“been distributed in all the factories, workshops, and public
“places in the town.”

KETTERING URBAN.—“Notwithstanding all the efforts
“which have been made of late to reduce the mortality from
“Phthisis, there has been a larger number of deaths from
“that disease in this town than usual. I feel sure that no
“endeavour has been wanting on the part of the Veterinary
“Inspector as to the milk supplies, or on the part of the
“Sanitary Inspector as to disinfection, for I believe that every
“room in which a death has occurred from this disease has been
“disinfected, while Lectures have been given and instructions
“issued as to the latest knowledge of its prevention and
“treatment ; also the sanitary condition of the factories and
“workshops is greatly improved, so that probably the increase
“of mortality is due to accidental causes. The sunless and
“cold summer, too, may have been instrumental in preventing
“recoveries. The Board of Guardians of the Kettering Union
“have determined to do all in their power to combat Phthisis,
“and have already under their consideration plans for the
“erection of a building specially constructed, according to the
“latest knowledge on the subject, for the treatment of, and
“the prevention of, any infection from this disease. By this
“means, poor people who cannot afford special treatment will
“have the great advantage of modern treatment and isolation,
“and probably great good will result to cases in the earlier
“stages of the illness.”

RAUNDS URBAN.—“I am glad to be able to say that we
“have had only 1 death from consumption of the lungs, or
“Phthisis Pulmonalis. This is very satisfactory, and compares
“favourably with the last two years, when the numbers were
“4 and 16 respectively. The other 4 cases returned as ‘other
“tubercular diseases’ were 3 from Tabes Mesenterica or Con-
“sumption of the Bowels, and 1 General Tuberculosis : these
“were young children.”

WELLINGBOROUGH URBAN.—“The number of deaths from Phthisis is less than last year, viz., 16.”

GRETTON RURAL.—For two successive years, no “death from Consumption or other form of Tuberculosis” has been recorded.

KETTERING RURAL.—“The deaths from Phthisis were rather more numerous than in 1901, three of them occurred at Burton Latimer; the usual precautions were taken as to disinfection.”

The phthisis death-rate varied in the Urban Districts from 0·0 per 1,000 of the population in the Oundle District, to 1·63 per 1,000 of population in the Desborough District. In the Rural Districts, the variation in this mortality was from 0·0 per 1,000 of population in the Easton-on-the-Hill and Gretton Districts, to 1·69 per 1,000 of population in the Potterspury District.

Arranged in order of their Phthisis death-rates, the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Oundle	... 0·0	Finedon	... 0·71
Raunds	... 0·24	Wellingborough	... 0·82
Higham Ferrers Borough	... 0·39	Daventry Borough..	1·05
Brackley Borough..	0·4	Kettering	... 1·31
Rothwell	... 0·46	Irthlingborough	... 1·54
Rushden	... 0·69	Desborough	... 1·63

The position of the Rural Districts in respect of their Phthisis death-rates is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Easton-on-the-Hill..	0·0	Towcester	... 0·84
Gretton	... 0·0	Thrapston	... 0·87
Crick	... 0·43	Brixworth	... 1·01
Hardingstone	... 0·63	Oundle	... 1·06
Middleton Cheney..	0·82	Daventry	... 1·11
Wellingborough	... 0·82	Oxendon	... 1·42
Brackley	... 0·83	Northampton	... 1·65
Kettering	... 0·83	Potterspury	... 1·69

Respiratory Diseases Mortality.—A reference to the chart shows that the annual rises and falls of this mortality have been very variable during the past seven years, but, in spite of the treacherous summer months of 1902, the mortality for that year was ·13 per 1,000 of population less than the average for the six years 1896—1901. There were 415 deaths registered in the Administrative County during the year 1902; of these, 167 occurred in the combined Urban Districts and 248 in the combined Rural Districts. Included in the latter number are 8 deaths which occurred in Berry Wood Asylum, and these have been excluded in working out the Respiratory Diseases mortality-rate for the Northampton Rural District. Of the total deaths from bronchitis, pneumonia, and pleurisy, 164, or 39·51 per cent. were recorded as being children under five years of age; of these, 91, or 55·49 per cent. were in the Urban Districts, and 73, or 44·51 per cent. were in the Rural Districts.

The following table shows the number of deaths from the respiratory diseases and the rate per 1,000 of the population for the whole Administrative County for the seven years 1896—1902 :—

Area.	Respiratory Diseases.	1896	1897	1898	1899	1900	1901	1902
Administrative	No. of Deaths.	380	497	432	467	450	337	415
County.	Rate per 1,000.	1·91	2·48	2·13	2·29	2·18	1·62	1·97

The following references are taken from the Reports of the District Medical Officers of Health :—

HIGHAM FERRERS BOROUGH.—“There were 10 deaths “due to diseases of the respiratory organs, other than phthisis, “during the year which gives a death-rate of 3·9 per 1,000. “I think this high death-rate was, in some measure, caused “by the prevalence of influenza in the winter months. For “although there does not appear to have been any death “directly due to that malady, the effect of it upon the “individual is to lessen his resistance to this class of diseases.”

DESBOROUGH URBAN.—“There were four deaths from “pneumonia and three from bronchitis. Of these, four “occurred below the age of one year and three at the other “extreme of life, giving a respiratory death-rate of 1·94 per “1,000.”

FINEDON URBAN.—“There were 10 deaths from diseases “of the Respiratory Organs other than Phthisis, giving a rate “of 2·3 per thousand per annum. This is the largest rate I “have reported since the formation of the Council, and is due “to the unhealthy atmospheric conditions prevalent at the “end of the year.”

IRTHLINGBOROUGH URBAN. — “Respiratory Diseases, “which include Bronchitis, Pneumonia, and Pleurisy, caused “16 deaths, giving a death-rate of 3·5 per 1,000. . . . This “is a very high death-rate, but it can easily be accounted for “when we consider the very cold weather experienced during “the Spring and early Summer, with a prevalence of Easterly “and North Easterly winds. During the latter part of October “and the beginning of November, the town was visited by an “epidemic of what might very well be described as ‘Infectious “Bronchitis’ among young children, which caused several “deaths. During these few weeks a very large proportion of

“young children in the town were stricken with this disease
 “and when it entered a house it affected one after the other,
 “as a rule, all the younger members of the family.”

WELLINGBOROUGH URBAN.—“The deaths from Bron-
 “chitis and Pneumonia have much decreased, being 14 and
 “11 respectively as against 20 in each last year.”

The death-rate for Respiratory Diseases varied in the
 Urban Districts from 1·24 per 1,000 of population in the
 Oundle District, to 3·93 per 1,000 of population in the Borough
 of Higham Ferrers. In the Rural Districts, the variation in
 this mortality was from 0·43 per 1,000 of population in the
 Crick District, to 3·41 per 1,000 of population in the Easton-
 on-the-Hill District.

Arranged in order of their death-rates for Respiratory
 Diseases the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Oundle	... 1·24	Daventry Borough...	1·85
Wellingborough	1·28	Desborough	... 1·90
Rushden	... 1·54	Raunds	... 2·23
Rothwell	... 1·63	Brackley Borough...	2·83
Finedon	... 1·66	Irthlingborough	... 3·53
Kettering	... 1·68	Higham Ferrers Borough	... 3·93

The position of the Rural Districts in respect of their
 death-rates from Respiratory Diseases is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Crick	... 0·43	Northampton	... 2·02
Potterspury	... 1·50	Daventry	... 2·08
Middleton Cheney	1·65	Brixworth	... 2·11
Kettering	... 1·83	Wellingborough	... 2·39
Oundle	... 1·83	Gretton	... 2·58
Hardingstone	... 1·91	Oxendon	... 2·61
Brackley	... 1·94	Towcester	... 2·63
Thrapston	... 1·94	Easton-on-the-Hill	... 3·41

General Zymotic Mortality.—The steady, and nearly continuous, decline annually of the General Zymotic Mortality in the County during the past seven years is one of the most striking and satisfactory features of the mortality chart. But, as this mortality is inclusive of such non-notifiable diseases as Measles, Whooping Cough, and Diarrhœa, it has been necessary to further illustrate this decline in a comparison of the mortality-rate of notifiable diseases with the rate of notified sickness. The latter comparison can, however, only be made for a period of three years, since all the districts in the Administrative County had not adopted the Infectious Diseases Notification Act before the year 1900, when such notification became compulsory. Such as it is, however, it shows a slight continuous decline in the prevalence of the notifiable diseases,—due it is to be hoped to improving conditions of sanitation and a greater recognition of the value of isolation of the sick,—and a similar decline in the mortality resulting therefrom. This is one of the greatest causes for congratulation on the signs of public health improvement in the county, for the notifiable diseases are mainly those which are largely controllable by the action of local sanitary bodies, and should act as encouragement for further and more continuous efforts in the same direction.

The number of deaths registered as having occurred in the Administrative County from the zymotic diseases— inclusive of Measles, Whooping Cough, and Diarrhœa,—during the year 1902 was 162. Of these, 93 were in the combined Urban Districts and 69 were in the combined Rural Districts. Of the total deaths from the zymotic diseases, 111, or 68.51 per cent., were children under five years of age; of these 64, or 57.66 per cent. were in the Urban Districts, and 47, or 42.34 per cent. were in the Rural Districts.

The following table shows the number of deaths from the general zymotic diseases and the rate per 1,000 of the

population for the whole Administrative County for the seven years 1896—1902 :—

Area.	General Zymotic Diseases.	1896.	1897.	1898.	1899.	1900.	1901.	1902.
Administrative County.	No. of Deaths.	331	288	293	255	217	187	162
	Rate per 1,000.	1·66	1·43	1·45	1·25	1·05	0·90	0·77

The general zymotic death-rate varied in the Urban Districts from 0·40 per 1,000 of population in Brackley Borough, to 1·63 per 1,000 of population in the Desborough District. In the Rural Districts the variation in this mortality was from 0·0 per 1,000 of population in the Gretton District, to 1·40 per 1,000 of population in the Hardingstone District.

Arranged in order of their death-rates from Zymotic Diseases, the Urban Districts stand thus :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Brackley Borough	0·40	Kettering	... 0·96
Oundle	... 0·41	Raunds	... 0·99
Finedon	... 0·71	Irthlingborough...	1·10
Higham Ferrers		Rushden	... 1·15
Borough	... 0·78	Daventry Borough	1·58
Wellingborough...	0·92	Desborough	... 1·63
Rothwell	... 0·93		

The position of the Rural Districts in respect of their death-rates from Zymotic Diseases is as follows :—

	<i>Per 1,000 of Population.</i>		<i>Per 1,000 of Population.</i>
Gretton	... 0·0	Towcester	... 0·56
Kettering	... 0·25	Brixworth	... 0·67
Wellingborough...	0·37	Easton-on-the-Hill	0·68
Thrapston	... 0·38	Potterspury	... 0·75
Crick	... 0·43	Middleton Cheney	0·82
Daventry	... 0·44	Brackley	... 0·83
Oundle	... 0·45	Northampton	... 1·29
Oxendon	... 0·47	Hardingstone	... 1·40

SPECIAL ZYMOTIC DISEASES AND MORTALITY.

Small Pox.—The County did not unfortunately escape the consequences of the introduction of small-pox among unvaccinated communities. There were in all 28 cases of the disease during the year 1902, and they were distributed as follows :—in the Wellingborough Urban District, 9 cases with 4 deaths, in the Daventry Rural District, 1 case, in the Hardingstone Rural District, 17 cases with 2 deaths, and in the Oundle Rural District, 1 case. The mortality-rate from the disease for the Administrative County amounted to 21·42 per cent. of the cases. The extracts from the reports of the Medical Officers of Health for the Wellingborough Urban and Hardingstone Rural Districts are eloquent as to the risk to life in cases where small-pox is contracted by un-vaccinated persons, or by those who have not sought a renewal of protection in adult life by means of re-vaccination :—

WELLINGBOROUGH URBAN.—“ The only approach to an epidemic was in May, when there were nine cases of Small Pox, one of these was a tramp, and none of the subsequent cases could be attributed to infection from him. He was isolated in the Small Pox hospital and cured. After that a fresh case occurred of a virulent type, the source of which could not be positively ascertained. The other cases arose from contact and were for the most part of a severe type, the death-rate being 50 per cent. The persons attacked were all un-vaccinated except 3, and of the 4 deaths, 3 were in un-vaccinated persons, and the fourth in a man who had not been revaccinated and was 57 years old. All the cases were treated in the Small Pox hospital, having been moved as quickly as possible.”

BRACKLEY RURAL.—“ No further case of Small Pox occurred in consequence of the case imported at the end of the previous year, and, I think it may be justly said, no doubt owing to the prompt measures adopted.”

DAVENTRY RURAL.—“The single case of small-pox was reported early in May, but the case occurred inside Weedon Barracks and was not under our care. The Army Authorities isolated the case with the satisfactory result that no spread of the disease took place.”

HARDINGSTONE RURAL.—“On June 10th, a case of hæmorrhagic small-pox was reported at Wootton. The man had been visiting near London, close to the small-pox hospital ships, and must have there contracted the disease. I had him at once removed to the Small Pox Hospital with all the other occupants of the cottage, viz., his wife, his father, and his two sons. The man died during that night and I re-vaccinated the other members of the family, of these, the wife contracted the disease in the mildest possible form (I was only able to count about a dozen pustules altogether on various parts of her body), whilst the others escaped the disease entirely. Unfortunately in removing this case, the Sanitary Inspector, requiring more assistance, called in two men from the village who helped him to carry the man. All would still have been well I believe, but they obstinately refused to be vaccinated, and in a fortnight's time not only they, but also the boy who drove the Ambulance and had not touched the man, and many of their families, with some others, who had been in contact with these men on the same evening, all fell with the disease. Thus, by June 27th, we had sixteen cases of small-pox in the hospital and three suspected cases. After this, most of the people in the village were thoroughly roused and frightened, and submitted to be vaccinated, and only one more case occurred, a woman, whose son was attacked, and who had obstinately refused vaccination. After her removal the rest of her family were vaccinated and the disease was then stamped out. Besides the first fatal case one child also died in the Hospital, fortunately, the Infectious Hospital was empty when the outbreak

" occurred and we were obliged to use both the Small Pox
 " and Infectious Hospital and to engage the services of two
 " trained nurses. The hospital was not clear of these cases
 " till the middle of August, when it was kept empty and
 " purified by keeping windows and doors thoroughly open for
 " some weeks, it was then disinfected by formalin vapour,
 " the interior was entirely washed down with strong carbolic
 " lotion, and the walls and floors were varnished. The place
 " is now fit for use, but during the last three months no case
 " of infectious disease fit for removal has been notified.
 " During the continuance of this epidemic, by my advice one
 " of Dr. Thresh's Disinfectors was obtained : this has proved
 " of enormous value to us and has already repaid its cost, for
 " almost all the bedding and clothing from the cottages and
 " patients must have been destroyed and replaced had it not
 " been for this apparatus. It has already done an immense
 " amount of work, the bedding from the cottages, the patients'
 " clothes, and finally all the bedding and clothes in the
 " hospital have passed through this apparatus, and very great
 " credit is due to the caretaker and his wife for the time and
 " trouble they took over this matter which was a most arduous
 " undertaking. The disinfecter seems to me to work well
 " and to be most efficient. In consequence of this epidemic
 " the hospitals have almost entirely been used for small-pox,
 " only one case of scarlet-fever at the beginning of the year
 " having been treated there. I append a table of the small-
 " pox cases showing the age of each patient, the number of
 " vaccination marks, and the severity of the attack.

NAME.	AGE.	NUMBER OF MARKS.	SEVERITY OF ATTACK.
" W. Stanton	48	?	First case—fatal.
" A. Stanton	46	2 and re-vacc.	Very slight.
" E. Rose	73	0	Very severe.
" W. Chapman	22	4	Slight.
" F. Chapman	18	4	"

NAME.	AGE.	NUMBER OF MARKS.	SEVERITY OF ATTACK.
" M. Chapman	17	6	Slight.
" L. Chapman	12	2	"
" C. Fairbrother	19	2	Medium.
" A. Cox	17	4	Very slight.
" A. Chapman	9	4	"
" J. Chapman	5	0	Fatal case.
" M. Hodges	1½	0	Slight.
" A. Hodges	17	0	Very severe.
" W. Stanton	19	4	Very slight.
" M. Hodges	38	2	Slight.
" E. Whiting	23	4	"
" J. Stanton	50	0	Rather severe.

" Excepting the baby, this shows that with no vaccination
 " marks the attack was invariably a severe one, whilst in
 " those with 4 marks it was always slight. To this it must be
 " added that the man's own family, who were with him all the
 " time but were evidently re-vaccinated in time, escaped the
 " disease almost entirely, whilst those who simply removed
 " him, and would not be re-vaccinated, not only contracted
 " the disease themselves but were very instrumental in spread-
 " ing it."

OUNDLE RURAL.—" On April 5th, a case of Small-pox
 " was notified from Yarwell. I found the patient was a
 " French nurse, in the employment of a gentleman staying
 " with his family in the village. She had been vaccinated in
 " infancy ; and the case proved mild. We had no Isolation
 " Hospital to send her to, but, most fortunately, an empty
 " cottage was placed at our disposal situate quite outside the
 " village. In the course of 24 hours the cottage was thoroughly
 " cleaned, repaired, and furniture got in. I had the patient
 " removed there ; and got a French speaking nurse to attend
 " to her. Special thanks are due to your representative, Mr
 " Jelley, for the energy he displayed and the trouble he took,
 " and I am glad to say no further case occurred."

Scarlet Fever.—The prevalence of Scarlet-fever in the County during 1902 was slightly higher than in the year 1901, but still much below that in the year 1900, there having been 602 cases notified in 1902, as against 570 in 1901 and 816 in 1900. Of the 602 cases, 111 occurred in the Urban Districts and 491 in the Rural Districts. The total scarlet-fever prevalence was equal to a sickness-rate of 0·28 per cent. of the total estimated population of the County; in the combined Urban Districts the rate was 0·11 per cent., and in the combined Rural Districts the rate was 0·42 per cent. of the population. The total number of deaths from the disease in the County was 11, or 1·82 per cent. of the cases, as against 1·57 per cent. in the year 1901, and 1·96 per cent. in 1900. The continuance of the mild type of this disease, as shown in previous years, is exemplified by the fact that no death from it occurred in any of the Urban Districts during the year 1902.

The following references to the prevalence of this disease are to be found in the Reports of the District Medical Officers of Health :—

BRACKLEY BOROUGH.—“There were notified during “the year seven cases of scarlet-fever.”

HIGHAM FERRERS BOROUGH.—“The case of scarlet-
“fever fortunately occurred in a house where it was possible,
“by isolation and disinfection, to prevent the spread of the
“disease.”

