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ANNUAL REPORT

For the Year 1893,

ON THE

Urban Sanitary District

OF

STRATFORD-ON-AVON

BY

ARTHUR THOMSON, M.B., D.P.H., Camb.,

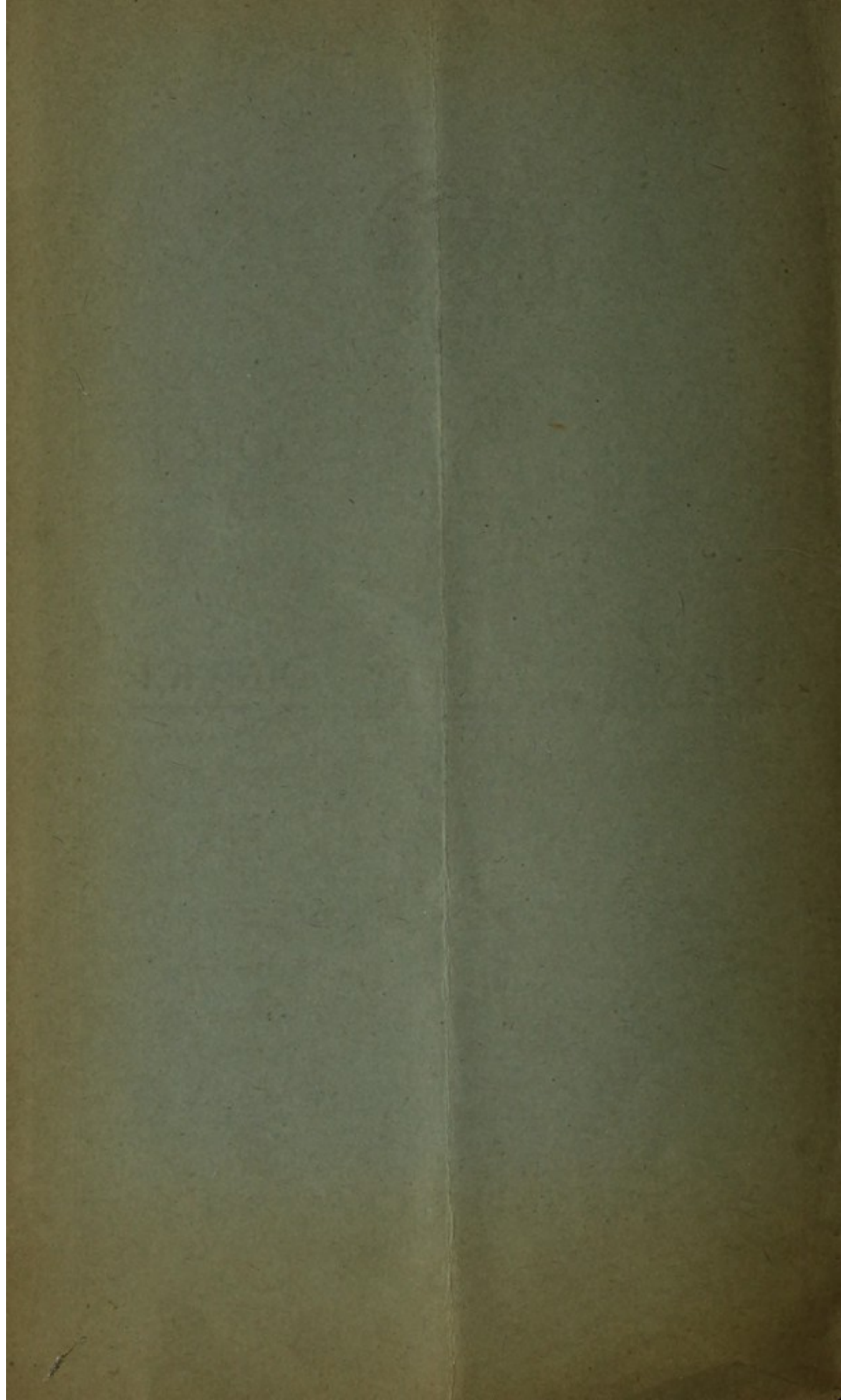
Medical Officer of Health to the Urban and Rural Sanitary

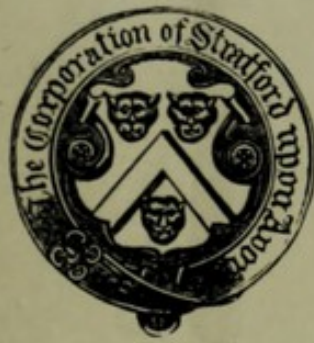
Authorities of Stratford-on-Avon.

