Borough of Luton.

REPORT OF MR. HORACE SWORDER,

THE MEDICAL OFFICER OF HEALTH,

For the Year ended 31st Day of December, 1894,

Presented to the Sanitary Committee on the 1st day of February, 1895, and ordered to be printed.

REPORT.

MEDICAL OFFICER OF HEALTH'S OFFICE,

GEORGE STREET, LUTON,

January 25th, 1895.

GENTLEMEN,

I beg to lay before you my Report for the year ended December 31st, 1894, being my Sixteenth Annual Report.

During the year 984 Births and 502 Deaths have been registered, equal to annual rates of 31·7 and 16·1 per 1000 respectfully. The excess of Births over Deaths amounted to 482.

There were	142	Deaths	under 1 year	
" "	82	"	between 1 and 5 years	
" "	19	"	" 5 " 15	"
" "	16	"	" 15 " 25	"
" "	134	"	" 25 " 65	"
" "	109	"	" 65 & upwards	

The Deaths were thus distributed:

Small Pox	0
Measles	15
Scarlet Fever	4
Diphtheria Croup	8
Whooping Cough	10
Fevers	1
Diarrhœa, &c.	12
Rheumatic Fever	1
Erysipelas	0
Pyœmia	1
Phthisis	44
Scrofula Struma	5
Bronchitis, Pneumonia, Pleurisy	81
Heart Disease	43
Cancer	21
Syphilis	1
Wasting Infantile	31
Convulsive do.	28
Hernia	1
Senile	39
Injuries	8
Bowel Disease	5
Urinary Organs	13
Nervous System, Paralysis Fits, &c.	42
Liver Disease	3
Suicide	5
Confinement, Puerperal Fever, &c.	3
Premature Birth	11
Influenza	4
Other Diseases	62
Total	502

OBSERVATIONS.

Zymotic Diseases.—Fifty deaths were referred to the 7 principal Zymotic Diseases, viz: 15 to Measles, 4 to Scarlet Fever, 8 to Diphtheria and Croup, 10 to Whooping Cough, 1 to Fevers, and 12 to Diarrhœa. Twelve of these deaths occurred in the 1st quarter, of which seven were referred to Measles; twenty-four occurred in the 2nd quarter, eight were referred to Measles, seven to Whooping Cough, and 5 to Diphtheria; eleven occurred in the 3rd quarter, of which ten were referred to Diarrhœa; only three occurred in the 4th quarter, and these were all referred to Diphtheria and Croup.

In the 1st qr.	there were	12	Zymotic deaths	with a rate	1·5	per 1000
" 2nd	"	24	"	"	3·0	"
" 3rd	"	11	"	"	1·4	"
" 4th	"	3	"	"	0·38	"

The Zymotic rate for the whole year was equal to 1·6 per 1000

Small Pox.—No case of small pox came to my knowledge during the year. In the 2nd quarter a Medical Officer of Health kindly wrote warning me of the return to Luton of a woman whose husband had been sent to a fever ward suffering from small pox, and who might herself very likely become the subject of the disease. Enquiries were made unsuccessfully, but a day or two after, the papers informed us that she had been safely locked up elsewhere on a charge of theft.

Our usual good fortune with regard to the dissemination of small pox, should not blind us to the fact that we are not quite prepared for an epidemic. Dr. Prestley, Medical Officer of Health to the Borough of Leicester, in a paper he read before the British Medical Association, at Bristol, expressed himself forcibly and well on this point. He said: "The present epidemic, 1892-4, has forcibly shown one thing—the utter unpreparedness of many authorities, urban and rural, for thus grappling with small pox. Tents, sheds, barns, shanties, all sorts and conditions of isolation hospitals, have been put up on any plots of land which could be got hold of; money has been spent lavishly, but not in all cases wisely. Indeed there has been an almost general stampede amongst sanitary authorities, no doubt in their laudable endeavours to act promptly! All this precipitate action has, as a rule, failed to stem the epidemic tides, so that it must be remembered in future that what is needed is:—(1) a notification act, well carried out, (2) an isolation hospital situated well away from inhabited houses, (3) efficient means of disinfection, (4) a carefully planned system of quarantine or medical inspection." By the term quarantine Dr. Prestley refers to retention of infected persons in their own homes, not in buildings set apart for the purpose. He states that this method is satisfactory, both financially and otherwise. Of the four needs referred to, we are without a notification act. We have an isolation hospital which fulfils the condition of being far away from inhabited houses, but it is much too small, and if occupied by any other sort of fever would not be available: besides there is a well-grounded objection to using a small pox hospital for any other purpose. We are without any efficient means of disinfection. As regards quarantining we did, a few years ago, resort to quarantining in infected houses with very satisfactory results.