FINEDON URBAN.—“Scarlet Fever fortunately did not
“spread to any extent, and it was not necessary at any time
“during the year to close any of the schools.”

KETTERING URBAN.—“Cases of Scarlet Fever have been
“notified during every month in the year but two; but the
“disease has never become epidemic, and has, no doubt, been

“ kept in check through the early removal of the cases to the
 “ Hospital, which has all through the year been able to afford
 “ sufficient accommodation. 24 cases have been notified, 21
 “ of which were admitted to Hospital, all of which were
 “ discharged cured.”

OUNCLE URBAN.—“ The source of the 2 cases of Scarlet
 “ Fever could not be traced. It is worthy of note that a case
 “ of Scarlet Fever had occurred 11 months previously in the
 “ same house as one of these cases.”

ROTHWELL URBAN.—“ There were a few cases of
 “ Scarlatina at the beginning and the end of the year, but,
 “ thanks to prompt measures being taken, this ailment did
 “ not spread.”

RUSHDEN URBAN.—The following brief statement only
 is made, “ Eighteen cases have been reported, with no death.”

WELLINGBOROUGH URBAN.—“ Of the 38 cases of Scarlet
 “ Fever, 7 were imported, 14 arose from direct infection, 5
 “ were in places where the drainage was unsatisfactory, which
 “ has since been remedied, and the remainder from no apparent
 “ cause, many of the cases being of a very mild character.”

BRACKLEY RURAL.—“ The disease has been epidemic in
 “ several of the villages, having been introduced, I have no
 “ doubt, from the neighbouring town of Banbury, where the
 “ disease has been epidemic for some time. All possible
 “ precautions have been taken to prevent the extension of the
 “ disease, but, owing to its very mild character, it has been
 “ more or less uncontrollable as many children have exposed
 “ themselves while suffering from it without knowledge of the
 “ fact.”

BRIXWORTH RURAL.—“ Isolated cases occurred at
 “ different times during the year in the villages of Moulton,

“Walgrave, Brixworth, Pitsford, Holdenby, Scaldwell,
 “Guilsborough, Ravensthorpe, East Haddon, Hannington, and
 “Brampton. In the majority of these cases they were con-
 “tracted outside our District. There were none of a serious
 “nature. The disease occurred in epidemic form in the
 “villages of Spratton and Boughton. The school at Spratton
 “was closed from February 17th to April 2nd, and that of
 “Boughton from October 1st to December 17th. Where the
 “cases were sent to an Isolation Hospital there was no further
 “spread of the disease; also, where two children in East
 “Haddon were isolated in a cottage under trained nurses, the
 “disease was checked. In cases where every precaution was
 “taken in the house, but no proper isolation, as above, was
 “practised, the disease often spread.”

CRICK RURAL.—There were only “four cases of Scarlet
 “Fever, which occurred in Kilsby.” All recovered.

DAVENTRY RURAL.—“Scarlet Fever occurred in 12
 “Parishes; 12 cases in Braunston, 10 in Woodford-cum-
 “Membris, 5 in Dodford, 4 in West Haddon, 3 in both
 “Newnham and Welton, 2 in Charwelton, Everdon, Weedon,
 “and Whilton, and single cases in both Watford and Winwick.
 “By far the larger number of these cases were notified to me
 “during September, October, November, and December; but
 “the mildness of the outbreaks is very certain, as no deaths
 “occurred among the 47 cases notified to me.”

EASTON-ON-THE-HILL RURAL.—“There were 5 cases of
 “Scarlet Fever, all occurring at Easton. Of these, 3 cases
 “were a continuation of the epidemic of 1901, while the
 “other 2 cases were clearly imported. All were removed to
 “the Stamford Infirmary.”

GRETTON RURAL.—“During the first week of June,
 “five cases of Scarlet Fever were notified in Harringworth.

“On visiting the village I found two unnotified cases. Both
 “were of a very mild type, and were unsuspected by the
 “parents. The remaining cases were notified during July.
 “The school had been closed prior to the onset of these
 “cases, and there was no evidence to show that it was
 “implicated in the spread of the disease.”

HARDINGSTONE RURAL.—“Twenty-eight cases of scarlet-
 “fever occurred, 10 in the Brafield district and 18 in the
 “Wootton district. The Brafield cases were reported from
 “Little Houghton and Brafield, and were the remains of the
 “epidemic that occurred at the end of 1901 in those villages.
 “The 18 other cases happened at Milton. At that time the
 “infectious hospital was quite occupied with cases of small-
 “pox, so it was impossible to isolate these cases and the
 “epidemic was allowed to burn itself out. Many complaints
 “reached me of the way in which parents allowed children
 “in the peeling stage to mix with the healthy, but it is
 “absolutely impossible in their small cottages to insist on
 “strict isolation and that every child shall be kept in a small
 “stuffy room for six or more weeks. If we could have
 “removed the first cases to the isolation hospital, I believe
 “there would not have been nearly so many cases, and this is
 “another proof of the great value of such a hospital. I may
 “also say that most of the parents expressed great sorrow
 “that their children could not be removed. This shows a
 “marked change of opinion during the last ten years, for,
 “when the hospital was first started, we had great difficulty
 “in persuading them to allow their children to be removed
 “to it.”

KETTERING RURAL.—“Scarlet Fever was present in the
 “following villages, but only eleven cases were notified :—
 “Burton Latimer, 7 cases, Pytchley, 2 cases, Cranford, 1 case,
 “Broughton, 1 case. Eight of these were removed to the
 “Hospital. This removal of the earliest cases appeared to be
 “the means of checking the spread of the disease.”

MIDDLETON CHENEY RURAL.—“Under the Notification
 “of Infectious Diseases Act, I have had reported to me sixty-
 “nine cases of Scarlet Fever of which forty-three occurred at
 “Middleton Cheney, twenty at Chipping Warden, and four at
 “Chalcombe. Two were also reported from Upper Boddington,
 “which were evidently the result of a case sent down from
 “Town that had been in an Isolation Hospital and discharged
 “as cured. The best that could be done under the circum-
 “stances as regards isolation and disinfection was carried out.
 “Schools were closed at Middleton and Chipping Warden.
 “No case of any other infectious disease was notified.”

NORTHAMPTON RURAL.—In regard to the epidemic of
 Scarlet Fever at Duston, when 23 cases were notified—12 from
 Duston and 11 from Berry Wood Asylum,—“Excepting this
 “epidemic, no other case of Scarlet Fever was reported from
 “any other village in the district during the year. The cases
 “were almost entirely among school children, and I think
 “must have had something to do with the bad smells
 “prevailing in the village, especially about the school
 “premises. On investigation it was found that some of the
 “new drains had been laid into the old sewers, and this
 “mistake has now been remedied. Fortunately the epidemic
 “was a mild one, and no deaths from this disease have been
 “reported. The schools in the village were kept closed for
 “several weeks till the epidemic was exhausted.”

OUNDLE RURAL.—“An outbreak of Scarlatina occurred
 “at Bulwick in August. The disease, which appears to have
 “been imported from Barrowden, was confined to two
 “families at the Laxton end of the village, and was of the
 “usual mild type now prevalent.” “Scarlatina was prevalent
 “in Nassington throughout most of the year,” and a few cases
 seen at Kings’ Cliffe were said to have been imported.

POTTERS PURY RURAL.—“Seven cases of Scarlet-fever
 “were notified—all apparently of the usual mild type, un-
 “attended by mortality, and generally spread by unrecognised
 “cases imported into the district. They do not call for any
 “special comment.”

THRAPSTON RURAL.—“The health of Thrapston appears
 “to have been very good. Four mild cases of Scarlatina
 “were seen in the town last Spring, which were promptly
 “isolated. There was no spread of the disease.” “In March
 “a case of Scarlatina was reported from the Schoolmasters’
 “house at Chelveston. As the house is really part of the
 “school buildings it was found necessary to close the school.
 “There was no spread of the disease.” “A few cases of
 “Scarlet Fever were seen at Stanwick which were really the
 “conclusion of the epidemic of the previous year. For some
 “time past the village has been free from Infectious Disease.”
 At Woodford, “A few cases of Scarlatina were seen in the
 “summer, but the disease never spread to any extent.”

TOWCESTER RURAL.—With reference to the thirty cases
 of Scarlet Fever occurring in ten parishes of the District,
 “These were, I believe, all mild cases with the exception of
 “one in the parish of Towcester, which was of a malignant
 “type.”

WELLINGBOROUGH RURAL.—“Forty-two cases of Scarlet
 “Fever have been reported—5 in the Earls Barton district, 12 in
 “the Finedon, and 25 in the Higham Ferrers districts, with
 “two deaths.” “In November an outbreak of Scarlet-fever
 “occurred at Irchester, which necessitated the Infants School
 “being closed for a month.”

Diphtheria and Membranous Croup.—I am
 very pleased to be able to record a fall in the total number of
 cases of Diphtheria and Membranous Croup, as compared
 with the numbers for several preceding years, but, none the

less, the year was characterised by more than one undue prevalence of the disease in certain parts of the County. There were 105 cases of Diphtheria and Membranous Croup in the County during the year 1902, with 20 deaths, as against 122 cases with 39 deaths in 1901, 172 cases with 38 deaths in 1900, 119 cases with 28 deaths in 1899, 125 cases with 39 deaths in 1898, 99 cases with 27 deaths in 1897, and 101 cases with 21 deaths in 1896. In the combined Urban Districts during 1902, there were 39 cases with 8 deaths, while in the combined Rural Districts there were 66 cases with 12 deaths. These mortalities give a death-rate of 20·51 per cent. of the cases in the Urban Districts, of 18·18 per cent. in the Rural Districts, and of 19·04 per cent. in the Administrative County.

Although the spread of Diphtheria is most usual through the intermingling of the sick with the healthy, I cannot but again urge that those potent agencies for the development of the disease, to be found in the insanitary conditions of dwellings, should continue to receive the best attention of all concerned.

The following are the principal references in the Annual Reports of the District Medical Officers of Health in regard to this disease-prevalence :—

DESBOROUGH URBAN.—“ It is with regret I have to
 “ record the recurrence of diphtheria and membranous croup
 “ in the district, three cases of the former and one of the latter
 “ having been notified. These cases occurred at wide intervals
 “ during the year, and had no common source of origin. In
 “ every instance prompt precautionary measures, such as
 “ disinfection, keeping children from school, and the flushing
 “ of drains, were taken to prevent the disease spreading.
 “ Special inspections of the premises were made and attention
 “ directed to the milk supply, but nothing of a conclusive
 “ character was discovered to account for these cases. In

“company with your Inspector, I visited the Board Schools,
 “where everything was found satisfactory, with the exception
 “of the lavatory basins, which were untrapped. This defect
 “was brought to the notice of the proper authorities, and was
 “at once remedied.”

KETTERING URBAN.—“No less than 21 cases of Diph-
 “theria have been notified during 1902. This is a great
 “increase on our record for many years past. Sore throats
 “were very prevalent during the autumn, and later on
 “diphtheria appeared. Careful enquiries were made, and
 “records taken of the usual sources of this disease, but no
 “common cause could be found, and there was very little
 “evidence of infection from one case to another. Seven of
 “the cases were removed to the Hospital, three of which
 “proved fatal, but two of these three were in a dying condition
 “when admitted; one of the remaining cases was fatal. . . .
 “One case was imported in Rockingham Road, and two cases
 “which occurred in the same house were supposed to be
 “caused by a sick cat. It was thought by many that the
 “emanations from the town sewers were the cause of the
 “earlier cases of sore throat, and certainly there was cause
 “for complaint, particularly in two or three localities.
 “Probably before another summer we shall find it necessary
 “to make additional ventilations to the sewers, in the places
 “where there was most cause of complaint.”

OUNDLE URBAN.—“The case of Diphtheria was imported
 “from South Wales.”

RUSHDEN URBAN.—The simple statement, with regard
 to this disease, is made that “Four cases have been reported,
 “with 1 death.”

BRIXWORTH RURAL.—“25 cases were notified; seven
 “were isolated cases. Two occurred in Moulton, one in
 “January traceable to a large manure heap which was

“against the gable end of a house, and drained under the
“floor. The nuisance was reported and abated. The other
“in July, traceable to an uncovered ashpit, close to the back
“door, which contained decomposing vegetable matter. The
“nuisance was reported and abated. One case in Walgrave,
“due to pigstye in yard being in bad repair and in a dirty
“condition. It was reported and put in proper repair, so
“that it could be kept clean. One case in Brixworth,
“traceable to return gas from w.c. I recommended that
“ventilating shafts should be put in, and the suggestion was
“carried out. The remainder of the cases occurred, in
“epidemic form, in Pitsford and Spratton. Of these, Pitsford
“accounts for seven cases. Three of these cases occurred in
“one yard, the first case appeared in a house against which a
“large heap of uncovered ashes and decomposing vegetable
“matter lay. Also the common w.c.’s were improperly venti-
“lated, and the drains were not properly trapped from the
“main sewer. I recommended that covered-in ashpits be
“built, that ventilating shafts be put in w.c.’s, and that a
“man-hole with disconnecting chamber be placed between
“yard drains and main sewer. These suggestions were
“carried out. The first four cases occurred in January, 1902,
“and no fresh cases in the village proper have since been
“reported. The remaining three cases occurred at the Tollgate
“house—a small isolated place in a most insanitary condition.
“The water supply is bad, the drains are bad, and there is no
“ashpit. I recommended that a fresh water supply be found,
“and that the drains be put in order. This has not been done,
“but I see that the house is closed—I trust for ever as far as
“human habitation goes. Of the Spratton epidemic I have
“already reported to you, but a synopsis of my Report may not
“be out of place here. Up to the end of the year fourteen
“cases occurred, with four deaths. The first case was treated
“at home, and occurred a month before any of the other cases
“notified. This case, before coming under medical observa-
“tion, had attended the Infant School. The bulk of the

“epidemic no doubt was contracted at the School, as all the
 “Scholars that were attacked attended the Infant School, and
 “most of them were affected within a week of each other.
 “How the first case originated I am not sure. These were
 “possible causes :—1.—The patient’s near relatives lived 100
 “yards from the Tollgate, Pitsford, where virulent Diphtheria
 “existed the previous month. Infection might have been
 “carried by the relatives, though this possibility was stoutly
 “denied by both parties, who said that they had not visited
 “each other for months. 2.—There were large uncovered ash
 “heaps, with decomposing vegetable matter, close to the
 “house. 3.—The patient had been playing about the carcase
 “of a decomposing sheep, and the escaping gas might have
 “been a possible source of infection. Methods used in
 “dealing with the outbreak were :—1.—Schools and Factory
 “closed for disinfection. 2.—Partial isolation in cottages, with
 “wholesale injection of anti-toxin as a preventative measure
 “to those about the case. 3.—Isolation at Borough Fever
 “Hospital. 4.—Isolation at Cottage Hospital in the village,
 “with trained nurses. In no house where all children were
 “injected with anti-toxin has a second case occurred. I
 “think it is worth recording the fact that in nearly every
 “case of fresh origin in the District during the last fifteen
 “months, there has existed either a damp heap of ashes with
 “decomposing vegetable matter mixed up in it, or a heap of
 “decomposing manure.”

CRICK RURAL.—There were “six cases of Diphtheria
 “and diphtheritic sore-throat, which occurred in Crick.” All
 recovered.

DAVENTRY RURAL.—“Diphtheria occurred in 5 of the
 “27 Parishes ; 3 cases in Preston Capes, and single cases in
 “Braunston, Staverton, Stowe-nine-Churches, and West
 “Haddon. The case in Stowe-nine-Churches died.”

HARDINGSTONE RURAL.—“ Only one case of diphtheria
 “ was reported during the year. It was unfortunately speedily
 “ fatal, and occurred at a farm-house; the little boy had spent
 “ his holidays in Northampton, and on the second day after his
 “ return was taken ill, dying in two days. There can be no
 “ doubt, therefore, that the disease must have been contracted
 “ in the town.”

KETTERING RURAL.—“ Only three cases of Diphtheria
 “ were notified, all of which recovered.”

NORTHAMPTON RURAL.—“ Two cases of Diphtheria
 “ were reported, and unfortunately both proved fatal. The
 “ first occurred in a group of three cottages at Duston, where
 “ Diphtheria broke out in a previous year. I considered that
 “ it must be due to defective drainage, as the drains and drain
 “ openings were very near the cottages, and I advised that the
 “ drains should be diverted. The second case happened at
 “ Kislingbury, in a group of cottages near the river. I could
 “ find no explanation for it, the drainage was good, the closets
 “ were a long way from the cottages, and they all drank the
 “ same water. The disease did not spread, and no one in this
 “ group of houses caught the infection, though another child
 “ was living in the same cottage.”

OUNDLE RURAL.—“ Three cases of Diphtheria were seen
 “ at Cotterstock; . . . The germs of the disease were intro-
 “ duced several years ago, and never seem to have been
 “ completely eradicated. I strongly advise all inhabitants to
 “ have skilled advice in all cases of slight sore throat. There
 “ are many slight cases of Diphtheria, which escape notice
 “ but still have the power of giving the disease in a severe
 “ form to susceptible persons.”

POTTERS PURY RURAL.—“ Four cases were notified;
 “ three at Ashton in continuation of the outbreak in 1901,
 “ when six cases were reported. Like Scarlet-fever, Diphtheria

“appears to arise independently of sanitation, and to be
 “mainly spread by personal agency. The other case was at
 “Old Stratford, but careful enquiries failed to detect the
 “cause.”

THRAPSTON RURAL.—“Nearly ten years ago Brigstock
 “suffered from an epidemic of Diphtheria of unusual magni-
 “tude and severity, which naturally makes the inhabitants
 “most anxious when threatened with any return. When,
 “therefore, it was reported last August that several cases had
 “appeared in different parts of the village, the Parish Council
 “with the assistance of other inhabitants determined that
 “every effort should be made to check the disease. I have
 “already reported at length upon the matter; it will not,
 “therefore, be necessary to go into the details a second time.
 “By the kindness of Mr. Beeby, a building was placed at
 “your disposal which made an excellent Isolation Hospital.
 “All the patients were removed to the Hospital, and their
 “homes disinfected. There was no difficulty experienced in
 “getting the consent of parents to the removal of their
 “children, who all recovered. The two fatal cases which
 “occurred took place before the Hospital could be got ready.
 “The success of the scheme was in fact complete, and is one
 “of the best instances I know of the value of isolation.”
 The number of cases notified was 7, but there seems to have
 been a considerable prevalence of sore-throats in the village
 during the months of May, June, and July.

WELLINGBOROUGH RURAL.—“Two cases have been
 “notified, both being in the Earls Barton district, with no
 “death.”