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TO THE URBAN SANITARY AUTHORITY
OF
STRATFORD-ON-AVON.

MR. CHAIRMAN AND GENTLEMEN,

I beg to present to you the ANNUAL REPORT on the
Health of the Borough for the year 1893.

The Report is framed on the lines of previous reports,
and on perusal will, I think, be found to give evidence that the
active interest in Sanitation, and the progress in that direction, of
preceding years is maintained.

STRATFORD-ON-AVON

URBAN SANITARY DISTRICT.

AREA IN ACRES, 3,865.

TOTAL RATEABLE VALUE, £34,738.

POPULATION in 1871	..	...	...	...	7,221
„ 1881	...	...	...	...	8,053
„ 1891	...	...	...	...	8,318
ESTIMATED POPULATION, 1893	...	...	...	...	8,378

STATEMENT OF MORTALITY AND SICKNESS.

MORTALITY RATES.—It is obviously necessary, in order to make an estimate of mortality rates correctly, that the number of the population under consideration should be accurately known; and, owing to the fact that a census has been taken so recently as 1891, there is little doubt that the estimated population for 1893 as given above is practically correct. When, however, the statistician has to make his calculations when seven, eight, or nine years have elapsed since a census enumeration, the value of his statistics is impaired by the fact that it is impossible for him to be sure of the data on which such statistics are founded. This is a great argument in favour of a quinquennial census instead of the present ten years' system. I am induced to make these preliminary remarks by observing that the death-rates which were estimated during the decade 1881-1891 for the Borough are lower than was really the case. They were estimated on the assumption that the population was increasing between 1881 and 1891 in the same ratio as it had increased between 1871 and 1881, but, as the figures given at the top of this page show, such an increase did not occur.

A.—TABLE OF DEATHS during the Year 1893, in the Urban Sanitary District of Stratford-on-Avon, classified according to DISEASES, AGES, and LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities. (Columns for Population and Births are in Table B.)	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	At all ages	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhs.	FEVERS.				Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	TOTAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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The Borough	123	19 4 3 5 35 57	Under 5	1</

B.—TABLE OF POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1893, in the Urban Sanitary District of Stratford-on-Avon; classified according to DISEASES, AGES, and LOCALITIES.

NAMES OR LOCALITIES adopted for the purpose of these Statistics; Public Insti- tutions being shown as separ- ate localities.	POPULATION AT ALL AGES.		Aged under 5 or over 5	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOW- LEDGE OF THE MEDICAL OFFICER OF HEALTH.																NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITAL.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Census 1891	Estim- ated to middle of 1893		Regis- tered Births.	FEVERS.								FEVERS.								FEVERS.								FEVERS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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State here whether "Notification of Infectious Disease" is compulsory in the District: Yes. Since when? January 1st, 1890. Besides the above-mentioned Diseases, insert in the columns with blank headings the names of any that are notifiable in the District, and fill the columns accordingly. None. State here the name of the Isolation Hospital used by the sick of the District. Mark the Locality in which such Hospital is situated; and if not within the District, state where it is situated: Copham's Hill Sanatorium, in the Rural Sanitary District of Stratford-on-Avon, for Scarlet Fever only. Bellevue Hospital, in the Urban Sanitary District of Stratford-on-Avon, for Smallpox.

A.I.—TABLE OF DEATHS during the Year 1893, in the Warwickshire portion of the Urban Sanitary District of Stratford-on-Avon, classified according to Diseases and Ages, and shewing also the Area and Population of such District, and the Births therein during the Year, together with Birth, Death, and Zymotic Rates, and the Rate of Infant Mortality.

DISTRICT.	AREA IN ACRES.	Population per Square Mile.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infant Mortality under 1 year. to Registered Births per 1000.	POPULATION AT ALL AGES.		MORTALITY FROM ALL CAUSES AT SUBJOINED AGES							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF PERSONS UNDER FIVE YEARS OF AGE.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Stratford-on-Avon Urban Sanitary District.	3865	1387	28·1	16·7	·9	80·5	8318	8378	236	156	194	3	8	42	80	Under 5

THE DEATH-RATE for 1893 is 16·7 per 1,000.

This is the "corrected" rate, and in estimating it I have deducted from the gross number of deaths, those of persons dying in the Urban District who belonged outside it. The fact that the Union Workhouse and the Hospital are situated in the Borough renders this correction necessary.

The gross number of Deaths is 156 (Males 74, Females 82), and of these I have deducted 16.

The following are the Death-rates which have been estimated for the Urban District since 1880 :

Year.....	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Death Rate...	18·7	14·0	14·9	13·7	20·4	14·4	13·2
Year.....	1887.	1888.	1889.	1890.	1891.	1892.	1893.
Death Rate...	12·6	14·8	14·3	18·4	18·03	21·07*	16·7

* Uncorrected.

THE INFANTILE MORTALITY of the year is 80·5 per 1,000 registered Births.

This is highly satisfactory, as the average of this rate in the Urban District is a little over 100 per 1,000 registered births, which is itself a satisfactory rate of Infantile Mortality.

There is no more certain index of the sanitary condition of district than the rate of Infantile Mortality, inasmuch as infants are particularly susceptible to insanitary conditions. And this prominently is the case when the season has been unusually one of high temperature, as was the case in the past year.

There were 19 deaths of infants in the year and 236 births registered of which 111 were male and 125 female.

THE ZYMOTIC DEATH-RATE is ·9 per 1,000. There have been eight deaths from zymotic disease of which one was from diphtheria, one from enteric fever, five from diarrhoea, and one from puerperal fever.

A TABLE giving the Death-rate, Birth-rate, Zymotic Death-rate and the Infantile Mortality, from 1884 to 1893.

YEAR.	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
No. of Deaths ...	185	144	122	115	144	145	162	149	177	156
Death-rate ...	20·4	14·4	13·2	12·6	14·8	14·3	18·4	18·03	21·07	16·7
No. of Births ...	252	225	245	220	219	214	187	232	195	236
Birth-rate ...	31·2	26·3	28·9	25·7	25·3	24·5	21·2	27·8	23·3	28·1
Deaths from Zymotic Diseases ...	18	8	1	8	7	4	12	7	15	8
Zymotic death-rate	2·1	·9	·1	·9	·8	·4	·3	·8	1·6	·9
Deaths of Infants	31	26	20	19	22	27	29	22	27	19
Infantile Mortality	122	115	81	86	100	126	155	94	138	80·5

STATEMENT OF MORTALITY AND SICKNESS.

SMALL POX.—The prevalence of this disease in the vicinity of Stratford-on-Avon during the year led to its importation into the Borough, and the total number of cases coming under observation has been eight, of which three occurred in vagrants at the Union Workhouse. The first case reported in the year was in the person of a child aged two years, a member of a family of tramps detained at the Workhouse by reason of illness of the mother of the family. This patient was isolated in the infectious wards of the Workhouse, and disinfection of the building he sickened in was carried out, as also was re-vaccination when deemed necessary.

Ten days afterwards another member of the same family (who had all been quarantined in a ward apart from the first case) developed the disease, and was removed to the ward occupied by the first case.

The infectious wards of the Workhouse are quite unsuitable for the isolation of small pox, as they are too near the main building and also to the female vagrant wards.

Fortunately, by means of the praiseworthy efforts of the union workhouse officials, no extension occurred to the inmates of the main buildings, or was carried outside the Workhouse grounds.

In February a case was reported in Brewery Street. The patient, a woman, was removed to a double cottage about $2\frac{1}{2}$ miles from the town, not far from Billesley. No other house was within some hundreds of yards. The patient was attended by her husband who had already had the disease, and the remainder of the family were housed in the adjoining cottage, which was fenced off from that occupied by the patient. Re-vaccination, and disinfection of premises in Brewery Street were at once carried out.

Eleven days afterwards an infant child of the sick woman developed the disease, but having been vaccinated, a mild form of the complaint was only experienced in this case.

In March an adult male tramp came to the Workhouse sickening with small pox. He was isolated in the infectious ward of the institution and made a good recovery.