Enteric Fever.—It is most pleasing to be able to
 report that this most preventible of all zymotic diseases was,
 in spite of epidemics of it at Desborough and Finedon, less
 prevalent during the year 1902 than in any one of the pre-
 ceding six years. In the year 1902, the number of cases

of Enteric Fever notified in the Administrative County was 121, as against 276 cases in 1901, 144 cases in 1900, 287 cases in 1899, 226 cases in 1898, 143 cases in 1897, and 303 cases in 1896. The cases during 1902 numbered 90 in the combined Urban Districts, and 31 in the combined Rural Districts. The total number of deaths from the disease was 11, giving a death-rate of 9·09 per cent. of the total cases. The number of deaths in the combined Urban Districts was 8, or 8·88 per cent. of the total Urban cases, and in the combined Rural Districts there were 3 deaths, or 9·67 per cent. of the total Rural cases.

The following are the references to the prevalence of this disease in the Reports of the District Medical Officers of Health :—

BRACKLEY BOROUGH.—“The case of enteric-fever was “due to defective sanitary conditions in the home of the “patient, which defects were remedied without delay.”

DESBOROUGH URBAN.—“There were 18 cases of enteric- “fever notified during the year, namely, in April one case, “June one, July four, August ten, and September two. A “special report was presented to the Council regarding the “occurrence of these cases, at least half of which were clearly “traced to the drinking of water from a shallow well liable to “pollution. This fact, in my opinion, affords a striking “object lesson in regard to the penalties attaching to the “continued use of the old shallow wells for drinking “purposes. Fortunately this practice is fast disappearing, as “the advantages of a pure water-supply are becoming more “widely appreciated.”

FINEDON URBAN.—“The Public Health was very good “during the first half of the past year. In August, however, “we had another of those regrettable outbreaks of Typhoid “Fever, which our imperfect water supply makes us at all

“times liable to. I presented a Special Report to you on the
 “outbreak in August last. There were 37 cases in the August
 “outbreak, and one case, an isolated one, in May, making a
 “total during the year of 38 cases. In October of the previous
 “year we had an outbreak of the same disease, consisting of
 “14 cases. In practically all the cases the disease was water-
 “borne, the wells having been either directly contaminated
 “by the house or pump drains, or some more distant source
 “of pollution. When we get the new water supply laid on
 “Enteric Fever should be an unknown disease amongst us.
 “In all the cases the use of the water for domestic purposes
 “was stopped. Mr. Paget, the County Medical Officer of
 “Health, made an inspection of the infected area with me and
 “agreed with me as to the cause of the outbreak.”

IRTHLINGBOROUGH URBAN.—“The Typhoid cases”—
 two—“occurred in the beginning of January, and were
 “really the tail-end of the Epidemic that commenced in the
 “late Autumn of 1901, and which was no doubt due, as I
 “stated in my brief report of last year, to the importation of
 “a case from a neighbouring town.”

KETTERING URBAN.—“Only eight cases of Typhoid
 “Fever occurred during 1902, exactly the same number as in
 “1901. Every one of these cases was removed to Hospital.
 “Six recovered, one died, and one remains under treatment.
 “Again no common cause could be found to connect these
 “cases together. . . The cause of one case was probably
 “swallowing filthy water whilst bathing; one case from over-
 “crowding, and one was imported. The following is the
 “record of notifications of Typhoid Fever since 1890 :—

“1890 ... 49	1894 ... 38	1898 ... 17	1902 ... 8
“1891 ... 21	1895 ... 25	1899 ... 26	
“1892 ... 25	1896 ... 23	1900 ... 9	
“1893 ... 111	1897 ... 11	1901 ... 8	

“A very satisfactory diminution indeed.”

OUNDLE URBAN.—“There has been no Enteric Fever.”

RUSHDEN URBAN.—There appear to have been thirteen cases, with two deaths; but no particulars are given as to their possible origin.

WELLINGBOROUGH URBAN.—“There were only 7 cases of Typhoid Fever, and of these two appeared to have arisen from eating shell fish, 1 from insanitary condition of drains, which have been remedied, 2 were imported, and in the rest there was nothing to indicate the source of infection.”

BRACKLEY RURAL.—“No deaths have occurred from Enteric Fever, and only one case of this disease has been notified, and this was imported into the district.”

BRIXWORTH RURAL.—“East Haddon District.—An isolated case at a farm house. Had been staying at Raunds a fortnight previous, where Enteric was epidemic, so that we may treat it as imported. Old.—Isolated case, caused by insanitary condition of sink and drains in yard. Recommended new drains to be laid down in cement, and connected with sewer. Sink to be moved outside house and properly trapped. These suggestions were carried out. Pitsford.—Isolated case; pigstyes built up against wall of house. Recommended new pigstyes to be built at a distance of 30 yards from house, and that they be properly drained. This has been done. Brixworth.—Isolated case, probably due to sewage gas escaping from w.c. In this block of houses I have since had all drains well ventilated with shafts.”

DAVENTRY RURAL.—“Enteric Fever occurred in only two Parishes; 3 cases in Long Buckby, and 1 in West Haddon. None of the cases ended fatally; this is most satisfactory, and is a great improvement on former years.”

HARDINGSTONE RURAL.—“Of the four cases of enteric fever, one arose at Roade : it was a very mild, perhaps doubtful, case, was admitted into the Northampton Infirmary, and no cause for it could be discovered. The second case occurred at Milton in a man who worked all the week away from home, returning only on Saturday night till Monday morning. As there were no other cases in this village, the probability is that he contracted the disease at his work : he also was admitted into the Northampton Infirmary and unfortunately died from hæmorrhage. The remaining two cases occurred in a brother and sister at Denton, and the sister unfortunately died. Their parents lived in a row of cottages in which a case of enteric fever had occurred in the previous year, so I cannot but think that the disease must in some way have arisen from the water supply. There is a pump in front of the cottages, but the water is not fit for drinking, they use it, however, for washing purposes and for washing vegetables, etc. I have had the pump padlocked, and no other cases have been reported.”

KETTERING RURAL.—“Only one case of Typhoid Fever occurred during the year, which was admitted to the Hospital from Burton Latimer, and recovered.”

NORTHAMPTON RURAL.—“The only other cases of Infectious disease notified were two cases of Enteric Fever ; one in a man aged between 40 and 50 at Weston Favell. This man worked in the town and took most of his meals there, so, as there was no sign of any other case in the village, I think he must have contracted the disease elsewhere. The man was seriously ill for some time, but eventually recovered.” “Although no other cases of Enteric Fever broke out in this district, a rather serious, though happily small, epidemic of Enteric Fever broke out in Northampton, and was traced to contaminated milk from a dairy at Upton. The man who lived at the farm and

“superintended the dairy contracted Enteric Fever from
 “eating contaminated oysters, and, on comparing dates, it
 “became evident that some infected material on a certain day
 “must have infected the milk before the disease was recog-
 “nised. The cases all broke out within a few days of each
 “other; they were very severe, and there were several deaths.
 “The sale of milk from this dairy was at once stopped, and
 “the proprietor has now relinquished dairy farming. The
 “farm yard was in a very bad state from large accumulations
 “of manure.”

OUNDLE RURAL.—“The health of Kings’ Cliffe appears
 “to have been fairly good. A case of Enteric Fever reported
 “was in all probability contracted out of the district.”

OXENDON RURAL.—“The case of Enteric was a severe
 “and fatal one, occurring in the Brampton Parish, and appar-
 “ently contracted at Braybrooke, where the water supply was
 “found to be defective; every precaution was taken in dealing
 “with the excreta, and in the details of sanitary management.”

POTTERS PURY RURAL.—“One case was reported, at
 “Yardley Gobion, and was contracted at Northampton from,
 “it is alleged, contaminated milk supply.”

WELLINGBOROUGH RURAL.—“Nine cases were reported
 “in the Earls Barton district, with no death.” No particulars
 are given as to their possible origin.

Puerperal Fever.—Eight cases of this disease were notified in the Administrative County during the year 1902, with 3 deaths, as against four cases with no deaths in 1901, and 13 cases with 7 deaths in the year 1900. The distribution of the cases and mortality was as follows:—Kettering Urban District 4 cases with 2 deaths, Wellingborough Urban District 1 case, Crick Rural District 1 case, Hardingstone Rural District 1 case with 1 death, and Towcester Rural District 1 case.

The Medical Officer of Health for the Hardington Rural District says :—“One fatal case of puerperal-fever was reported at Denton. No cause as regards the sanitary arrangements of the house could be found—it was a lone farmhouse some distance from the village—the nurse was strictly warned to disinfect herself before attending other cases, and her clothes as well as the bedding, &c., were carefully disinfected in the new disinfectant.”

Erysipelas.—There were 187 cases of erysipelas notified in the Administrative County during the year 1902, with 6 deaths, as against 146 cases, with 5 deaths, in 1901, and 165 cases, with 4 deaths, in the year 1900. The cases and deaths were distributed as follows :—in the combined Urban Districts there were 94 cases with three deaths, and in the combined Rural Districts 93 cases with three deaths, the figures for the combined Urban and Rural Districts respectively being thus almost identical. The percentage case-mortality for the combined Urban Districts was 3·19, as against 7·57 in 1901, and 5·79 in 1900, while in the combined Rural Districts, where there was no mortality in 1900 and 1901, the percentage case-mortality was 3·22. In the Administrative County the mortality was 3·2 per cent. of the cases.

Measles.—This disease proved fatal in two Urban and six Rural Districts in the County, there being 10 deaths in the Urban and 9 in the Rural Districts. There were, therefore, 19 deaths in eight districts, as against 32 deaths in sixteen districts in the year 1901. The disease is not notifiable, so that there is no knowledge of the actual number of cases that occurred. The mortality was distributed among the Kettering and Wellingborough Urban Districts and the Brackley, Brixworth, Northampton, Oundle, Oxendon, and Potterspury Rural Districts.

The following are the chief references as to the prevalence of this disease in the Annual Reports of the Medical Officers of Health :—

IRTHLINGBOROUGH URBAN.—“Only 2 cases of measles occurred to my knowledge during the year. Both were carefully isolated and fortunately no extension took place.”

KETTERING URBAN.—“Although Measles have been prevalent, particularly during the latter months of the year, only eight deaths have been recorded. As the holidays were so near it was not thought desirable to close any of the schools.”

OUNDLE URBAN.—“Owing to an extensive but mild outbreak of Measles the British School was closed for three weeks in March.”

ROTHWELL URBAN.—“During November and December we had one of the most pronounced and extensive epidemics of Measles which we have had for some years. Fortunately, it was of a very mild type without any fatal cases.”

BRIXWORTH RURAL.—“Measles have been prevalent in epidemic form in Pitsford and East Haddon. The Schools were closed for some weeks in these villages.”

CRICK RURAL.—“Measles became somewhat prevalent in Crick in April, and I gave a certificate to close the schools for a time, but none of the cases proved fatal.”

DAVENTRY RURAL.—“Outbreaks of Measles occurred during February in Flore, during May in Braunston, during October in Watford, and during November in Long Buckby; these were not serious, as no case proved fatal.”

KETTERING RURAL.—“The schools at Cottingham were closed for a fortnight on account of an outbreak of Measles.”

OUNDLE RURAL.—“There was an extensive epidemic of Measles at Glaphorn at the end of the year. The Schools had to be closed for six weeks.”

Whooping Cough.—There was a very much larger prevalence of whooping-cough in the County during the year 1902 than in the year preceding. There were indeed 64 deaths from this disease, as against 29 in the year 1901, and 46 in the year 1900. Six of the deaths in 1902 occurred above the age of five years, as against none in 1901 and two in 1900. These deaths during 1902 were distributed as follows:—there were 46 in the combined Urban Districts, in the Boroughs of Daventry and Higham Ferrers, in Desborough, Irthlingborough, Kettering, Raunds, Rushden, and Wellingborough, and 18 occurred among the Rural Districts of Crick, Daventry, Hardingstone, Kettering, Northampton, Oundle, Potterspury, Thrapston, Towcester, and Wellingborough. The prevalence of the disease in the County was, therefore, very general.

The following particulars may be gathered from the Reports of the District Medical Officers of Health:—

DAVENTRY BOROUGH.—“In April this disease began at Drayton where it spread rapidly, and soon extended to the rest of the town. The epidemic was a very severe one and occasioned 5 deaths; it reached its height in July and August, and was still so prevalent at the beginning of September that the Abbey and British Schools were upon my recommendation kept closed until the middle of the month. From this time the disease gradually declined, but solitary cases were to be met with until nearly the close of the year.”

HIGHAM FERRERS BOROUGH.—“Whooping-cough was very prevalent in the town in the early part of the year and caused two deaths.”

DESBOROUGH URBAN.—“Whooping-cough was extensively prevalent during the third quarter of the year, and was responsible for two of the deaths registered. In all the

“cases that came under observation the necessity of having
 “the sufferers from the disease kept from coming in contact
 “with other children was impressed upon the parents
 “concerned, but unfortunately in some instances the advice
 “tendered was not acted upon. It cannot be too widely
 “known that whooping-cough is a disease to be dreaded not
 “only on account of the immediate distressing symptoms, but
 “also by reason of the many and diverse complications which
 “are apt to be excited during its course.”

IRTHLINGBOROUGH URBAN.—“Whooping Cough which
 “was prevalent, although never to any great extent, throughout
 “the whole year caused 4 deaths, viz.:—2 under 1 year of
 “age, and 2 between 1 and 5 years, Bronchitis, or Broncho-
 “Pneumonia being in all cases the secondary cause of death.
 “Uncomplicated Whooping Cough is rarely fatal, but if
 “children while suffering from it are allowed to go out,
 “during wet or cold weather, Bronchitis or Pneumonia is
 “very apt to supervene and it is from one or other of these
 “causes that death so often results.”

RAUNDS URBAN.—“Whooping Cough was very prevalent
 “during the year, and was the cause of two deaths, due to
 “complications.”

RUSHDEN URBAN.—“Whooping Cough, not notified,
 “has caused 11 deaths—7 under 1 year, 4 under 5 years.”

CRICK RURAL.—“The single death attributed to Whooping
 “Cough occurred in Kilsby, where there was a limited out-
 “break of the disease in May; but this was the only death
 “recorded as due to any of the seven principal zymotic
 “diseases, and represents the low Zymotic death-rate of 0·43
 “per 1,000 of the population.”

DAVENTRY RURAL.—“Outbreaks of Whooping-cough
 “occurred during October in Norton and Everdon, during
 “November in Farthingstone and Long Buckby, and during

“December in Weedon. Two cases proved fatal, one in Farthingstone and one in Weedon.”

KETTERING RURAL.—“Only two deaths occurred from Whooping Cough, one at Newton, one at Pytchley.”

WELLINGBOROUGH RURAL.—“Whooping Cough has caused two deaths, both being in the Earls Barton district.”

Chicken Pox.—One case of this disease was reported during the year as having occurred in the Gretton Rural District.

Diarrhœa —There were 22 deaths from this disease in the Administrative County during the year 1902, as against 50 in 1901, 52 in 1900, 102 in 1899, 87 in 1898, 77 in 1897, and 47 in 1896. The small number of deaths during the year 1902, as compared with previous years, may I think be largely attributed to the unusual coolness of the summer and autumn months. Of the deaths which occurred during 1902, 17 or 77·27 per cent. were of infants under five years of age. The larger number of deaths occurred in the combined Urban Districts, there being 12, as against 10 in the combined Rural Districts. Of the deaths over five years of age, 2 were in the Urban Districts and 3 in the Rural Districts. The Urban Districts which had no deaths from Diarrhœa were the Boroughs of Daventry and Higham Ferrers, and Desborough, Finedon, Irthlingborough, and Raunds, while the Rural Districts which were likewise situated were Brixworth, Crick, Gretton, Hardingstone, Kettering, Middleton Cheney, Oundle, Oxendon, Thrapston, and Wellingborough.

Influenza.—There was a very considerable prevalence of Influenza in many parts of the County during the year 1902. The mortality, too, was somewhat heavy. There were 34 deaths in fifteen districts of the County, as compared with 12 deaths in the year 1901. The disease was more fatal in the Rural than in the Urban Districts, there being mortality in

ten out of sixteen of the former, as against only five out of twelve of the latter. The mortality among children under five years of age amounted to 5, or 14·7 per cent. of the total deaths from this disease.

The following references to the subject are to be found in the Reports of the District Medical Officers of Health :—

DAVENTRY BOROUGH.—“I have this year included “epidemic influenza amongst zymotic diseases. It has “occasioned five deaths.”

DESBOROUGH URBAN.—“During the months of October “and November, influenza was very prevalent,—though a few “cases were met with in all the other months of the year,— “and was marked by severe sore-throats, and, in children, “swollen glands about the neck. Frequently cases of influenza “were found to glide into sub-acute rheumatism, of a very “stubborn character to yield to treatment. However, it is “pleasing to record that no death resulted from this malady.”

FINEDON URBAN.—“Influenza was epidemic during the “latter part of November and December.”

IRTHLINGBOROUGH URBAN.—“Influenza, like Whooping “Cough, was prevalent to a greater or lesser extent throughout “the whole year, except during December, which month was “exceptionally free from diseases of all kinds. This disease “caused 4 deaths, viz. :—2 under 1 year of age, 1 between 1 “and 5 years of age, 1 between 25 and 65 years of age, “pneumonia being in all cases the secondary cause of death. “During the first fortnight in November the disease was “epidemic, but the type was not of such a severe nature as it “has been in previous years, and there were certainly fewer “cases of Lung complications.”

RAUNDS URBAN.—“We have also had a serious outbreak “of influenza, which has been the cause of a great deal of “suffering, although no deaths occurred from it.”

GRETTON RURAL.—“A death from Influenza occurred
“in Gretton in the month of February.”

ISOLATION HOSPITALS AND DISINFECTION.

I have already reported at length on the part which I took during the year in forwarding questions of Isolation Hospital accommodation in different parts of the County; but additional information as to the extent to which the want of such accommodation has been under consideration is obtainable from the following extracts from the Reports of the District Medical Officers of Health. I am glad, however, to be able to specially note that, in spite of the falling through of the provisional agreement entered into between the Urban and Rural Districts of Oundle for the suggested hospital to serve the two Districts, referred to in my last report, the Rural District Council have decided to act independently and fulfil their obligations to their community.

BRACKLEY BOROUGH.—“The question of providing an
“Isolation Hospital for the town has been seriously considered
“by the Council, and, as the result of many meetings of the
“committee and exhaustive discussions of the subject, a
“definite scheme is now before you which I trust you will
“finally adopt. Your committee recently had a meeting
“with similar committees from the Brackley Rural and the
“Middleton Cheney Rural Councils with a view to the con-
“sideration of the question of a joint hospital, but your
“Council decided that it would not be to the advantage of
“this district to join with the other Authorities.”