In June an unvaccinated child in Meer Street was removed to Bellevue Hospital on suspicion. He subsequently confirmed the diagnosis by developing the disease. He was vaccinated on the first day he was seen, and this seemed to modify favourably the course of the disease. Eleven days after an infant in the same family was sent into hospital with the disease.

Immediately after these cases a young man arrived in Stratford from Birmingham with the disease upon him. He was seen very shortly after his arrival, and sent to hospital at once. Re-vaccination of other occupants of the house he visited in Stratford was refused, but, luckily, no extension of the disease occurred.

It is a matter of congratulation that all these cases above-mentioned were seen by medical men as soon as they occurred, and so were promptly dealt with.

SCARLET FEVER.—This zymotic has been present in a limited degree throughout the year. The type, as a rule, has been mild, and this has increased the difficulty of tracing infection in individual cases. For it is naturally hard to understand by the general public that a child who has had a little malaise for a day or two, and who has not complained of the throat, and on whom no rash has been seen, has had the disease. Consequently such cases are never reported, and the links in the chain of infection are thus lost. In all 25 cases have been reported, the details of which are as follows :—

January, six cases. One in Bull Street, two in West Street (in the same house), two in Shakespeare Street (in the same house), and one in Guild Street.

March, two cases. One in Mansell Street, and one in Henley Street.

April, three cases. One in Clopton Lane, one in West Street, and one in the Union Workhouse.

May, two cases. One in a Court in Shakespeare Street, and one in Chapel Street.

June, five cases. One in Mansell Street, one in Guild Street, one in Greenhill Street, one in Arden Street, and one at Bishopston.

August, one case, at the Hospital

October, four cases. All from one house in Guild Street.

December, two cases. One in Birmingham Road, and one on the Shottery Road.

In 1891 there were 19 cases reported and in 1892 there were 25 cases, so it would appear that the above 25 cases do not represent an exceptional number. Of these 25 cases 23 were removed for isolation to Copham's Hill Sanatorium.

DIPHTHERIA.—This disease has been more prevalent in the past year in the Borough than in the preceding three years, and this has been a common experience throughout the country. Altogether sixteen cases have been reported to me in the twelve months—one of which cases terminated fatally.

Following are the details of the cases, inspection of which will show that the majority of the cases occurred in the hot, dry months of summer, when decomposition of organic matter is most active, and when, by reason of absence of rain, yard gulleys and house drains receive least flushing.

Not very much precise knowledge exists as to the causation of the disease, but that it is a filth disease and preventible by sanitation is very certain. An eminent authority has demonstrated that polluted water is not an agent in its production, but I have known its outbreak to occur more than once in districts where, by reason of the great snow-fall, the shallow wells of the rural population are flooded with snow-water in the spring derived from melted snow which has throughout the winter been subject to filth contamination.

CASES OF DIPHTHERIA REPORTED IN 1893.

June, six cases. Two in College Street (in the same family), one in College Lane, two in Greenhill Street (in the same family), and one in Shipston Road.

July, four cases. One in College Street, two in West Street (in the same family), and one in Wellesbourne Grove.

October. One case in High Street.

November, three cases. Two in Ryland Street (in the same family), and one in Chapel Street.

December, two cases. One in West Street and one in Bridge Street.

As will be noticed, it frequently happened that more than one case occurred in a house, and this might have been avoided if it had been possible to isolate the first case that occurred on any premises.

ENTERIC OR TYPHOID FEVER.—Five cases of this disease were notified in the year, of which one was fatal.

The first case notified was in May, the patient being a gentleman who sickened with the complaint in Stratford, after having received the infection in a Northern town.

In June two cases were reported. The first case was in Ely Street, and the drinking water was suspected as the source of infection as it proved to be polluted. This case died in Hospital. The second case was also in Ely Street, and, as the patient had only arrived four days previously from Birmingham, the infection was clearly imported.

In August a case occurred in Maidenhead Road. The patient, I think, received infection from polluted water on the premises where he was employed. There was no other plausible cause to be ascertained.

In October a case was reported in Ely Street, and the patient gave a history of working among offensive drains.