DAVENTRY BOROUGH.—“No case of Small Pox, Scarlet
“Fever, Measles or Diphtheria has occurred during the year,
“so that there has been no occasion to open the Sanatorium.
“Nothing further, however, has been done to increase the
“accommodation there.”

DESBOROUGH URBAN.—“In view of the existence of
“Small-pox in the county, and the possibility of its occurrence

“in this district, the question of dealing with such an outbreak
 “was brought before your Sanitary Committee, who decided
 “upon certain arrangements, which were regarded by your
 “Officers as wholly inadequate for the purpose. I would,
 “therefore, again respectfully bring this matter to your serious
 “attention. No doubt the matter of expense in dealing
 “effectually with the question of an isolation hospital for
 “small-pox is a serious one, having regard to the heavy
 “financial burdens already operating.”

FINEDON URBAN.—“I should like to remind the members
 “of the Council that we are still without the means of isolating
 “any case of small-pox that might occur, and that the disease
 “is as near to us as Thrapston. Most of the surrounding
 “townships have made some provision for such cases, and so
 “ought we.”

IRTHLINGBOROUGH URBAN.—“In spite of the terrible
 “epidemic of this disease in London in the early part of the
 “year, no actual provision was made here for the isolation of
 “such cases. I repeatedly suggested that provision of some
 “kind should be made, and obtained and laid before the
 “Council various plans, specifications, and estimates of
 “hospitals. . . . As Small Pox is at the present time an
 “exceedingly prevalent disease, I would again advise the
 “Council to reconsider the question of making adequate
 “arrangements for the isolation of Small Pox cases.”

KETTERING URBAN.—“A large proportion of the cases
 “of Infectious Diseases notified have been removed to the
 “Joint Isolation Hospitals, which appear to have been
 “instrumental in curtailing the spread of these illnesses in
 “both districts, and the accommodation has been such that
 “no case was refused admission.” “We have been most
 “fortunate with regard to Small Pox, no case has occurred in
 “this district during the past year, although we have had

“three narrow escapes. Your officers have suffered consider-
 “able and constant anxiety in this matter, and I believe have
 “taken every precaution possible. The Tramp Wards at the
 “Workhouse have received a great deal of unusual attention.
 “. . . The Joint Hospitals Board have caused to be erected
 “on a suitable piece of land a temporary building capable of
 “accommodating several cases of both sexes, with arrangements
 “for enlargement if necessary. This building has been kept
 “aired and quite ready for the reception of the earliest cases,
 “and a caretaker and his wife, having both been revaccinated,
 “have held themselves in readiness to go and take charge of
 “the building at any moment. The older ambulance waggon
 “has been repaired, and removed to this building, and no
 “delay whatever would take place in the removal of any case
 “which might occur. Arrangements have also been made as
 “to the disposal of any persons coming in contact with the
 “earliest cases.”

OUNDLE URBAN.—“The question of an Isolation Hospital
 “is still in abeyance.” The following statement is, however,
 made in reference to the risk of the introduction of Small
 Pox by tramps, “I mentioned in my last Annual Report that
 “a Hospital Tent had been purchased and erected at Wakerley
 “Cottage.”

WELLINGBOROUGH URBAN.—“Disinfection has been
 “carried out thoroughly and efficiently by the Sanitary
 “Inspector. The Formalin process, Sulphur, and Solution of
 “Chloride of Lime being the means used.” “The Isolation
 “Hospital proved to be of the greatest benefit in the epidemic
 “of Small-Pox in the month of May, and, if another site
 “more isolated can be selected for a Small-Pox hospital, it
 “would be a great benefit to the town to retain the present
 “Isolation Hospital as one for Infectious diseases. During
 “the year 4 cases of Scarlet Fever were admitted, the only
 “deaths occurring there being 4 from Small-Pox.”

BRACKLEY RURAL.—“The question of an Isolation Hospital for Infectious Diseases still remains unsettled, and has occupied your attention during the year.”

BRIXWORTH RURAL.—“As in my Annual Report last year, I must point out to you the utter hopelessness of so-called Cottage Isolation. Where there is often only one living room, and a large family, Contagious and Infectious Disease must spread, anyway when the invalid is convalescent and able to go downstairs; for it is at that period that the doctor's order to keep separate from the family is most often disobeyed. If isolation were to be thoroughly carried out in the District, it would be much better to have your own Isolation Hospital; then it would be possible to prevent much of the Notifiable Disease which each Annual Report of your Medical Officer discloses. Disinfection is done by Formalin Gas Fumigation.”

CRICK RURAL.—“The agreement between the Rugby Urban, Rugby Rural, Monks Kirby, and Crick Rural Districts, to which I referred in my last annual report, has resulted, after some difficulties concerning site, in the erection of a sixteen-bed hospital block and cottage some three miles from Rugby, which are nearing completion.” This has reference to the erection of a Small Pox Hospital; with regard to progress in the matter of a hospital for other Infectious Diseases, the following statement is made:—“With regard to the Rugby Urban, and the Rugby Rural, Monks Kirby and Crick Rural Districts, it may be said that while they have agreed on terms, there is disagreement as to site, and I see no way out of the difficulty, until either the order issued by the Warwickshire County Council a few years ago is amended, or a new order is issued instead.”

KETTERING RURAL.—“The joint Hospital for Infectious Diseases appears to have been the means of arresting the spread of disease. No case has been declined admission.”

“The following is a record of the year’s admissions:—From
 “Burton Latimer, 7 cases of Scarlet Fever, 1 case of Typhoid
 “Fever; from Cranford, 1 case of Scarlet Fever. Eight of
 “these cases were discharged cured, one Scarlet Fever case
 “from Burton Latimer, which was complicated with Bronchitis,
 “died.”

NORTHAMPTON RURAL.—Referring to the freedom from
 cases of Small Pox, “I regret that your Council has at present
 “no hospital in which to isolate such cases should they occur,
 “but several schemes for obtaining a site for such a building
 “have been before you and have had to be abandoned, mostly
 “because of the very great objections raised by neighbours to
 “the erection of such a building.”

OUNDLERURAL.—“Owing to the prevalence of Small
 “Pox in London during the winter 1901—1902, I drew your
 “attention to the need of providing means of isolation, should
 “a case be brought into your District. The matter was the
 “subject of most careful consideration. As a result I am
 “glad to say that a site for the erection of an Isolation Hospital
 “has been procured on the Oundle and Stoke road; and the
 “sanction of the Local Government Board obtained to enable
 “you to borrow money for the purchase of the land and the
 “erection of suitable buildings.”

OXENDON RURAL.—“During the year the question of an
 “Isolation Hospital was before the Council, firstly, with a
 “view for the provision of accommodation for Small-pox,
 “and, secondly, a scheme was suggested to join the Market
 “Harborough Urban Council and the Guardians on behalf of
 “the Workhouse. A scheme was drawn out, plans submitted,
 “and the consent of the other two Bodies obtained, which
 “was for the isolation of Infectious Diseases other than Small
 “Pox, the general expense to be shared in proportion to the
 “number of beds allotted. Unfortunately, when the matter

“seemed in a position to be settled, it was rejected by a
 “majority of one vote, mainly because Small-pox Isolation
 “was not included in the scheme. It would seem that this
 “provision would have adequately provided for the require-
 “ment of the District, and at a small and reasonable cost. I
 “would earnestly recommend the Council to re-consider the
 “matter.”

POTTERS PURY RURAL. — “Small Pox hospital.—This
 “subject has been again before the District Council owing to
 “the letter from the Local Government Board of the 25th
 “September last. In accordance with the suggestion contained
 “therein, namely, to combine with other districts where there
 “is a difficulty in obtaining a site, negotiations were opened
 “with the neighbouring districts of Towcester, Hardingstone,
 “and Newport Pagnell, but they have declined co-operation.
 “Under these circumstances I submit that the responsibility
 “for providing a Small Pox hospital rests with the County
 “Council, who are empowered by the Isolation Hospitals Act
 “of 1893 to provide, or cause to be provided, hospitals for
 “combined districts or the county at large. A Small Pox
 “hospital may serve a larger area than an hospital for other
 “infectious diseases, as Small Pox patients commonly bear
 “removal long distances well, and their removal is readily
 “consented to.” I have brought these statements before the
 Public Health Committee, and the matter is now under con-
 sideration ; but it is necessary to point out emphatically that
 the Isolation Hospitals Act of 1893 does not in any way relieve
 District Councils from responsibility for seeing to the isolation
 of their infectious sick.

THRAPSTON RURAL.—“Last year I drew attention to
 “the epidemic of Small Pox then prevalent in London, and
 “advised that proper precautions should be taken for dealing
 “with any case which might arise. An acre of land, situated
 “on high ground off the Huntingdon road, about a quarter of

“a mile from the nearest house in Thrapston, was hired from
 “Mr. Preece, and arrangements were made to erect tents
 “should any case occur. Happily we did not have a case,
 “but, as some of the other districts in the County were not so
 “fortunate, the danger cannot be called imaginary. The
 “question of purchasing a disinfecting apparatus was again
 “considered, but it was decided not to do so. I think it
 “would be found judicious expenditure, as clothes and bedding
 “have now occasionally to be burnt, and the cost made good
 “to the owners. The erection of an Isolation Hospital, and
 “the purchase of a Disinfector are both safe to come in time
 “in every district, and surely there is little to be gained by
 “postponement.”

TOWCESTER RURAL.—“I am pleased to be able to
 “report that no case of Small Pox occurred in the District
 “during the year, and also to be able to congratulate the
 “Council on the provision of Hospital Tents, with complete
 “equipment, ready for dealing with cases of Infectious
 “Disease requiring Isolation should the necessity arise.”

WELLINGBOROUGH RURAL.—“A site for an Isolation
 “Hospital for the district has been selected, and if the water
 “supply proves satisfactory will be concluded.”

VACCINATION.

It is satisfactory to know that one of the effects of the
 prevalence of Small Pox in the country, and its occasional
 appearance in this County, has been to counteract in a small
 measure the influence of the teachings of anti-vaccinators.
 It is to be hoped that the resort which is had to vaccination
 and re-vaccination in times of panic will in time become
 habitual during periods when danger from infection does not
 threaten. But I am by no means hopeful of change in this
 direction so long as the teaching of the need of vaccination
 and re-vaccination lies within the province of one Authority,

and the direction of the operation remains in the hands of another Authority. It is high time, in my opinion, and has been for many years, that the administration of public vaccination should be taken out of the hands of Boards of Guardians altogether, and I greatly hope that, when the Vaccination Act is again under consideration by Parliament, it will be amended in this respect.

The following brief references from the Reports of the District Medical Officers of Health are happily evidence of some increase of vaccination in this County during the year:—

DESBOROUGH URBAN.—“It is gratifying to observe the
“unmistakable indications of vaccination not being in such
“great disfavour as was the case a few years ago, when
“Primary Vaccination was altogether at a standstill. Very
“probably the occurrence of small-pox in the country has
“been the means in some cases of stimulating the public to
“avail themselves of this the only safeguard against that
“dreaded disease; but it is much to be desired that seeking
“for this protection will not be left until the enemy is within
“our gates, and when, perhaps, it may be found that the
“remedy has been sought too late. There were during the
“year 62 primary vaccinations and 19 re-vaccinations.”

FINEDON URBAN.—“I am glad to be able to report that
“vaccination and re-vaccination have become somewhat more
“general in the township.”

IRTHLINGBOROUGH URBAN.—“As I stated in my brief
“report last year, it has been clearly proved that the best and
“most certain safeguard against Small Pox is Vaccination and
“Re-vaccination, recently and well done.”

OUNDLE URBAN.—“A number of the inhabitants were
“re-vaccinated, thus lessening our chance of an epidemic.”

KETTERING RURAL.—“A considerable number of
“persons have been vaccinated and re-vaccinated.”

OUNCLE RURAL.—“ I am glad to learn that a large number of re-vaccinations have been done during the year. I believe about 25 % of the population between the ages of 10 and 65 years were re-vaccinated.”

TOWCESTER RURAL.—“ In the Towcester Sub-District, during the year, 90 children have been successfully vaccinated, 6 died un-vaccinated, 5 left the District un-vaccinated, 1 case vaccination was postponed, 35 cases of “conscientious objection” were raised, whilst 9 cases remained unaccounted for. In the Abthorpe Sub-District, for the half-year ending 30th June last, 14 children were successfully vaccinated, 1 removed from the District un-vaccinated, 1 case vaccination was postponed, and 6 cases of “conscientious objection” were raised. The returns for the Abthorpe District being incomplete as yet, I am unable to give full statistics for the year.”

WELLINGBOROUGH RURAL. — “ Vaccination has been more efficiently carried out than formerly.”

WATER SUPPLY.

I am glad to be able to record that considerable progress was made during the year 1902 in pushing forward in several districts with much needed schemes for public water supply. The most notable scheme of all is undoubtedly that promoted by the Borough of Higham Ferrers and the Rushden Urban District, and hardly less important is the one for the Finedon Urban District, which has so frequently suffered from outbreaks of Enteric Fever due to the consumption of water from local contaminated shallow wells. I wish that I could record as much progress in respect of the Raunds Urban District, which is just as much in need of a good supply as the Finedon District, but I hope to be able to report more favourably next year. The Borough of Daventry has embarked on a scheme for enlarging its public supply of water, and

this promises to be a successful one. It is hardly possible to impress on any one too strongly the importance to the public health of there being always available for a community an abundant and wholesome supply of water, and I sincerely trust that, in those districts where there is still a need of such provision, the most earnest efforts will be made without delay to supply it.

The following detailed references to the subject of water supply in particular districts are taken from the Reports of the Medical Officers of Health :—

BRACKLEY BOROUGH.—“Water is derived from a deep well, it is pumped into reservoirs from which it is supplied by gravitation through the mains. The well, pumping works, and reservoirs are situated at the highest point, outside the town, and there is no danger of pollution at the source. The water is very free from organic matter, but contains a rather large quantity of saline substances. The supply is constant.”

DAVENTRY BOROUGH.—“In my report for 1901, I stated that there is reason to believe that the water found at Dodford will prove a satisfactory supply for the town. At the time of writing this report I am happy to say the scheme has received the sanction of the Local Government Board, so that we ought in the near future to see the work commencing.”

HIGHAM FERRERS BOROUGH.—“Since making my last annual report you have obtained the sanction of Parliament, in conjunction with Rushden, to secure a public water supply from Sywell. And now that all preliminary matters are arranged, and the work actually begun, it is hoped that this important undertaking may be brought to a successful conclusion as soon as possible.”

DESBOROUGH URBAN.—“There are now 590 houses
 “supplied with the town water, leaving 221 deriving water
 “for drinking purposes from shallow wells. Unfortunately
 “the present source of supply not having quite realised the
 “expectations originally formed of it, the Council consulted
 “an expert, Mr. Beeby Thompson, who advised that experi-
 “mental borings should be made in land near the Pipewell-
 “road. This advice is now being acted upon, and so far the
 “indications appear to point to success in that quarter.”

FINEDON URBAN.—“I am also glad to be able to report
 “that at last there are signs of progress being made with the
 “new water scheme.”

IRTHLINGBOROUGH URBAN.—“Scarcity of water was
 “complained of during the Summer and Autumn in most of
 “the streets leading off Victoria Street as well as in certain
 “other parts of the town, and the chief source of supply,
 “although a never failing one, is the Top Well Trough, which
 “is still liable to many sources of pollution. Negotiations
 “were completed early in the year between the Council and
 “Mr. J. Spencer for the lease of an acre or more of land with
 “the option of purchase of the whole field containing about
 “9 acres, on which it is proposed to erect water-works. A
 “scheme has been prepared by Mr. John Waugh, Engineer,
 “of Bradford, and sanctioned by the Council at an estimated
 “cost of £10,252. Plans and Specifications have been sent
 “to the Local Government Board, and the Council is now
 “awaiting an inquiry by an Inspector of the Local Govern-
 “ment Board.” This inquiry was held on 13th February,
 1903.

KETTERING URBAN.—“The water supply has been
 “sufficient and the quality excellent, but owing to the very
 “dry seasons, and the larger quantity consumed, the present
 “sources are now drawn upon to their full capacity. That a

“further supply would be required at no distant date was
 “foreseen by the Council, and an Act of Parliament was
 “obtained in 1900, conferring powers for constructing two
 “additional Reservoirs, with the necessary mains and other
 “works. Negotiations for the purchase of the land for the
 “first of these Reservoirs are in progress, and it is intended
 “to commence the progress of the works as soon as possible.
 “A new Filter Bed has been constructed at the existing works
 “at Cransley, for the better filtration of the present supply.”
 It also appears from the report of the Inspector of Nuisances
 that “Forty samples of water were taken for testing, resulting
 “in six Wells being cleansed, and two houses being supplied
 “with Councils’ water.”

OUNDLE URBAN.—“The supply is excellent in quantity
 “and quality, the latter being proved by periodical analysis.”

RAUNDS URBAN.—“There is no change for the better
 “since my Report of last year upon this subject, and, therefore,
 “leaving out the first paragraph, I reproduce and reiterate
 “what I then said upon this subject.”

ROTHWELL URBAN.—“Allow me to congratulate the
 “Urban Council on the completion of our splendid Water-
 “works, the general scheme of which reflects credit on all
 “concerned.”

RUSHDEN URBAN.—“There has been a short supply of
 “water owing to the new scheme not being yet completed.”
 “Six samples of water have been submitted to analysis, four
 “of which were found to be good, two being condemned as
 “unfit for domestic use.”

WELLINGBOROUGH URBAN.—“The water supply is from
 “public service, and increased in quantity from an extra
 “source. In nature it is well water, containing Lime and
 “Iron, quite wholesome, free from pollution, being pumped

“from the wells, softened, filtered and stored in closed, “locked reservoirs.”

BRACKLEY RURAL.—“The water supply,” derived from shallow wells, “has been of good quality, as shewn by the “sickness and mortality tables, but towards the end of the “year some villages suffered from a diminished supply on “account of the drought. The supply of part of Syresham, “of Charlton, and of Hinton, has been under consideration. “In the first place it was considered by the Parish Council “that water was to be obtained within “a reasonable distance” “of the part requiring it. Charlton has been provided with “an excellent and convenient village supply, and the question “at Hinton is now being dealt with by those on whom the “onus of provision will fall.”

BRIXWORTH RURAL.—“Analyses of many wells have “been made during the year under review, due to which a “new supply has been found for Underwood Lodge. A new “well is being sunk in Blunt’s Row, Moulton. New drainage “has been laid at Bamford’s, Old, to protect his well. The “water supply of Scaldwell has been found to be satisfactory. “An exhaustive report and analysis of the water supply of “Brixworth was made. Many wells have been closed, and “others cleaned out. A suggestion made by the Local “Government Board as to the further protection of the wells “in Brixworth is under your consideration.”