ERYSIPELAS.—During the year ten cases of Erysipelas were reported of which the majority occurred in the early winter months. Though this is a zymotic disease, little interest attaches to it as compared with the more important diseases of the same class, but it is worthy of being notifiable from its possible association with puerperal cases. These remarks, of course, apply to erysipelas as a disease among the general public, in the wards of a hospital where surgical cases are present, it is a most dreaded disease.

DIARRHŒA AND DYSENTERY.—Five deaths have occurred from Diarrhœa. Considering the great heat of the past summer months, and the abundance of fruit, which last was of a forced and rapidly decaying nature, this small mortality from Diarrhœa is highly satisfactory.

The especial causation of Diarrhœa requires a certain degree of temperature of the soil, and a degree of saturation of the soil with organic matter (filth) to afford pabulum for the micro-organisms concerned in the production of the disease. The first factor has been maintained for an unusually long time in the past year, and was arrived at unusually early in the season, and doubtless the absence of the second condition occasioned the low mortality.

INFLUENZA.—During the last three months of the year this zymotic disease was prevalent in the Borough. The type was less malignant than has been commonly experienced in the past. Three deaths in the last quarter of the year were certified as due to Influenza, and one death was returned in June as owing to the same disease. So far as I am aware the complaint has been almost entirely affecting adults, and has not prevailed among children.

CANCER.—Fourteen deaths are returned as due to one or other of the tumour growth diseases commonly grouped under this heading.

Much interest attaches to the question as to whether cancer is on the increase, and in considering this it has to be remembered that obscure malignant disease of internal organs, when it exists, is probably more frequently discovered nowadays than was the case formerly.

The interest to the sanitarian in the causation of cancer lies in the fact that, if as asserted, the tissue changes producing cancer are due largely to the presence of parasitic protozoa in the tissues, it is of great importance to ascertain what food may be the means of introducing the parasites to the tissues, and what preventative medicine can do to exclude the cause of the disease,

PHTHISIS.—Ten deaths have occurred in the year from phthisis. There exist two important checks which a Sanitary Authority can maintain over the causation of this disease. The first lies in the supervision of the dairy cattle furnishing the milk supply of the district. There is every reason to believe that milk from a tubercular cow may set up tubercular intestinal disease in a human being. The efficient supervision of dairies and cowsheds in the Stratford district acts as a safeguard in this respect. With regard to the second check referred to, this involves the inspection of slaughtered cattle, and it is only in a district where a public abattoir exists that such inspection can be efficiently done.

ACTION UNDERTAKEN TO PREVENT SPREAD OF DISEASE.

I have to thank those gentlemen practising medicine in the borough for the promptitude with which they have notified cases of infectious disease, and for their co-operation in dealing with such cases. It is to be regretted that the obligation of the Infectious Diseases (Notification) Act, 1889, requiring householders (as well as medical men) to report any case of infectious disease on premises occupied by them, is practically a dead letter in Stratford-on-Avon. If this were not the case much benefit might result by including in the number of those diseases at present notifiable, the diseases, measles and whooping cough. But, as the matter stands, little benefit would probably result from including these diseases, for only those cases seen by medical men would be reported, and these would constitute the minority of cases.

. Under the headings of "scarlet fever" and "small pox" an account will be found of the proportion of cases of these diseases which were isolated, and in appendix A, B, and C, details will be found of the newly-constructed Small Pox Hospital; of Copham's Hill Sanatorium; and of the proposed Hospital for Infectious Diseases, which will replace the hospital at Copham's Hill.

DISINFECTANTS.—The disinfectants supplied in infectious cases has been "Jeyes Fluid," which has the advantage of being non-poisonous. Fumigation with sulphurous acid gas has been done in all cases of infectious disease where deemed necessary, and white-washing and stripping of wall paper has been a routine practice. All disinfection has been personally supervised by the Sanitary Inspector, and has been most effectually done. It was found necessary in dealing with small pox to destroy articles which it was impossible to disinfect, but where this had to be done the goods destroyed were of little value.

SCHOOLS.—It was not necessary to close any School in the district on account of the prevalence of Infectious disease.

SANITARY WORK COMPLETED, CONTEMPLATED AND REQUIRED.