CRICK RURAL.—“The Surveyor reports that the few “public wells in the district have been kept in order, but “there has again been scarcity of water in Lilbourne.”

DAVENTRY RURAL.—“The Long Buckby water scheme “has not advanced much during the year, the difficulties over “the purchase of the required land being great; but I hope “that before very long these difficulties will be overcome. “During the year plans for the water supply of Badby were

“prepared, and I hope that before long this village may have
“a supply of good water from a source outside the village.”

GRETTON RURAL.—“As is usual in Rural Districts,
“much of the water is derived from shallow wells, which are
“more or less contaminated by soakage from privy-pits. . . .
“The importation of a case of Enteric Fever might lead to a
“broadcast dissemination of the disease through one of these
“polluted wells, and I would therefore ask you to seriously
“consider the expenditure of getting rid of the chief source
“of water contamination, the privy-pit. The cost of cleaning
“out one of these pits, filling it with earth, concreting the
“floor, rendering in cement and providing a pail, is very
“trivial; and when you take into consideration the increased
“security to health, which would result from the supply of
“purer water, you can scarcely, as a Sanitary Authority,
“permit them to remain.”

HARDINGSTONE RURAL.—“Complaints of scarcity of
“water at Little Houghton and Wootton have been received
“during the year, whilst at the latter village the unprotected
“state of the wells leads to much pollution at times, in some
“cases wilful on the part of children. These matters require
“remedying. The water scheme at Denton is now approaching
“completion. A well has been sunk at Brafield and has been
“proved to contain an abundant supply of pure water, so it
“only remains to complete the scheme. The public well at
“Hackleton failed in the month of August, but on sinking
“the well deeper an abundant supply of water has been
“obtained. The water supply at Hardingstone still proves
“very efficient; and the new well at Great Houghton is
“satisfactory in supplying the upper part of the village.”

KETTERING RURAL.—“The arrangement for the supply
“of water to Pytchley has been completed, and appears to be
“highly satisfactory. The supply is plentiful, the quality
“good, and the water is laid on to all parts of the village. A

“loan has been sanctioned for carrying out an independent
 “supply for Burton Latimer, which was greatly required.
 “The supplies of water to the parishes of Cranford St.
 “Andrew and Cranford St. John have been analysed, and the
 “water in most of the wells was found to be impure. Alter-
 “ations were made in the drainage, and the wells were
 “cleaned out, with a view to improve these supplies; and a
 “further analysis will shortly be made, and if the water is
 “not found to be improved, probably ere long steps will be
 “taken to provide an independent supply. Owing to an
 “outbreak of illness in Stanion of a peculiar kind, the drains
 “were opened and examined, and the water in the public
 “wells analysed. The water in all the public wells was
 “found to be impure. The wells were cleaned out, and a
 “further analysis will shortly be made with hopes of finding
 “an improvement. The water supply at Warkton ran very
 “short during the dry summer. At the present time Pytchley,
 “Thorpe Malsor, Weekley, Geddington, Middleton, and
 “Cottingham are all well supplied, and probably before the
 “end of this year Burton Latimer, Loddington, and Orton
 “will also be provided, but the other villages in the district are
 “largely dependent on shallow wells and small springs for
 “their supply, and when their contents have been examined,
 “they have in most instances been found unsatisfactory.”

MIDDLETON CHENEY RURAL.—“The water supply from
 “Wells, Pumps, and Springs has been satisfactory.”

NORTHAMPTON RURAL.—“The water supplies at Kisling-
 “bury and Heyford are in good working order, and no
 “complaint of scarcity of water has reached me from other
 “villages, though the rainfall is still so very deficient, and
 “many of the wells in some parts of the county are very
 “low.”

OUNDLE RURAL.—“Eight samples of water were brought
 “to me to be tested, one of which was condemned as unfit
 “for drinking.”

OXENDON RURAL.—“The water supply of the district
 “has as usual received attention. All the villages are
 “supplied with wells, and most have a public as well as a
 “private supply, which as a rule give a sufficient amount of
 “good quality, and the sources are good, contamination by
 “local surface conditions mostly accounts for any defects.
 “At Stoke and Welford the supply is augmented by a spring
 “source. During the year the general supply throughout the
 “District has been satisfactory, but, with the dryness of the
 “seasons we have experienced, some wells failed to private
 “properties, and water had to be obtained by the courtesy of
 “neighbours. The public supply at Wilbarston, which had
 “in other years given trouble, appeared to be satisfactory this
 “year. One of the public supplies at Braybrooke reported
 “bad last year remains defective, and a private well supply
 “was also found to be very bad, and in spite of attention in
 “every way has remained deficient and defective. A private
 “well at Farndon has also been condemned as unsatisfactory,
 “apparently owing to remediable surface conditions, and
 “an order was served on the owners. Water at Weston and
 “Clipston has also received attention and been found satis-
 “factory.”

POTTERS PURY RURAL.—“The remarks contained in the
 “report for 1900 still hold good, viz. :—Wicken and Deans-
 “hanger have public water supplies of good quality; the rest
 “of the district is dependent on shallow wells, more or less
 “exposed to contamination, but the opposition of small owners
 “and ratepayers to any scheme involving much expense
 “prevents the general adoption of a public water supply in
 “all parts.”

THRAPSTON RURAL.—At Brigstock, “The question of a
 “water supply has been again considered, and the sanction of
 “the Local Government Board obtained to a loan for this
 “purpose.” “A supply of good water has been laid on to

“the centre of Woodford at a moderate cost, and so far I understand it has proved efficient. This is a great improvement, as the village has suffered from deficient water supply for a long time.”

TOWCESTER RURAL.—“Since the last Annual Report, a good supply of wholesome water has been provided for the parish of Gayton, the expenses of which have been defrayed out of a Loan obtained for that purpose, and the works being now completed will prove a great boon to that parish. Through the generosity of C. W. Bartholomew, Esq., of Blakesley Hall, the parish of Blakesley has now an ample supply of pure water which should prove a source of gratification and contentment to the inhabitants of that parish. The question of a water supply for the parish of Litchborough is, I believe, still in abeyance.”

WELLINGBOROUGH RURAL.—“The Council are considering a scheme for a proper water supply to those villages which require it. Several samples of water have been examined. Those found to be polluted were condemned, and the wells ordered to be closed.”

DWELLING-HOUSES AND OVERCROWDING.

It is satisfactory to be able to note that there appears to be no diminution of attention being paid to the conditions of working-class house accommodation in the several districts of the county. There is no doubt, in some, much that may yet be done in the way of improvement or amelioration of those conditions; but on the whole there is no appearance of general neglect of the duties devolving upon the local authorities in this respect. I would, however, point out that attention has been called to the fact during the last two or three years of the continuance in the Borough of Brackley of houses which are unfit for human habitation, and that steps should be taken at an early date to deal with this condition of things.

The following extracts from the Reports of the District Medical Officers of Health are deserving of notice as illustrating the extent to which this subject of house-accommodation is receiving attention :—

BRACKLEY BOROUGH.—“ House accommodation for the “ working classes is, speaking generally, good, but there are “ some houses which are unfit for human habitation and ought “ to be demolished.”

DESBOROUGH URBAN.—“ Plans for 13 new houses and “ an addition to a factory were passed during the year. Only “ one case of overcrowding came to the notice of your Officers, “ and in this instance the objectionable conditions were “ speedily remedied without the resort to coercive measures.”

KETTERING URBAN.—“ In December, a batch of houses “ in Gas-street were condemned as unfit for habitation. The “ tenants of the worst of these have received notice to quit, “ and probably the houses will not be re-let; the better of “ them will be put into a state of habitable repair.”

OUNDLÉ URBAN.—“ Only one case occurred in St. “ Osythe’s Lane, and the nuisance was promptly abated. “ Drumming Well Yard was inspected. Of the 13 cottages 5 “ only are inhabited, the others being unfit for habitation. “ The yard has sufficient closet accommodation, and is “ efficiently drained.”

RAUNDS URBAN.—“ The number of new houses built in “ Raunds since the census has been 44, and there is no doubt “ that this has greatly improved the town from a sanitary “ point of view; yet in many parts of the place the houses “ occupied by the poorer class of people—who are not able to “ afford to pay the high rents necessary to be paid for new “ houses—are too small, ill-ventilated, and scarcely fit for “ habitation. More houses are urgently needed, and if a few

“ blocks could be built at rentals suitable for labourers and
 “ others having only a small wage, then we might soon be
 “ able to remove the worst of the old insanitary dwellings,
 “ which for many years have been periodically and regularly
 “ infested with fever.”

BRACKLEY RURAL.—“ Plans for twelve new buildings
 “ have been passed, six new houses have been erected and
 “ there are three in course of erection.”

BRIXWORTH RURAL.—“ Eight new cottages have been
 “ built, and three reconstructed ; three old ones condemned.
 “ In many places pigsties exist too close to dwelling houses.
 “ As these houses become vacant many pigsties shall be con-
 “ demned.”

HARDINGSTONE RURAL.—“ During the year, 1 new
 “ cottage has been built at Cooknoe, 1 at Castle Ashby, and 1
 “ at Piddington, whilst 3 new cottages have been built at
 “ Yardley Hastings, to replace 3 old ones that have been
 “ pulled down. One cottage at Milton has been closed as un-
 “ fit for human habitation.”

NORTHAMPTON RURAL.—“ Some dilapidated and dirty
 “ cottages at Weston Favell have been condemned by me, and
 “ steps are in progress to remedy them.”

OXENDON RURAL.—“ The House Accommodation as
 “ regards the working classes is good in most of the villages.
 “ There is a general sufficiency of open space about the
 “ houses ; no new houses have been erected and no insanitary
 “ dwellings have been found or any cases of overcrowding.”

POTTERS PURY RURAL.—“ No cases of overcrowding
 “ have been reported during the past year, but certain cottages
 “ at Paulerspury and Hartwell have been condemned as unfit
 “ for habitation.”

WELLINGBOROUGH RURAL. — “In April I inspected several houses at Irchester, which were in a dilapidated state and unfit for habitation, and reported the matter to the Council ; seven of them have been closed, the remainder have been put into thorough repair.”

EXCREMENT AND REFUSE DISPOSAL.

While a good example is being given by the large Urban Districts of Kettering and Wellingborough in the direction of Refuse Destruction by heat, an example which I sincerely trust will in time be followed by other Urban Districts in the County, the conditions under which excrement and refuse disposal is performed in many of the Rural Districts leave much to be desired. The total abolition of the privy-pit has not yet been accomplished, the covering over of ashpits to secure their contents free from rain is still much neglected, and public scavenging is not fully organised in every village. These things are of so much importance, both in respect of the healthiness of the dwelling and the protection of shallow wells, that I hope greater efforts will be made to bring them about.

The following references will be found to be of interest in this connection :—

BRACKLEY BOROUGH. — “House refuse is removed weekly by the Council’s carts.” It appears that 471 loads were thus removed during the year.

HIGHAM FERRERS BOROUGH.—“I think it would be a further improvement if the important work of scavenging could be done entirely by your own men.”

DESBOROUGH URBAN.—“With the steady decrease in the number of pail-closets in the district—37 of these having, during the year, been converted into water-closets—and the

“total abolition of all privies, it has not been necessary to make
 “a collection of the night-soil more than once a week. Thus
 “a considerable saving has been effected in the cost of scavenging.”

FINEDON URBAN.—“The scavengers have done their
 “work in a satisfactory manner.”

IRTHLINGBOROUGH URBAN.—“The Scavenging of the
 “town having been very indifferently performed under the
 “Contract System, the Council at the beginning of the year
 “purchased horses and carts and commenced to carry out the
 “work with their own servants. The Sanitary Inspector
 “prepared a scheme for the regular collection of excrement
 “and house refuse and gave a good deal of personal supervision
 “to the working of it for a few weeks, with the
 “result that now the work is carried out to the satisfaction, I
 “believe, of the Council and the Public. The pail-system
 “without the use of any deodorant or disinfectant is in force,
 “but I hope that as soon as a Public Water Supply is obtained
 “Water Closets will be provided to most houses. The pails
 “are emptied once, and where necessary as in the case of
 “workshops and some factories two or three times a week.
 “Ashpits unless properly constructed should be gradually
 “done away with. A properly constructed Ashpit should be
 “roofed in, in order to keep the contents dry. No slops or
 “excrement should be thrown into it as they cause fermentation
 “and render the contents offensive. Filth accumulations are now
 “seldom if ever seen, the Council may congratulate itself that
 “under the new arrangements the Scavenging is being carried out
 “more satisfactorily than it has ever been before.”

KETTERING URBAN.—“The Refuse Destructor, about
 “which there was considerable difference of opinion, especially
 “as to the choice of a suitable site, is already in course of

“ construction, and in my opinion the nuisances arising there-
 “ from will not be so great as was anticipated by those who
 “ opposed it. Without doubt a Destructor must shortly have
 “ been obtained, and certainly no pains were spared by the
 “ Urban Council in ascertaining the best sort of thing for our
 “ purpose, and the best position for its erection, several mem-
 “ bers of the Council, as well as their officers, having made
 “ long journeys, and spent considerable time in inspecting
 “ different kinds of Destructors in other towns.”

WELLINGBOROUGH URBAN.—“ House refuse is removed
 “ weekly, and destroyed by incineration. During the summer
 “ months I would strongly recommend the removal of refuse
 “ oftener if possible.”

BRIXWORTH RURAL.—“ In some villages there is a total
 “ absence of ashpits, and in but few are any covered in.”

EASTON-ON-THE-HILL RURAL.—“ There are still existing
 “ Privy vaults that are a source of danger and ought to be
 “ done away with.”

GRETTON RURAL.—Referring to privy-pits, “ The abo-
 “ lition of these pits and the substitution of pail-closets with
 “ a regular system of scavenging is an economical sanitary
 “ reform which I urge you to adopt, at least in the village of
 “ Gretton. A clean zymotic bill of health should not delude
 “ you into the belief that insanitation of this kind can be
 “ perpetuated with impunity. . . . The baneful effect of the
 “ privy-pit is not confined to the well. These vaults pollute
 “ the subsoil and ground-air, and the atmosphere in their
 “ vicinity cannot possibly be regarded as otherwise than un-
 “ healthy. It would be very rarely indeed that I should have
 “ the slightest hesitancy in condemning a privy-pit as a
 “ nuisance and injurious to health.”

OXENDON RURAL.—“ The removal and disposal of house
 “ refuse is done by the private owners.”

POTTERSPURY RURAL.—“The district being an agricultural one, house refuse, &c., is generally disposed of in gardens or on the land, but pail closets are increasing in certain localities and are emptied by the public scavenger.”

SEWERAGE AND SEWAGE DISPOSAL.

The record for the year under this heading is at least a progressive one, and, though difficulties are nearly always to be met with in devising new schemes of sewage-disposal and the year has not been free from such, the progress which has been made is both substantial and satisfactory. I would again urge on Rural District Councils, in the interests of the Parishes under their control, that they should systematically set to work to devise simple schemes of sewage disposal in every village, particularly those which contribute to the sum total of river or stream pollution in this county. They are certain, otherwise, to find themselves involved in proceedings under the Rivers Pollution Act.

The following extracts from the Reports of the District Medical Officers of Health set forth in detail much of the progress which has been made during the year in many of the districts in the county :—

BRACKLEY BOROUGH.—“The sewerage system is efficient and works well. The sewage is treated by direct irrigation on the sewage farm.”

DESBOROUGH URBAN.—“A new sewer has been constructed leading into Station-road, which is a decided sanitary advantage, as it will allow of the closets of two factories being connected with the sewerage system. There were 1,500 loads of water used in flushing the sewers. Before long it will be necessary to enlarge the outfall sewer, as it is unable satisfactorily to carry away the storm water at times of heavy rainfall. Improvements of a most satis-

“factory nature, which should go a good way towards
 “improving the state of the effluent, have been carried out on
 “the sewage farm. The precipitation tanks have been
 “increased by one capable of holding 8,000 gallons, and a
 “filter of the capacity of 3,000 gallons has been constructed.
 “The suggestion of your Surveyor that the effluent water
 “should be tested every year, and records kept of the same, is
 “a very good one, as allowing of an opinion being formed
 “regarding the efficiency of the sewage farm. Two acres
 “of land on the Sewage Farm have been under-drained.”

FINEDON URBAN.—“There is, I am sorry to say, still a
 “great nuisance arising from the escape of sewer gas through
 “the grills of the manholes. I think the manhole covers
 “ought to be air-tight, and, if found necessary, more venti-
 “lating shafts be put up. No doubt much may be done to
 “remedy the evil when we have a proper supply of water for
 “flushing purposes. I should like to impress upon the
 “Council the importance of a proper inspection of house
 “drains on new property by their Surveyor before they are
 “covered up. I am quite sure that had the drains on the
 “property on the Wellingborough Road been properly
 “inspected before being covered in, they would most certainly
 “have been condemned, and in all probability we should not
 “have had the deplorable outbreak of Enteric Fever to
 “chronicle. In this case one end of the pump drain emptied
 “itself into the well, and some little of the contents got into
 “the sewer. The outbreak in 1899 was due to an exactly
 “similar cause.”

IRTHLINGBOROUGH URBAN.—“The Sewering of the
 “town has been completed. The engines, pumps, and tanks
 “have been erected, and the Rising Mains laid on the Sewage
 “Farm. The Ventilating Shafts, which are now being erected,
 “will materially assist in the thorough ventilation of the
 “Sewers. Their height and the positions in which they are

“being placed will prevent any nuisance or injury to health
 “from sewer gas. Regulations for the connections of property
 “with the main sewer have been prepared by the Surveyor,
 “and printed by an order of the Council, and I hope that as
 “soon as the Sewage Scheme is completed, and the Farm
 “ready for Irrigation, the work will be proceeded with.”

KETTERING URBAN.—“Fair effluents have been main-
 “tained at the Sewage Disposal Works, but the unusually
 “small rainfall has made it very difficult to maintain the
 “brook receiving them in a satisfactory condition, the flow in
 “it having been so small that the least defect in the effluent
 “has become unusually apparent. The main outfall Sewers
 “on the east and west sides of the town have been extended
 “during the year, to provide for the growth of the town
 “northwards. Special Flushing arrangements have been
 “provided for maintaining them in a clean condition, as the
 “flow of Sewage through them will be small for some time
 “to come. Also 45 Automatic Flushing Syphons have been
 “provided on the Sewers in the town, and 12 Flushing
 “Chambers have had $3\frac{1}{2}$ inch services from the Water Mains
 “laid on to them so as to effect a more satisfactory Flushing
 “of the Sewers, and to dispense with the use of Water Vans
 “for Flushing. These latter Flushing Chambers will also be
 “very useful in cases of fire, as tanks from which the Fire
 “Engines can obtain water for pumping. It appears to me
 “that a further extension of Sewers would be an advantage,
 “to receive the Slops and Sewage from the new houses on the
 “Co-operative Society Estate, on the Rockingham Road, which
 “are at present supplied with earth-closets and have no
 “arrangements for the disposal of slop-water. It also seems
 “very doubtful whether it is judicious to erect houses at all,
 “in a town like Kettering, before a provision has been made
 “for the reception of Slops and Sewage from them, otherwise,
 “unless the greatest care is exercised, the slops are very liable
 “to permeate into the adjoining properties, and, where private
 “wells are used, to pollute the water supplied from them.”

OUNDLE URBAN.—“The Sewerage and Drainage of the
 “Town have been very satisfactory, several fresh connections
 “have been made with the main sewer.”

RAUNDS URBAN.—“The Common Sewer now extends
 “to every part of the town, and as nearly all the manholes
 “have been sealed up and plenty of ventilating shafts run up,
 “the smells so much complained of last year have almost
 “entirely disappeared. The question of flushing has been
 “practically solved, at least in the principal artery of the
 “sewer—that is, from near Chambers’ Row right down the
 “whole length of the main sewer. This has been done by
 “constructing a dam in the course of the brook, and so con-
 “necting it to the sewer that the whole or part of the clean
 “water can be turned into the sewer at any time, and
 “thousands of gallons per day allowed to pass down, thus
 “thoroughly flushing it. The idea of this system was
 “originated by myself, and it seems to have been well carried
 “out by your Surveyor, Mr. York. I would be glad to see
 “the other Main Sewer, from Newtown along Thorpe Street,
 “connected to another dam, or by some simple process
 “whereby the brook there might be utilised for flushing
 “purposes. After heavy rains that brook is often filled with
 “plenty of clear water for weeks together—as it now is. If
 “this can be done then we shall have the two principal parts
 “of the sewer perfectly clean; and the smaller parts can
 “easily be kept clean, as they are now, by the special van
 “procured for that purpose.”

RUSHDEN URBAN.—The statement is made that “the
 “drainage is satisfactory, and the sewage farm well managed.”

BRACKLEY RURAL.—“Sewers have required and have
 “received attention at Croughton, Helmdon, Culworth, and
 “Syresham, and in the last named village a new one has been
 “put in and connected with that laid down two years ago at
 “the east end of Broad Street.”

BRIXWORTH RURAL.—“As against thirteen villages in 1900, sixteen are now provided with a sewerage system, and four partly so. During the past year the sewerage scheme to Old village has been finished, the Brixworth Extension Scheme carried out, and that of Brington Extension commenced. Plans for the sewerage of Cold Ashby and Creaton have been approved by the Local Government Board.”

DAVENTRY RURAL.—“New socketted pipes have taken the place of old drains for a distance of about 88 yards in Braunston, for about 80 yards in Watford, for about 47 yards in Newnham, for about 45 yards in Byfield, for about 42 yards in Flore, and for about 40 yards in Everdon.”

HARDINGSTONE RURAL. — “The sewers at Little Houghton have been extended to the north-east end of the village. Only one section of the village remains to be put in, when the whole village will be laid on to the irrigation beds. The main sewer at Collingtree has been completed during the year, but there are still a few connections to be made. There is, however, no system of sewage purification in force for this village. Schemes for Cooknoe, Great Houghton, and Yardley Hastings are in hand, and the Brafield scheme is nearly completed. The existing sewage farms have been in good working order during the year.”

KETTERING RURAL. — “A new Sewage Scheme for Burton Latimer is now before the Local Government Board, and—now that an independent Water Supply has been arranged for in this village—will be a great improvement when sanctioned. In several other villages steps have been or will shortly be taken to prevent the direct flow of the drainage from small villages into the brooks.”

NORTHAMPTON RURAL. — “The drainage scheme at Duston has now been completed, and the new drains have all been properly connected with the new sewers. The

“septic tank, into which the sewer runs, must be considered
 “as still on its trial ; I cannot say that I have been satisfied
 “with the effluent on my visits to it. The effluent from the
 “tank is very black and foul, but the land on to which it
 “runs is so absorbent, being a portion of some old ironstone
 “excavations, and so far from other buildings, that no nuisance
 “is at present created, and no complaints of it have been
 “received.”

OXENDON RURAL.—“The Drainage of the various parts
 “of the District has continued to receive general attention,
 “and improvements have been steadily carried out. At
 “Ashley an old stone and brick culvert in the centre of the
 “village has been taken up, and 9 in. socket pipes and two
 “manholes and ventilation substituted. At Marston the new
 “sewer extension has been completed so as to prevent the
 “pollution of the brook, and all the cottages are now con-
 “nected with the settling tank. At Sibbertoft it is proposed
 “to build a new settling tank, and at Sutton Bassett the sewer
 “outfall is to be extended. At Welford a complaint has been
 “received from the Rugby authority respecting the pollution
 “of the source of the Avon, which is one of the sources of
 “the Rugby supply. The drainage of Welford at present in
 “part goes straight into the brook ; the matter is receiving
 “special attention, and the Council have been advised to
 “have a settling tank and filters, and at present the scheme
 “is approved by the Council, and plans have been prepared,
 “and the owners of the property in which it would be neces-
 “sary to place them have been communicated with, with a
 “view to either purchase or renting of the site for them. The
 “drainage of Welford as at present existing is not satisfactory,
 “as, though there is a good natural fall, the sewers are not
 “laid well with that view. Taking the Drainage of the
 “District as a whole, the larger villages have their settling
 “tanks which are emptied and disinfected every quarter,
 “whilst properties not connected with a drainage have the

“usual accommodation which is dealt with and cleaned as
“required where pail and earth closets are not in use.”

THRAPSTON RURAL.—At Thrapston, “The Sewage Works
“were opened and appear to work extremely well. I do not
“think that any reasonable complaint can now be made with
“regard to the small effluent now discharged into the river.”
“A new outfall sewer has been provided for Little Addington,
“which will prove advantageous.” “New sewers have been
“completed for Islip. The outfall arrangements work well.”
“A scheme for the sewerage of Ringstead has been considered,
“and will shortly be taken in hand.” At Stanwick, “A
“scheme of sewerage for the village is under consideration,
“and will shortly be carried out.”

TOWCESTER RURAL.—“The Towcester Sewage Farm is
“now in full working order, and, I trust, satisfactorily.”

WELLINGBOROUGH RURAL.—“The drainage of Isham,
“Irchester, Great Doddington, Mears Ashby, Wilby, and
“Little Harrowden, are under consideration by their respective
“Councils.”

RIVER POLLUTION.

The following extracts from the Reports of the District
Medical Officers of Health may be read as supplementary to
the foregoing statements in respect of Sewerage and Sewage
Disposal :—

DAVENTRY RURAL.—“During July, I made a special
“inspection of Badby, Newnham, Everdon, Dodford, Weedon,
“and Flore, with regard to the sewage from the six villages
“passing into the River Nene. In all these villages I found that
“pollution of the River was taking place, and I advised you
“to appoint an Engineer to prepare plans for dealing with
“this pollution ; this you accordingly did, and I hope that in

“time schemes will be drawn up for treating this sewage, as
 “the present river-pollution cannot possibly be allowed to
 “continue.”

HARDINGSTONE RURAL.—“The large fell-mongering
 “works at the old Paper Mills have been visited by me.
 “There is no scheme at present for the treatment of the
 “refuse, and they largely pollute the river. The proprietors
 “promise that steps shall be taken for proper treatment of the
 “nuisance, but at present nothing has been done. This
 “question has been before you many times and means must
 “soon be taken to enforce some purification scheme.” A
 scheme is now in course of execution by which it is hoped
 that the pollution referred to will be effectually abated.

NORTHAMPTON RURAL.—“A scheme is now in contem-
 “plation by which the sewage from the village of Bugbrooke
 “will be intercepted and purified before its discharge into
 “the river.”

LODGING-HOUSES.

In regard to the common lodging-houses in the County,
 it may be remembered that the two in the Borough of
 Brackley, having fallen into a dilapidated condition and the
 owner being unwilling to put them into repair, were refused
 registration. The Report of the Medical Officer of Health
 now says that “there are no Common Lodging Houses,” while
 that for the Borough of Daventry records that the lodging-
 houses in that Borough are “regularly inspected, and the
 “occupiers required to keep them in proper condition.”

The Reports of other Medical Officers of Health are as
 follows :—

KETTERING URBAN.—“The only Licensed Lodging-
 “house in the town appears to be well conducted. When

“your officers have visited it they have always found it in a
 “cleanly condition, and never over-crowded. No case of
 “Infectious Disease has occurred in it, and the proprietor has
 “always been willing to give any information required.”

WELLINGBOROUGH URBAN.—“I have visited the Lodging
 “Houses and found them in a satisfactory condition.”

THRAPSTON RURAL.—The Lodging House in Thrapston
 “has been periodically visited, and is stated to be clean and
 “well conducted.”

SLAUGHTER-HOUSES.

In Brackley Borough the Slaughter-houses are said to be
 “in a satisfactory state,” in Daventry Borough “regularly
 “inspected, and the occupiers required to keep them in proper
 “condition,” while in Higham Ferrers Borough they “have
 “been visited and found, with one exception, in a satisfactory
 “condition.” Records are also made that they have been
 visited from time to time in the Desborough Urban District,
 but that nothing requiring intervention was observed, that
 they were inspected regularly and the general condition found
 satisfactory in the Finedon District as well as at Irthling-
 borough.

The Medical Officer of Health for the Kettering Urban
 District, however, again calls attention to one phase of this
 subject, as he has likewise done on previous occasions, which
 ought not to be overlooked :—“No steps have yet been taken
 “towards the provision of a Public Slaughter-house. This is
 “a matter of very great importance on account of the facilities
 “which would be given for the Inspection of Animals before
 “and after slaughter, which is quite impossible where a
 “number of small slaughter-houses are constantly used.” It
 is also interesting to note that he records the fitting up of a
 Cold Chamber at one of the Slaughter-houses in the town.

In Oundle Urban District, "the slaughter-houses have "been regularly inspected and found in good condition," and at Raunds it is said that "all the slaughter-houses are in a "perfectly clean and healthy condition—well washed, well "ventilated, and free from bad smells." Likewise at Rushden and Wellingborough they have been found on the whole to be satisfactory.

I cannot but, however, strongly endorse the remarks of the Medical Officer of Health for Kettering, and in addition point out that, while the slaughter-houses in these Urban Districts are considered to be satisfactory in regard to the manner in which they are kept, there may be questions as to locality in which they are situated which might form very forcible arguments for their abolition in favour of a public establishment under official control.

The Medical Officer of Health for the Brackley Rural District says "I have visited and inspected the Slaughter-houses in the district, and, with one or two exceptions, have "found them in a satisfactory state. The exceptions were "served with notices to amend the conditions requiring it." In the Thrapston Rural District, they "have been inspected, "and reported to be in a satisfactory condition," nearly all found in good order in the Middleton Cheney Rural District, in good sanitary condition in the Oundle Rural District, while the Inspector of Nuisances for the Wellingborough Rural District says that they "have been regularly inspected, "and found on each visit well kept and clean."

DAIRIES, COWSHEDS, AND MILK-SHOPS.

I have already reported on the efforts of the County Council to ensure that Registration of Dairymen, Cowkeepers, and Purveyors of Milk should be enforced in every district of the County, and the extent to which Regulations have been

adopted by the several District Councils. I should be glad if an increasing amount of serious attention were given to this matter, for I am certain that in the interests of the County it is most important that there should be uniformity of administration. It is, however, greatly to be regretted, that County Councils are not endowed with the power to enforce uniformity of control over such an important article of food as the milk-supply.

The following are the principal points in regard to this subject of dairies, cow-sheds, and milkshops to be gathered from the Reports of the District Medical Officers of Health :—

BRACKLEY BOROUGH.—“There are four registered, all “in good condition.”

DAVENTRY BOROUGH.—They are “regularly inspected, “and the occupiers required to keep them in proper con-
“dition.”

HIGHAM FERRERS BOROUGH.—“All the dairies, cow-
“sheds, and milk-shops have been inspected and found kept
“in a proper condition.”

DESBOROUGH URBAN.—“I am pleased to report favour-
“ably as to the state of the Dairies and Cowsheds.”

FINEDON URBAN.—They are said to be inspected
regularly, and the general condition to be found satisfactory.

IRTHLINGBOROUGH URBAN.—“These have been inspected,
“and, in cases where sanitary improvements were recom-
“mended, the suggestions have been carried out.”

RAUNDS URBAN.—“The Dairies and Cowsheds have
“been inspected regularly during the year, and all of them
“seem to be kept in a clean and good sanitary condition.”

RUSHDEN URBAN.—“Cowsheds, Dairies, and Milkshops
“are registered, have been inspected at intervals, and are
“kept in a satisfactory condition.”

WELLINGBOROUGH URBAN.—“Dairies, Cowsheds, and
“Milkshops have been visited and found on the whole
“satisfactory.”

GRETTON RURAL.—“There is no milk exported from
“the District. Cowsheds are regularly inspected, and are on
“the whole well kept.”

HARDINGSTONE RURAL.—“Your Council have now
“agreed to adopt bye-laws under this Act to come into force
“on April 1st. This seems to me a very wise decision, it
“gives us power to insist on uniformity in the cleanliness
“and drainage of the different dairies: at present some are
“in a very good condition, whilst the state of others leaves
“much to be desired. Very little milk from these dairies is
“sold in our district, but it largely supplies the needs of the
“town of Northampton, and the purity of this milk is most
“essential to its inhabitants.”

NORTHAMPTON RURAL.—“The dairies and cowsheds
“are visited and reported upon half-yearly by the Inspector,
“and your Council have now adopted the Model Bye-laws of
“the Local Government Board for this district, which come
“into force at the beginning of the present year (1903). As
“a standard is thus set up for all dairies, I anticipate a great
“improvement in this respect during the coming year. On
“visiting different dairies, I have been struck by the fact
“that though the drainage in the cowsheds is good, the yards
“themselves are often in a bad state from imperfect drainage
“and accumulations of manure. I cannot see any regulation
“in the Model Bye-laws to prevent this, and I think it may
“be a fruitful source of mischief from the cow’s udders becom-
“ing splashed and contaminated by this offensive matter.

“From the returns furnished by your Inspector, I find that
 “there are in the district 32 dairies, 47 cowsheds, and 23
 “cases in which milk is sold from the door. In almost all
 “cases the cows are in the fields during the day time.”

The precautions of the milkers washing their hands before milking, and of the udders of the cows being cleansed before being milked, are adopted by the proprietors of carefully conducted dairies, and should be urged on all dairymen and cowkeepers.

OUNDLE RURAL.—“The Milkshops and Dairies in the
 “District were inspected, and reported to be in a most satis-
 “factory condition.”

OXENDON RURAL.—“The Dairies and Cowsheds Order
 “was brought up for the consideration of the Council, but it
 “was decided not to adopt it. I consider that this is unwise,
 “as for instance anyone may commence to sell milk no matter
 “from what source obtained, and in the event of Typhoid-
 “fever breaking out it might be difficult to trace the source,
 “and, as milk is supplied to parts outside the Oxendon District,
 “insufficient protection is afforded to other authorities.”

POTTERSPURY RURAL.—“The Dairies, Cowsheds, and
 “Milkshops Privy Council Order of 1885.—This Order is
 “now in force in the district, and the Sanitary Inspector
 “reports ‘that the persons registered under it keep their
 “‘premises in a fit state to comply with the same.’ ”

THRAPSTON RURAL.—“The Dairies, Cowsheds, and
 “Milkshops have been periodically inspected, and their
 “sanitary condition much improved.”

TOWCESTER RURAL.—“No action was taken under the
 “Dairies, Cowsheds, and Milkshops Order during the year
 “1902.”

WELLINGBOROUGH RURAL.—The Inspector of Nuisances in his Report says that “Extensive alterations and sanitary improvements have been made to cowsheds at Bozeat, Doddington, Great Harrowden, Little Harrowden, Easton Maudit, Orlingbury, Irchester, and Hardwick. In most cases an improved water supply, improved drainage, better floors, more light, and better ventilation have been secured. The drains are well kept and in a cleanly condition.”

FACTORIES AND WORKSHOPS (BAKE-HOUSES).

In my Annual Report for the year 1901, I called attention to the provisions of the Factory and Workshops Act, 1901, under which extended supervision of Workshops was imposed on Medical Officers of Health and they were required to report upon them annually. The following extracts from the Reports of the Medical Officers of Health are evidence that the majority of them have not regarded their new duties as otherwise than important, and the result of this increased supervision is certain to show itself before long.

BRACKLEY BOROUGH.—“There are 17 workshops on the Register, they have been inspected by myself or the Inspector of Nuisances and found to comply with the conditions of the Act. It also appears that the Bakehouses are in a satisfactory state.”

DAVENTRY BOROUGH.—No records are given, for want of a list of workshops and workplaces, except as regards Bakehouses, which are reported to have been “regularly inspected, and the occupiers required to keep them in proper condition.”

HIGHAM FERRERS BOROUGH.—“Now that the Factory and Workshops Act, 1901, is in operation, more attention will have to be given to the sanitary condition of all factories and workplaces. I have visited the various factories in the

“town, with the Sanitary Inspector, and made such suggestions as seemed necessary to bring them in a line with the requirements of the Act.”

DESBOROUGH URBAN.—They were visited from time to time, but nothing requiring intervention was observed.

FINEDON URBAN.—“With regard to the working of the Factory and Workshops Act, which came into force during the past year, I have to report that all the Factories and Workshops have been visited, and, in nearly all cases, the cleanliness, ventilation, air-space, drainage, and sanitary conveniences, were found satisfactory. In no case, as far as the Factories were concerned, was there any overcrowding. With regard to some of the Workshops, your Inspector found it necessary to complain of overcrowding, and with regard to some home workers he also found ground for complaint for the same reason. In all cases he found that his directions were cheerfully carried out. In the absence of an Isolation Hospital, it will come very hard on the home workers should we get an outbreak of infectious disease. Your Inspector visited and reported upon 18 Workshops, and I visited the Factories. We have at present no list of Out-Workers supplied to us by the Shoe Manufacturers. We hope, however, during the coming year to get everything with regard to this part of the duties of the Sanitary Authority in good working order.”