WATERWORKS.—During the year steps have been taken by the Corporation to acquire ownership of the gathering-ground from which the reservoir of Stratford-on-Avon derives its water supply. It is proposed to construct a second reservoir to supplement the present one. This additional reservoir will afford storage for the surplus water which hitherto has, for want of means to store it, run to waste. There is every probability that when this is done, the waterworks will be able to furnish the town with water throughout the driest seasons, and the complete control of the gathering-ground will ensure a high standard of purity in the water supplied.

Inspection of the Sanitary Inspector's report will show that the town-water supply is gradually superceding the use of well-water, for the routine practice is maintained of closing those wells whose water is condemned,

SEWERAGE AND DRAINAGE.—Under the direction of the Borough Surveyor, systematic flushing of the sewers has been done throughout the year, and in the hot weather attention was given to the road gulleys to maintain an efficient water seal in them. Also an additional number of sewer ventilating shafts were directed by your Sanitary Committee to be constructed.

Your Authority has had under consideration, in the course of the year, the question of Sewerage at Shottery, and plans and estimates for an outfall sewer and a sewage precipitation scheme on the "Ives" principle have received consideration, with the result that it was decided to construct an outfall sewer to the limit of the Corporation meadow, and to temporarily defer adopting any special means of dealing with the sewage.

FACTORY AND WORKSHOPS' ACT, 1891.—In section three of this Act it is specified the Medical Officer of a Sanitary Authority shall give written notice to the factory inspector of the district of the employment of any child, young person, or woman in a workshop, of which he becomes aware. In reference to this I pointed out to your authority that periodical inspection would be necessary to comply with this, as employers are not required to notify a medical officer of health respecting their employees.

It has not been found necessary during the year to deal with any workshops under section four of this act, apart from one instance where a sleeping apartment was used as a work room.

CANAL BOATS.—The canal traffic in the district is small. Reference to the Inspector's report will show the result of work done in this department.

DAIRIES AND MILKSHOPS.—I have satisfied myself by personal inspection that these are not, generally speaking, well adapted to carry out their purpose from a sanitary point of view. It would be a useful measure to insist that the water used in dairy work (for cleansing milk utensils, etc.), should be of guaranteed purity, and that milk should be stored only with pure air surroundings.

BAKEHOUSES.—No contravention of the requirements of the Act relating to these has come to my knowledge.

UN SOUND MEAT ETC.—In an instance where, in the opinion of your Sanitary Inspector, a number of hares offered for sale were unfit for human consumption, and objection was made by him, the hares were voluntarily given into the Inspector's custody, and no action was required. The only other instance coming under my notice in the year was in reference to a ham which the Inspector had decided to be unfit to be used as human food, and this opinion I endorsed. No further action was required in this case.

HOUSING OF THE WORKING CLASSES ACT 1890.—Under Sec. 30 of this Act I gave a certificate referring to a house situated in Sydney Court, Sheep Street, and action was consequently entered upon.

SALE OF FOOD AND DRUGS ACT.—In the report of the Sanitary Inspector reference will be found as to samples taken, etc.

SCAVENGING. — This work is carried out satisfactorily in the borough. In view of the possibility of cholera becoming prevalent in England in the coming year, efficient scavenging will constitute one of the most important safeguards.

VACCINATION.—The Vaccination Officer for the borough (Mr. Brook) has drawn up, at my request, the carefully compiled table constituting Appendix D. Reference to it will show that vaccination is most thoroughly carried out in the district, and that the population under the age of ten or twelve years are practically immune from any extension of smallpox among them.

In conclusion, Mr. Chairman and Gentlemen, let me express my best thanks for the consideration and courtesy with which those recommendations I am called upon to make in the discharge of my duty as your official have been received by you.

I am, Your Obedient Servant,

ARTHUR THOMSON, M.B. & C.M., D.P.H., CAMB.

Medical Officer of Health to the Urban and Sanitary
Authorities of Stratford-on-Avon.

4, Wood Street, Stratford-on-Avon,
January, 1894.

C.—SUMMARY OF SANITARY WORK done in the Inspector of Nuisances' Department during the year 1893, in the Urban Sanitary District of Stratford-on-Avon.