IRTHLINGBOROUGH URBAN.—“In most of the workshops and in a few of the factories lime-washing had evidently not been done for many years, and the dirty walls gave the places a general appearance of uncleanness. In these cases the provisions of the Act were pointed out to the occupiers, and recommendations made as to the carrying out of the same, which, I am pleased to say, were in all cases complied with within a reasonable time. In only one case was there any overcrowding, and temporary arrangements

“were at once made to remedy the defect. The Act states
 “‘In every room in a factory or workshop, sufficient means
 “‘of ventilation shall be provided and sufficient ventilation
 “‘shall be maintained.’ In most cases, and this applies more
 “particularly to the large factories and workshops, the latter
 “part of this most important provision of the Act was much
 “neglected, although in all cases various and efficient means
 “of properly ventilating the rooms were provided. The
 “attention of the manufacturers and contractors was drawn to
 “this unsatisfactory condition of things and promises were
 “made to carry out the requirements of the Act. Sanitary
 “Conveniences :—Those in connection with most of the
 “workshops were on the whole satisfactory—the pail system
 “being in force. In two instances at least—where a number
 “of girls and young persons are employed—a privy cesspit is
 “in use. These should be done away with as soon as possible,
 “and either the pail system adopted or water closets erected
 “and connection made with the sewer. With few exceptions
 “the factories are provided with excellent sanitary conven-
 “iences on the w.c. system, but more cleanliness and care on
 “the part of those using them are required, as I found a good
 “many of the closets and urinals very filthy and most offensive,
 “and in all cases the nuisance was caused by the neglect of
 “proper flushing. Bakehouses were all visited and found in
 “a clean and satisfactory condition, and in no case were any
 “of the provisions of the Act as regards closets, limewashing,
 “sleeping places, or floor level contravened. Dressmaking
 “and Tailoring Workshops were inspected and found satis-
 “factory. Owing to various causes comparatively little work
 “is now done at home, but what is done consists chiefly of
 “hand stabbing, fitting and closing of boots and shoes. About
 “60 women and young persons are employed in this way in
 “the town. In connection with this work the only fault I
 “have to find is that, in the case of a very few married women
 “with small families, I am afraid that at times, the cleanliness

“of the home and the care of the children are somewhat
“neglected.”

KETTERING URBAN.—“Bakehouses have received fre-
“quent attention. There is only one underground Bakehouse
“in the district. A large proportion of the Bread supplied to
“the town is prepared in two Bakehouses, where the process
“is carried on by steam; these as well as the smaller bake-
“houses are at the present time in a satisfactory condition.
“Attention has been constantly given to Workshops, which
“has entailed considerable extra work on your officers,
“especially in those places where the prescribed ‘Abstract’
“should be affixed, in order to see that this was carried out,
“and that the General Register was properly kept. This
“Register is somewhat difficult to keep in this district as,
“Out-workers are frequently moving from one Workshop to
“another, and from one Residence to another. Many of the
“Workshops are but small, being used by from one to four
“persons only. In Workshops where necessary, additional
“Sanitary conveniences have been required; with reference
“to separate accommodation for both sexes arrangements have
“been satisfactorily carried out. When necessary, information
“has been given to the Inspector of Factories for the district.”

OUNDLE URBAN.—“Bakehouses. These are also in good
“condition. The Workshops have been visited and found
“satisfactory as to lighting, air space, ventilation, and sanitary
“appliances. A Register of Workshops is appended.” Accord-
ing to the latter, these appear to belong to 5 Dressmakers, 2
Bakers, 1 Cabinet Maker, 2 Saddlers, 1 Printer, 1 Tailor, 1
Plumber, 1 Wheelwright, 1 Basket Maker.

RAUNDS URBAN.—“The Factories and Workshops in
“the town are visited by Mr. Yorke and myself, and all of
“them are in a perfectly healthy condition as regards
“ventilation, airspace, and sanitary appliances. The work-
“places in the town are gradually decreasing in number,

“more especially in the case of male workers, who are now
 “nearly all working in the factories. Many of the female
 “workers are now employed in the factories, and I hope that
 “in a short time we may see the old-fashioned stuffy home
 “work-places entirely done away with in Raunds; the healthy,
 “well-ventilated, well-lighted factories being better in every
 “way for the workers.”

ROTHWELL URBAN.—“The Factories and Workshops
 “have been visited officially during the last year, and there is
 “nothing of a new or a special nature to record concerning
 “them.”

RUSHDEN URBAN.—“Fifty-three factories and 251 work-
 “shops have been visited at intervals, and are in a satisfactory
 “state. Any defects have been promptly remedied.” “Out-
 “workers whose family have been notified suffering from
 “any infectious disease have been prohibited following their
 “employment in the house until the house has been thoroughly
 “disinfected.”

WELLINGBOROUGH URBAN.—“In the Registered Work-
 “shops any alterations suggested have been carried out.”

BRACKLEY RURAL.—“There are no factories registered
 “in the district, and only five workshops were named by the
 “Inspector of Factories as being within the district. Only
 “four of these now come within the provisions of the Act.
 “These I have inspected and find that they fulfil its require-
 “ments. I have also as usual inspected the Bakehouses
 “throughout the district. These are now “workshops” as
 “defined in the Act. I have found them in nearly every case
 “in satisfactory condition, but a few do not now fulfil the
 “provisions regarding the whitewashing of ceilings, and these
 “were ordered to be attended to. No information is available
 “as to any ‘home-work’ being done in the district, and as
 “this is purely rural and agricultural it is unlikely that any

“such is done. As a matter of fact it would appear that such
 “‘workshops’ as these are only come within the letter and
 “not the spirit of the Act. It does not appear to be a part of
 “the duty of a Medical Officer of Health to seek for unregis-
 “tered workshops, and as no officer is appointed to do so the
 “Act, except as regards Bakehouses which have always been
 “attended to, remains in abeyance.”

CRICK RURAL.—“The comparatively few Workshops
 “and Workplaces, including bakehouses, in the district have
 “been duly inspected by the Sanitary Inspector and myself.
 “The Inspector has taken all the measurements of indoor
 “workplaces, and has entered these and all the other details
 “which affect the general sanitary condition of premises on
 “the register. The total number including 6 bakehouses
 “entered in the register amounts to 20, and, with compar-
 “atively few exceptions concerning which notices were issued
 “and have been complied with, the condition of the whole
 “was found to be fairly satisfactory.”

DAVENTRY RURAL.—“The Factory and Workshops Act,
 “1901, came into force on the first of the year, and I spent a
 “good deal of time in visiting the factories, workshops, and
 “workplaces in the District. Of course, in a Rural District
 “like this, they are few and far between; as a matter of fact,
 “there is only one factory (a two-storied building) in the
 “District. I found them as a whole, clean, and well-ventilated,
 “and no overcrowding. Many of the bakehouses have been
 “whitewashed only once a year, but on my pointing out that
 “this must be done every six months the owners readily
 “promised to do so. There is no underground Bakehouse in
 “the District.”

EASTON-ON-THE-HILL RURAL.—“No action has been
 “found necessary under the Factory and Workshops Act.”

GRETTON RURAL.—“The District being thoroughly
 “rural, is but little affected by the provisions of this Act. In

“no instance was it found necessary to order limewashing or
 “to abate any nuisance. Reference to the subjoined Report
 “of the Sanitary Inspector shews that there are twenty-two
 “Workshops on the Register, including six Bake-houses, and
 “that there are twenty-two out-workers residing within your
 “District. There was no case of Infectious Disease recorded.”

HARDINGSTONE RURAL.—“The requirements of this
 “Act require that its working in our district shall be com-
 “mented on by the Medical Officer of Health. Being a rural
 “district, it has here very limited application, only two shoe
 “factories come under its provisions, one at Cogenhoe and a
 “very small one at Piddington, whilst the number of workshops
 “is small. They are all in good order and fulfil the require-
 “ments of the Act. The Hunsbury Hill smelting furnaces
 “must also be mentioned, but little of a sanitary nature
 “requires attention in them. I visited the bakehouses in the
 “district some time ago and found them all clean and in good
 “order. No underground bakehouses exist in this district.”

KETTERING RURAL.—“There are very few Factories in
 “this district ; those at Cottingham and Burton Latimer have
 “been inspected. There are no Workshops properly so called,
 “but some of the work from the clothing factory is carried
 “out at the workers’ own homes.”

MIDDLETON CHENEY RURAL.—It is reported that the
 bakehouses were inspected, and nearly all found in good
 order.

NORTHAMPTON RURAL.—“There is only one small
 “factory at Kislingbury, which may be regarded really as
 “only an enlarged workshop. There are a good many small
 “work-shops, especially in the village of Harpole, and,
 “choosing this village because it contains about three-fourths
 “of the workshops of your district, I have made a tour of
 “them with the Medical Officer of Health for the County and

“ the Factory Inspector. They are mostly small workshops fitted
 “ up by the cottage tenant, in which himself and one or more
 “ of his family work at boot making. We found very little
 “ indeed with which fault could be found, and such faults
 “ were notified to the Sanitary Inspector, who has supervised
 “ their rectification. On the whole this Act seems to apply
 “ with very little force to this district, from a sanitary point
 of view, as there are so few cases in which it comes into
 “ operation, and the respective duties of the Factory Inspector
 “ and Sanitary Authority seem to be complicated and to
 “ overlap very much. The bakehouses are clean and
 “ regularly white-washed ; there are no underground bake-
 “ houses.”

OUNDLE RURAL.—“ The Factories and Workshops Act
 “ of 1901, which throws the duty of inspection on the
 “ Sanitary Authority, came into force last year. Your
 “ district, being purely agricultural, contains no workshops
 “ or workplaces, with the exception of Bakehouses, which
 “ have again been inspected and all found in a satisfactory
 “ condition.”

OXENDON RURAL.—“ I have to report that there are no
 “ Factories or Workshops within the District, but a proper
 “ list of the Bakehouses is duly kept, and inspections of the
 “ premises have been made and all sanitary requirements have
 “ been carried out with reference to them. The keeping of
 “ lists of outworkers has been duly performed and notice
 “ given to other Councils as required. There are five out-
 “ workers houses at Braybrooke, two at East Farndon, and 31
 “ at Welford ; all have been visited and inspected, and no
 “ insanitary conditions found, no cases of over-crowding, and
 “ no case of dangerous Infectious Disease has existed.”

POTTERSPURY RURAL.—There are two factories in this
 district, both at Deanshanger. “ These factories are kept in a
 “ clean state, have no wet floors, are free from effluvia arising

“from any drain, water-closet, &c., are not overcrowded, are
 “properly ventilated, and have suitable sanitary accommo-
 “dation. No home work is given out, and an abstract of the
 “Act is affixed where required by section 133. Provision is
 “also made for safety from fire. With regard to ‘Domestic
 “factories,’ ‘Workshops,’ and ‘Workplaces’ within the dis-
 “trict, I am unable to report, as I have no list or register of
 “such places. With regard to Bakehouses, the Sanitary
 “Inspector reports that ‘the situation and structural arrange-
 “‘ments of some of them are not all that could be desired,
 “‘but speaking generally they are kept clean and wholesome.’
 “The attention of the owners will be called to sections 97, 98,
 “and 99 of the Act, and steps taken to enforce the conditions
 “laid down therein.”

THRAPSTON RURAL.—“The duty of inspecting Work-
 “shops and Workplaces, which formerly was done by the
 “Factory Inspector, is now performed by your Officer. A
 “register of all such places has been made during the year,
 “and every place on the Register has been visited. The total
 “number placed upon the list amounts to 140. Of these, 101
 “are occupied by persons engaged in shoemaking, chiefly in
 “the villages of Stanwick, Ringstead, and Woodford. One
 “Workshop employs 37 hands, and another 8. The rest have
 “only 2 or 3. The Workshop of Messrs. Cave and Son at
 “Stanwick, which is the only large one, is very clean and
 “well ventilated. The other shoemaking places in the list
 “are usually reported clean and in good order. In 14 cases
 “directions for limewashing were given. One which employed
 “4 persons is said to be overcrowded. A second inspection
 “is now being made by the Sanitary Inspector, and any cases
 “in which his directions have not been carried out will be
 “reported to you. Bakehouses appear now to come under
 “the Workshops Act. In villages they are usually clean and
 “wholesome and require little supervision. One underground
 “bakehouse is reported at Thrapston, but it is at present un-

“occupied. A Dressmaking establishment which I visited
 “was found to have no abstract of the Act posted up, and the
 “matter was reported to the Inspector of Factories. Two
 “Clothing Factories were reported by the Sanitary Inspector,
 “one at Woodford and the other at Brigstock, as having no
 “efficient exit for the workpeople in case of fire. An outside
 “iron staircase is being erected at the Woodford Factory,
 “owned by Mrs. Fowler and occupied by Messrs. Wallis and
 “Linnell, which employs 60 hands. When completed, this,
 “it is thought, will give entire satisfaction. The Brigstock
 “Factory, owned and occupied by Messrs. Wallis and Linnell,
 “employs under 40 hands, and for that reason it was laid
 “down by your Clerk that the Council could not interfere.
 “The matter was reported to the Inspector of Factories.”

TOWCESTER RURAL.—“No legal proceedings were ren-
 “dered necessary under the Factory and Workshops Act
 “during the past year.”

WELLINGBOROUGH RURAL.—“All factories and work-
 “shops have been visited at intervals, and defects were remedied,
 “and they now are in a satisfactory condition. All families of
 “workers who have been notified as suffering from any
 “infectious disease have been prohibited working in any
 “factory or taking in work at their own homes.” The
 following further particulars in regard to this District are
 obtained from the Report of the Inspector of Nuisances.
 The total number employed as outworkers is put down at
 1,440, namely, 920 men and 520 women, half the latter being
 married, and generally engaged in the boot and shoe industry.
 A good deal appears to have been done in the way of having
 workplaces limewashed, and put into a sanitary condition.
 The Bakehouses also appear to have been inspected and, with
 one exception, found well kept and clean.

FOOD INSPECTION.

In the Desborough, Finedon, and Wellingborough Urban Districts, and the Potterspury Rural District, it is reported that it was not necessary to condemn any article of food exposed for sale. It appears, however, from the Report of the Inspector of Nuisances for the Kettering Urban District that "a quantity of Ice-cream that was unfit for consumption, and certain parts of a young beast being found unfit for food, were given up and destroyed." The Inspector of Nuisances for the Wellingborough Rural District also reports as follows :—"In June last I seized from a butcher's cart at Little Harrowden a quantity of meat which was unfit for food. It was destroyed. This being his first offence, no proceedings were taken against the offender."

CEMETERIES AND CHURCHYARDS.

The Medical Officer of Health for the Rothwell Urban District says "Our new Cemetery also is in progress of completion," while the Medical Officer of Health for the Wellingborough Rural District reports as follows :—"The Churchyard at Bozeat, which I reported to the District Council as being overcrowded, and advised a cemetery, met with disapproval, and was afterwards inquired into by a representative of the Local Government Board who confirmed my opinion, and steps have been taken to have it permanently closed."

OFFENSIVE TRADES.

The only reports under this heading are as follows :—

BRACKLEY BOROUGH.—"One tan-yard, condition satisfactory."

FINEDON URBAN.—"No obnoxious trade has been carried on during the year."

OXENDON RURAL.—“No offensive trades within the
“District.”

POTTERSPURY RURAL.—“No case under this heading
“was reported during the past year.”

BYE-LAWS.

It appears that Model Bye-Laws for the whole of the Kettering Rural District have been sanctioned by the Local Government Board, and adopted by the District Council. This is a step which I should like to see followed in all the Rural Districts of the County, and, in this connection, the following remarks of the Medical Officer of Health for the Crick Rural District are much to the point :—“Although very
“little building goes on in any part of the district, it is very
“important that plans should be submitted for approval, and
“that not only the erection of buildings, but more especially
“the drainage and the proper construction of closets, should
“be carried out under the supervision of the Surveyor.
“Hitherto, building bye-laws have only applied to Crick, but,
“now that less stringent Model Bye-Laws have been issued
“by the Local Government Board for rural districts, I would
“strongly recommend that bye-laws based on these be
“prepared and, after receiving the approval of the Local
“Government Board, be made applicable to the whole of the
“district.”

CHARLES E. PAGET,

County Medical Officer of Health.

County Hall, Northampton,

May, 1903.

LIST OF DISTRICT MEDICAL OFFICERS OF HEALTH FOR 1903.

DISTRICT.	MEDICAL OFFICER OF HEALTH.	RESIDENCE.
Urban:—		
Brackley (Borough) ...	J. S. Fenton, M.D., D.P.H. ...	Brackley
Daventry (Borough) ..	C. E. Oldacres, M.R.C.S. ...	Daventry
Higham Ferrers (Borough) ...	J. Crew, M.R.C.S., J.P. ..	Higham Ferrers
Desborough ...	H. Gibbons, M.B. ...	Desborough
Finedon ...	H. Burland, M.R.C.S. ...	Finedon
Irthlingborough. .	W. Robb, M.B. ...	Irthlingborough
Kettering ...	J. W. Dryland, M.R.C.S., J.P. ...	Kettering
Oundle ...	B. R. Turner, M.B. ...	Oundle
Raunds ...	W. Mackenzie, L.R.C.P. ...	Raunds
Rothwell ...	J. More, M.D. ...	Rothwell
Rushden ...	F. H. Morris, M.D. ...	Wellingborough
Wellingborough... ..	W. W. Clark, M.D., J.P. ...	Wellingborough
Rural:—		
Brackley ...	G. N. Stathers, M.R.C.S., D.P.H. ...	Brackley
Brixworth ..	E. M. Knott, M.R.C.S. ...	Brixworth
Crick ...	G. Wilson, M.D., D.P.H. ..	Warwick
Daventry ...	A. R. Darley, M.D. ...	West Haddon
Easton-on-the-Hill	T. P. Greenwood, M.R.C.S. ..	Stamford
Gretton ...	J. E. O'Connor, M.B., D.P.H. ...	Kirby Muxloe, Leicester
Hardingstone ...	G. H. Percival, M.B. ...	Northampton
Kettering ...	J. W. Dryland, M.R.C.S. J.P. ...	Kettering
Middleton Cheney	J. I. Johnson, L.R.C.P. ...	Sulgrave, Banbury
Northampton ...	G. H. Percival, M.B. ...	Northampton
Oundle ..	C. N. Elliott, M.B. ...	Oundle
Oxendon ...	T. A. Durrant, M.R.C.S. ...	Market Harborough
Potterspury ...	T. S. Maguire, M.D. ...	Stony Stratford
Thrapston ...	C. N. Elliott, M.B. ...	Oundle
Towcester ..	C. Simpson, M.B. ...	Towcester
Wellingborough... ..	F. H. Morris, M.D. ...	Wellingborough

SUMMARY OF REPORTS OF THE DISTRICT
MEDICAL OFFICERS OF HEALTH.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Brackley Borough.	<p>(a) Small amount of infectious sickness.</p> <p>(b) Scheme for an Isolation Hospital under consideration.</p> <p>(c) Some houses unfit for human habitation.</p>
Daventry Borough.	<p>(a) Rather high General Mortality.</p> <p>(b) Severe epidemic of Whooping Cough.</p> <p>(c) Scheme sanctioned for improving the supply of water to the town.</p>
Higham Ferrers Borough.	<p>(a) Low General and Infantile Mortality.</p> <p>(b) Small amount of infectious sickness.</p> <p>(c) Recommendation that Scavenging should be done entirely by Local Authority's own men.</p> <p>(d) Water Scheme, in conjunction with Rushden Urban District, now in hand.</p>
Desborough Urban.	<p>(a) Low General and Infantile Mortality.</p> <p>(b) Outbreak of Enteric Fever, in large part due to the drinking of water from a shallow well liable to pollution.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	<ul style="list-style-type: none"> (c) Prevalence of Whooping Cough and Influenza. (d) Want of an Isolation Hospital. (e) Some increase in Vaccination and Re-Vaccination. (f) Increase of Public Water Supply in hand. (g) Improvement of Sewage Disposal Works.
Finedon Urban.	<ul style="list-style-type: none"> (a) Low General, but high Infant, Mortality. (b) Serious outbreak of Enteric Fever due to polluted water supply. (c) Inspection of new drains strongly urged. (d) Some increase in Vaccination and Re-Vaccination. (e) Progress being made with new water scheme.
Irthlingborough Urban.	<ul style="list-style-type: none"> (a) Very small amount of Zymotic Sickness. (b) No Isolation Hospital accommodation. (c) High Mortality from Respiratory diseases. (d) Improvement in Scavenging arrangements. (e) Scheme for a Public Water Supply prepared. (f) Progress made in the Sewerage and Sewage Disposal scheme.

NAME OF DISTRICT	PROMINENT FEATURES OF REPORT.
Kettering Urban.	<ul style="list-style-type: none"> (a) Low General Mortality. (b) Provision for treatment of Phthisis patients under consideration by Board of Guardians. (c) Provision made for isolating Small Pox cases. (d) Refuse Destructor in course of construction. (e) Extension of Sewers effected, and further extension required. Additional land at the Sewage Disposal works is consequently very necessary for filtration purposes.
Oundle Urban.	<ul style="list-style-type: none"> (a) Very low Birth-rate, and low General Mortality. (b) Outbreak of Measles of mild type. (c) No Isolation Hospital, but a Hospital Tent purchased. (d) Considerable amount of Re-Vaccination.
Raunds Urban.	<ul style="list-style-type: none"> (a) Low General Mortality. (b) Considerable prevalence of Whooping Cough and Influenza. (c) Suitable houses for working-classes needed. (d) Flushing of sewers improved. (e) Public water supply greatly needed.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Rothwell Urban.	<ul style="list-style-type: none"> (a) Low General Mortality. (b) Extensive epidemic of Measles. (c) Completion of public Water-works. (d) New Cemetery nearing completion.
Rushden Urban.	<ul style="list-style-type: none"> (a) Low General Mortality. (b) Some prevalence of Scarlet Fever, and considerable mortality from Whooping Cough. (c) Scheme of Water Supply in hand.
Wellingborough Urban.	<ul style="list-style-type: none"> (a) Low General Mortality. (b) Limited outbreak of Small Pox. (c) Some prevalence of Scarlet Fever of mild type. (d) Recommendation to make a separate hospital for Small Pox cases.
Brackley Rural.	<ul style="list-style-type: none"> (a) Low infantile mortality. (b) Considerable prevalence of Scarlet Fever. (c) Provision of an Isolation Hospital under consideration. (d) No Factories in the District. (e) Water Supply to Charlton made, and for Hinton under consideration.
Brixworth Rural.	<ul style="list-style-type: none"> (a) Comparatively high General Mortality.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Crick Rural.	<p>(b) Some prevalence of Scarlet Fever, and severe outbreak of Diphtheria at Spratton.</p> <p>(c) Measles epidemic at Pitsford and East Haddon.</p> <p>(d) Many wells closed at Brixworth, and the protection of others under consideration.</p> <p>(e) Isolation Hospital recommended.</p>
Daventry Rural.	<p>(a) Comparatively low General and high Infantile Mortality.</p> <p>(b) Low Zymotic Sickness and Mortality rates.</p> <p>(c) Building Bye-laws recommended for whole of the district.</p> <p>(a) Lower General and Infantile mortality.</p> <p>(b) Prevalence of Measles and Whooping-Cough.</p> <p>(c) Long Buckby Water Scheme delayed on account of land-purchase difficulties, and scheme for Badby prepared.</p> <p>(d) Engineer appointed to prepare schemes for dealing with Sewage in six Parishes.</p>
Easton-on-the-Hill Rural.	<p>(a) High General Mortality.</p> <p>(b) Some Privy vaults still existing, which ought to be done away with.</p>
Gretton Rural.	<p>(a) Low General Mortality.</p> <p>(b) Abolition of privy-pits strongly urged.</p>

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Hardingstone Rural.	(a) Low General and Infantile mortality.
	(b) Serious outbreak of Small-pox at Wootton.
	(c) Water supplies unsatisfactory at Little Houghton and Wootton: good supplies made to Denton and Brafield, and improvements at Hackleton and Great Houghton.
	(d) Extensions of Sewers at Little Houghton and Collingtree; scheme for sewage disposal at Brafield nearly completed, and schemes for Cogenhoe, Great Houghton, and Yardley Hastings in preparation.
	(e) Pollution of river by a fell-mongering business.
Kettering Rural.	(a) Low General and Zymotic Mortality.
	(b) Pytchley Water Scheme completed, that for Burton Latimer and other places in hand.
	(c) Scheme for Sewage Disposal at Burton Latimer in hand.
	(d) Increase of Vaccination and Re-Vaccination.
	(e) Model Bye-Laws adopted for the whole district.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Middleton Cheney Rural.	(a) High General Mortality for a Rural District.
	(b) Extensive epidemic of Scarlet Fever.
	(c) Temporary provision made in order to isolate Small Pox cases.
Northampton Rural.	(a) Low General Mortality.
	(b) Epidemic of Scarlet Fever at Duston.
	(c) Serious outbreak of Enteric Fever in the Borough of Northampton, due to contaminated milk from a dairy at Upton.
	(d) Sewage Scheme for Bugbrooke in hand.
	(e) Want of an Isolation Hospital.
Oundle Rural.	(a) Higher birth-rate than in any year since 1894.
	(b) Loan sanctioned for erection of an Isolation Hospital.
	(c) Considerable amount of re-vaccination done.
	(d) Scarlet-fever prevalent at Nassington during greater part of the year.
	(e) Epidemic of Measles at Glapthorn.
	(f) Single imported case of Small Pox at Yarwell.
Oxendon Rural.	(a) High General Mortality, due to large mortality among

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
	aged persons, but low Infantile Mortality.
	(b) Small amount of Infectious Sickness.
	(c) Sewage Disposal at Welford in hand.
	(d) Want of Isolation Hospital Accommodation.
Potterspury Rural.	(a) High General Mortality for a Rural District.
	(b) No Isolation Hospital.
	(c) Extensive prevalences of Measles and Whooping Cough.
	(d) Cottages at Paulerspury and Hartwell condemned as unfit for habitation.
Thrapston Rural.	(a) Outbreak of Diphtheria at Brigstock; otherwise, only a small amount of zymotic sickness.
	(b) Improved water supply to Woodford, and scheme in hand at Brigstock.
	(c) New Sewage Disposal Works completed at Thrapston and Islip, and schemes in hand for Ringstead and Stanwick.
	(d) Need of an Isolation Hospital, and Disinfecting Apparatus for bedding and clothing.
Towcester Rural.	(a) Some prevalence of Scarlet Fever of mild type.
	(b) Towcester Sewage Farm now in working order.

NAME OF DISTRICT.	PROMINENT FEATURES OF REPORT.
Wellingborough Rural.	(c) Water Supplies to Gayton and Blakesley completed, that for Litchborough in abeyance.
	(d) Hospital Tents provided.
	(e) Fair increase in the amount of Vaccination of infants.
	(a) Low General and Infantile Mortality.
	(b) Increase of Vaccination.
	(c) Sewage Disposal of several villages under consideration or in hand.
	(d) Site for an Isolation Hospital been selected.
	(e) Churchyard at Bozeat ordered to be closed.
	(f) Outbreak of Scarlet-fever at Irchester.



State of Oregon, County of Multnomah, ss.

I, the undersigned, Judge of the Circuit Court of the County of Multnomah, do hereby certify that the following is a true and correct copy of the original of the same as the same appears from the records of the County of Multnomah, Oregon.

Witness my hand and seal of office at the City of Portland, Oregon, this _____ day of _____, 19____.

Judge of the Circuit Court of the County of Multnomah, Oregon.

Notary Public for the County of Multnomah, Oregon.

Notary Public for the County of Multnomah, Oregon.

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VITAL STATISTICS DURING 1902.

Table I.

SANITARY DISTRICTS. I.	Population estimated to middle of 1902.	BIRTHS.		Total Deaths Registered in the Districts.				Total Deaths in Institutions in the Districts.	Deaths of Non-residents registered in Public Institutions in the Districts.	Deaths of Residents in Public Institutions beyond the Districts (except Berry Wood Asylum).	Nett Deaths at all Ages belonging to the Districts.		Area of Districts in Acres.	At Census of 1901.				
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.†		Number.	Rate.‡	Total Population at all Ages.	No. of inhabited Houses.	Average No. of persons per House.
				Number.	Rate per 1,000 Births registered.	Number.	Rate †											
URBAN—																		
BRACKLEY (BOROUGH) ...	2,467	68	27.5	6	88.2	42	17.0	15	13		29	11.7	3,489	2,467	548	4.5		
DAVENTRY (BOROUGH) ..	3,780	70	18.5	10	142.8	69	18.2	22	16		53	14.0	3,633	3,780	869	4.3		
HIGHAM FERRERS (BOROUGH)	2,540	56	22.0	3	53.5	26	10.2				26	10.2	1,945	2,540	555	4.5		
DESBOROUGH ...	3,671	101	27.5	5	49.5	34	9.2				34	9.2	2,400	3,573	748	4.7		
FINEDON ...	4,214	155	36.7	23	148.3	48	11.3				48	11.3	3,661	4,129	853	4.8		
IRTHLINGBOROUGH ...	4,526	158	34.9	21	132.9	60	13.2				60	13.2	3,722	4,314	896	4.8		
KETTERING ...	29,000	887	30.5	100	112.7	356	12.2	49	11		345	11.8	2,814	28,653	5,659	5.0		
OUNDE ...	2,404	29	12.0	2	68.9	40	16.6	14	12		28	11.6	2,228	2,404	512	4.7		
RAUNDS ...	4,031	115	28.5	12	104.3	48	11.9			2	50	12.4	4,460	3,811	832	4.5		
ROTHWELL ...	4,293	117	27.2	16	136.7	52	12.1	3			52	12.1	3,638	4,193	902	4.6		
RUSHDEN ...	12,961	407	31.4	50	122.8	133	10.2				133	10.2	3,777	12,453	2,492	5.0		
WELLINGBOROUGH ...	19,400	438	22.5	56	127.8	221	11.3	32	5		216	11.1	4,265	18,412	3,873	4.7		
Totals and Means for Combined URBAN DISTRICTS ...	93,287	2,601	27.88	304	116.87	1,129	12.10	135					40,032	90,729	18,739	4.8		
RURAL—																		
BRACKLEY ...	7,182	162	22.5	13	80.2	97	13.5				97	13.5	42,440	7,182	1,818	3.9		
BRIXWORTH ...	11,820	271	22.9	24	88.5	177	14.9	25	11		166	14.0	63,647	11,829	2,876	4.1		
CRICK ...	2,280	55	24.1	8	145.4	33	14.4				33	14.4	18,547	2,284	601	3.8		
DAVENTRY ...	13,425	292	21.7	24	82.1	179	13.3				179	13.3	60,877	13,425	3,275	4.0		
EASTON-ON-THE HILL ...	1,462	45	30.7	5	111.1	27	18.4			1	28	19.1	6,341	1,462	353	4.1		
GRETTON ...	1,550	35	22.5	2	57.1	15	9.6				15	9.6	12,310	1,563	372	4.2		
HARDINGSTONE ...	7,846	177	22.5	11	62.1	94	11.9	4			94	11.9	32,542	7,846	1,889	4.1		
KETTERING ...	12,000	303	25.2	28	92.4	140	11.6			5	145	12.0	49,337	11,674	2,623	4.4		
MIDDLETON CHENEY ...	2,414	65	26.9	3	46.1	37	15.3				37	15.3	13,888	2,414	625	3.8		
NORTHAMPTON ...	6,420	139	21.6	17	122.3	186	28.9	121	121		65	11.9	16,228	6,420	1,290	4.2		
OUNDE ...	6,552	229	34.9	12	52.4	79	12.0			12	91	13.8	58,677	6,859	1,727	3.9		
OXENDON ...	4,202	90	21.4	6	66.6	66	15.7			6	72	17.1	34,491	4,202	1,084	3.8		
POTTERS PURY ...	5,304	138	26.0	9	65.2	79	14.8	8			79	14.8	19,914	5,372	1,282	4.1		
THRAPSTON ...	10,282	257	24.9	28	108.9	163	15.8	12			163	15.8	36,836	10,348	2,453	4.2		
TOWCESTER ...	10,608	238	22.4	19	79.8	138	13.0	10			138	13.0	42,457	10,720	2,633	4.0		
WELLINGBOROUGH ...	13,350	356	26.6	22	61.7	146	10.9				146	10.9	33,115	13,156	3,033	4.3		
Totals and Means for Combined RURAL DISTRICTS ...	116,697	2,852	24.43	231	80.99	1,656	14.19	180					541,647	116,756	27,935	4.1		
Totals and Means for ADMINISTRATIVE COUNTY ...	209,984	5,453	25.96	535	98.11	2,785	13.26	315	†63		2,722	12.96	581,679	207,485	46,674	4.4		

* Rates in Columns 4, 8, and 13, calculated per 1,000 of estimated population. † Berry Wood Asylum population excluded for purposes of this calculation.
 ‡ Deaths in Berry Wood Asylum situate in Northampton Rural District, and in Northampton County Borough Infectious Diseases Hospital situate in Brixworth Rural District, of persons not belonging to the Administrative County.
 NOTE.—The deaths included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the Districts. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10, and the addition of the number in Column 11.
 By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.
 The "Public Institutions" taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses, and lunatic asylums.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1902.

Table III.

URBAN SANITARY DISTRICTS.	AGES OF CASES NOTIFIED.							NUMBER AND CLASS OF CASES NOTIFIED.											NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.																		
	At all Ages.	Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards.	Small Pox.	Cholera.	Dysentery.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Bubonic Fever.	Relapsing Fever.	Continued Fever.	Intermittent Fever.	Plague.	TOTALS	Small Pox.	Cholera.	Dysentery.	Membranous Group.	Erysipelas.	Scarlet Fever.	Typhus Fever.	Bubonic Fever.	Relapsing Fever.	Continued Fever.	Intermittent Fever.	Plague.	TOTALS				
*BRACKLEY (BOROUGH) ...	9											1	7	1						9																	
DAVENTRY (BOROUGH) ...	6				2	2	2					5		1						6																	
HIGHAM FERRERS(BOROUGH)	4				1	2	1					3	1							4																	
DESBOROUGH ...	24		3	14	3	4					3	1	2	18						24																	
FINEDON ...	46		8	23	6	9						1	7	38						46																	
IRTHLINGBOROUGH ...	3		1	1		1						1		2						3																	
KETTERING ...	101	1	23	20	16	39	2			21	3	41	24	8				4	101		7				20		8									35	
OUNDLE ...	10		1	2		5	2				1	7	2							10																	
RAUNDS ...	11		4	2	1	3	1				3	2	2	2	2					11																	
ROTHWELL ...	12		3	4	2	3						2	10							12																	
RUSHDEN ...	43		8	14	10	9	2				4	8	18	13						43																	
WELLINGBOROUGH ...	79	4	11	25	10	28	1	9		1	23	38	7				1		79	9					4											13	
TOTALS ...	348	5	62	105	51	105	11	9	33	6	94	111	50				5		348	9	7				24		8								48		

* Ages not given.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1902.

Table III.

RURAL SANITARY DISTRICTS.	AGES OF CASES NOTIFIED.							NUMBER AND CLASS OF CASES NOTIFIED.											NUMBER AND CLASS OF CASES REMOVED TO HOSPITAL.																				
	At all Ages.	Under 1	1 to 3	3 to 10	10 to 25	25 to 65	65 and upwards	Small Pox.	Cholera.	Diphtheria.	Membranous Oozep.	Erysipelas.	Scarlet Fev.	Typhus Fev.	Bacterial Fev.	Relapsing Fev.	Continual Fev.	Puerperal Fev.	Plague.	TOTALS	Small Pox.	Cholera.	Diphtheria.	Membranous Oozep.	Erysipelas.	Scarlet Fev.	Typhus Fev.	Bacterial Fev.	Relapsing Fev.	Continual Fev.	Puerperal Fev.	Plague.	TOTALS						
BRACKLEY ...	141		34	88	11	7	1					5	135	1						141																			
BRIXWORTH ...	88		12	44	7	22	3		25		23	36		4						88		13			4													17	
CRICK ...	11		1	8	1	1			6			4						1		11																			
DAVENTRY ...	67	1	9	35	6	15	1	1	7		8	47		4						67																			
EASTON-ON-THE-HILL ...	5		2	3								5								5					5													5	
GRETTON ...	12		1	9	1	1			1		1	10								12																			
*HARDINGSTONE ...	59							17	1		7	29		4			1		59	20					1													21	
KETTERING ...	28		7	4	3	12	2		3		13	11		1					28						8		1											9	
*MIDDLETON CHENEY ...	69											69							69																				
*NORTHAMPTON ...	31								2		4	23		2					31																				
OUNDLE ...	37		4	22	3	8		1	6	2	3	23		2					37	1							1											2	
OXENDON ...	6				1	5					5			1					6																				
*POTTERS PURY ...	15								4		3	7		1					15																				
THRAPSTON ...	30		4	22	2	2			7		2	20		1					30			5																5	
TOWCESTER ...	35		16	11	4	4					3	30		1			1		35																				
WELLINGBOROUGH ...	69	1	21	34	6	7			2		16	42		9					69																				
TOTALS ...	703	2	111	280	45	84	7	19	64	2	93	491		31			3		703	21	18				18		2										59		

* Ages not given.

† Three on suspicion. ‡ Temporary hospital.