			Infectious and Obser- vations made.	Formal Notices by Authority.	Nuisances Abated after Notice.
Dwelling Houses and Schools.	Foul Conditions	...	41	23	39
	Structural Defects	...	29	14	24
	Overcrowding	...	4	4	4
	Unfit for Habitation	...	See M.O.H.'s Report.		
	Lodging Houses	...	12	—	—
	Dairies and Milkshops	...	24	1	1
	Cow Sheds	...	19	—	—
	Bakehouses	...	See M.O.H.'s Report.		
	Slaughter-houses	...	Regularly.		
	Canal Boats	...	8	—	—
House Drainage.	Ashpits and Privies	...	39	24	35
	Deposits of Refuse and Manure	...	3	3	2
	Water Closets	...	19	18	19
	Defective Traps	...	15	12	11
	No Disconnection	...	8	8	6
	Other Faults	...	9	5	9
	Water Supply	...	23	16	16
	Pigsties	...	1	1	1
	Animals improperly kept	...	1	1	1
	Offensive Trades (Horse Slaughtering)	...	2	2	2
	Smoke Nuisances	...	—	—	—
	Other Nuisances	...	4	4	4
	TOTALS	...	261	136	174

	NOS.
Seizure of unwholesome Food ...	—
Samples of Food taken for Analysis ...	—
„ „ found Adulterated ...	—
„ of Water taken for Analysis ...	23
„ „ condemned as unfit for use ...	16

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

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

	NOS.
Lots of Infected Bedding Stoved or Destroyed ...	2
Houses Disinfected after Infectious Disease ...	37
Schools „ „ „ ...	—
Prosecutions for not Notifying Existence of Infectious Disease ...	—
Convictions „ „ „ „ „ ...	—
Prosecutions for Exposure of Infected Persons or Things ...	—
Convictions „ „ „ „ „ ...	—

JOHN BROOK, Assoc. San. Inst.,

Sanitary Inspector.

APPENDIX D.

BOROUGH OF STRATFORD-ON-AVON.

RETURN shewing the number of Births registered, together with the number of such successfully vaccinated or otherwise disposed of between July 1st, 1892, and June 30th, 1893.

DISTRICT.	Number of Births.	Successfully Vaccinated.	Died Unvaccinated.	Postponed.	Left the District.	Remaining Unvaccinated.
Borough of Stratford-on-Avon ...	208	186	12	—	5	5

JOHN BROOK,

Vaccination Officer to the Stratford-on-Avon
Board of Guardians.

APPENDIX A.

PROVISION OF A HOSPITAL

FOR THE

ACCOMMODATION OF CASES OF SMALL POX,

BY THE

URBAN SANITARY AUTHORITY OF STRATFORD-ON-AVON (ACTING IN
CONJUNCTION WITH THE RURAL SANITARY AUTHORITY
OF STRATFORD-ON-AVON.)

In February, 1893, your Authority decided to adopt the plan of establishing a permanent hospital for the accommodation of smallpox, instead of having to resort, as had formerly been usual, to temporary expedients for isolation when the disease was actually present in the borough. And there is every probability that the hospital provided will prove in the long run not only vastly more effectual in the isolation of cases than any temporary expedient could ever be but will really be more economical. For there is always valuable time lost when the erection of tents or huts has to be done, and the disease gets consequently opportunity to gain a foothold, and, as a result, instead of the cost of maintenance and medical attendance being limited to a few patients, the number of these may be increased tenfold by a few days delay.

The building provided is of 8 beds capacity, and divided into two wards of 4 beds capacity each, but owing to the fact that a brick kitchen and laundry have also been built adjoining the main building it would be possible in an emergency to use as sick-rooms, two rooms in the main building provided originally as a kitchen and a nurses' room. So the hospital could be made to accommodate 12 patients if necessary. The hospital is constructed of corrugated iron, lined with felt and matchboarding and raised on brick piers.

The site occupied is one several hundred yards remote from any dwelling house, and within one mile of the town.

An unclimbable iron fence has been placed around the building at a distance of about 30 yards from the nearest point of the hospital. The main building has been painted a dark red with iron oxide paint, and an approach road has been constructed, and some shrubbery planted, giving the place a decidedly attractive appearance as compared with what usually obtains when a small hospital for smallpox is erected.

The heating apparatus of the wards consists in a Tortoise stove in each, and I have satisfied myself that it is possible to maintain a satisfactory temperature in frosty weather.

The chief difficulty in the administration of the hospital has been to obtain the services of a trustworthy and efficient matron, but, generally speaking, the management has been satisfactory, and the nursing efficient.

In accordance with the principle that it is always inadvisable to have a hospital generally known by the name of the disease for cases of which it is provided the hospital for smallpox has received the designation of "Bellevue Hospital."

The following regulations have been drawn up for the administration of the hospital :—

REGULATIONS OF BELLEVUE HOSPITAL.

1.—No visitors allowed to enter hospital grounds without written permit from M. O. H.

2.—No article of clothing and no personal property or hospital property are to be taken out of the hospital grounds without special permission in the case of each article.

3.—No one in the employ of the hospital is allowed to go outside the grounds without changing clothes and having washed.

4.—Clothes worn by employés *in* the hospital are not to be worn *outside* the grounds.

4.—Clothes worn by employés *while outside* the grounds are *not* to be worn into the wards, and are to be stored away from the wards.

6.—Tradesmen shall not be permitted to enter the gate, and shall in no instance leave at the hospital any returnable article, basket, or packing case.

7.—No milk-can belonging to any milk dealer shall be allowed to be sent inside the gate, the milk dealer shall in all cases empty the milk supplied to hospital into the hospital milk-can outside the premises.

8.—The Matron shall carry out the directions of the Medical Officer of Health as regards the general management of the hospital, and shall obey the directions of the physician in charge of any patient with respect to the nursing of such patient.

ARTHUR THOMSON,

Medical Officer of Health.

BELLEVUE HOSPITAL.

RETURN shewing the number of Small Pox Patients treated, and cost of maintenance.

Number of days the Hospital was occupied.	Number of patients treated	Cost per head per day.	Total Cost.
61	5	2s. 3 $\frac{3}{4}$ d.	£26 17s. 3d.

APPENDIX B,

COPHAM'S HILL SANATORIUM.

This isolation home for cases of Scarlet Fever from the Borough has been occupied all through the year with the exception of a few days.

There were five cases remaining under treatment in the hospital on January 1st, 1893, and during the year 24 cases were admitted, one of these being a case from the Rural District. On December 31st, 1893, there were three cases under treatment.

The average number of days for a patient to be resident has been in 1893, fifty-five.

There has been no fatal case of Scarlet Fever in the institution in the year.

The administration of the sanatorium is excellent, both as regards the nursing and attendance of inmates and as regards the care taken to prevent infection being carried outside.

APPENDIX C.

HOSPITAL FOR INFECTIOUS DISEASES

IN COURSE OF CONSTRUCTION BY THE

SANITARY AUTHORITIES OF THE URBAN AND RURAL DISTRICTS OF
STRATFORD-ON-AVON.

During the year your Authority finally arranged for the construction of a hospital to accommodate infectious cases (other than small-pox) from the Urban District, and the work of erecting the buildings will be entered upon, it is anticipated, early in 1894. The Hospital will be of twenty beds capacity, of which the Rural Sanitary Authority of Stratford-on-Avon will have the control of three-fifths, since that Authority has agreed to defray the cost of construction to the extent of three-fifths of the expense.

It is estimated that the Hospital will be provided at the rate of about £250 per bed.

The plans include—

- 1.—A twelve bed pavilion, divided into two wards of six beds capacity each. This ward-block will be kept for the isolation of cases of Scarlet Fever.
- 2.—Two separate ward-blocks of four beds capacity each. These will afford accommodation for cases of Diphtheria and Enteric Fever.
- 3.—An administrative block for the housing of nurses, cooking, laundry, etc.

Provision is also made for a mortuary, a steam disinfecting apparatus, and for a dressing-room with bath for convalescents about to be discharged from hospital.

The site selected for the Hospital is about a half-mile from the town, and quite remote from dwelling-houses and the highway.

An ambulance for the transport of patients to the Hospital has been already built, and is found to answer its purpose satisfactorily. It is indistinguishable from an ordinary brougham, which gives it the advantage of not being conspicuous.

This hospital will replace the Copham's Hill Sanatorium, which has been kept up by your Authority since 1887 as an isolation home for Scarlet Fever cases. The Sanatorium has fulfilled a most valuable purpose, but its usefulness is limited by its being unsuitable for the accommodation of more than one sort of infectious disease, and by reason of its inconvenient site.