This subject will grow in importance yearly so long as vaccination continues to be so foolishly neglected. There is a large unprotected population growing up, a constant source of danger to themselves and others.

I ought to mention here that in April I visited "Spittlesea" with the combined Sanitary and Sewage Committees, with a view to selecting a site for further accommodation for fever cases. The site was selected; but fortunately epidemics this year dealt so gently with us that the matter, I suppose, never presented itself to your notice with sufficient force to call for solution. As we are at present situated, only one kind of fever can be treated at one and the same

time; this condition of things is eminently unsatisfactory. "Spittlesea" has, however, so far done us good service.

Measles.—Seven deaths were referred to measles in the 1st quarter, and eight in the 2nd. In my 2nd Quarterly Report I stated that the mortality would in all probability have been greater had not the weather on the whole been mild.

Scarlet Fever.—Four deaths were referred to scarlet fever; one in the 1st quarter, two in the 2nd, and one in the 3rd. Altogether nine cases were reported to me, and of these five died. As there is no reason to suppose that the death-rate was higher than the usual average, the number of unreported cases must have been considerable. Two cases were sent to "Spittlesea" and were afterwards discharged cured. One of the two was the child of a washerwoman who had four more children, and who took in a considerable quantity of washing. This case most fortunately came to my knowledge, or I am afraid, in the absence of any notification Act, that we might have had the disease spread far and wide.

Diphtheria.—Seven cases of diphtheria came to our knowledge during the year; the only one which recovered was that which was removed to Spittlesea. Five of these cases occurred in the 2nd quarter and two in the 4th. One death only was referred to croup, which disease is now commonly considered to be diphtheria, in which the membrane is confined more or less to the larynx. Two deaths each occurred in two houses; in one, no sanitary defect could be found, but there was a history of the importation of a doll from a house infected with diphtheria; in the other, some sanitary defect was found in the outside drains.

On December 7th, as Medical Officer of Health, I attended a Lecture by Dr. Sims Woodhead, under the auspices of the Council of the British Institute of Public Health, on the Diagnosis and Antitoxic Serum treatment of Diphtheria. The lecture was most interesting and instructive. The lecturer proved that the new treatment had had a decided effect in reducing the mortality from diphtheria, more especially on the continent, where the mortality has always been higher than in this country.

It seems to me that, as the State enforces the attendance of children at school, it would not be unreasonable to expect it to put the remedial agent within their reach, for it appears to be an undoubted fact that the schools, rather than sanitary defects, are responsible for the alarming increase in cases, at least in London. This opinion is forcibly expressed in the last Annual Report of the Medical Adviser to the council. The Serum can be obtained from the British Institute of Preventive Medicine, at their temporary premises, 101, Great Russell Street, London, W.C., and thetelegraphic address is "Bacteriology, London."

It is satisfactory to know that the Institute will not only supply the Serum at a moment's notice, but will make the Bacteriological Examination necessary to determine whether the suspected case be one of true diphtheria or not. The importance of this is evident from a statement by Dr. Roux, of Paris, that 20 per cent. of the cases in the diphtheritic ward of the Children's Hospital, were not suffering with diphtheria at all; this experience has been confirmed in a London hospital, and the experience of an American expert bears out the same conclusion.

Whooping Cough.—Only ten deaths were referred to this disease, three in the 1st quarter and seven in the 2nd.

Typhoid Fever.—Only one death was referred to this disease against fifteen last year. In order that no one shall run away with the idea that Luton is a hotbed of typhoid and allied fevers, I will give

the number of deaths registered during the past 16 years, commencing with 1879: the numbers are 17, 8, 3, 3, 5, 4, 4, 1, 8, 2, 0, 1, 0, 4, 15, 1; there were therefore 76 deaths from typhoid and allied fevers in 16 years, or an average of 4·7. I should doubt whether a better state of things has obtained in any other town of the size of Luton. As our mortality from these diseases has been usually so slight, we may therefore with confidence, I think, consider that last year's outbreak was exceptional, due to an extraordinary number of drainage defects crowded into an area which happened to be low lying and not particularly healthy: such a number of drainage defects could not have been found in any other area of the same, or much larger size in Luton. The phenomenally small quantity of rain made us suffer so much owing to the absence of that constant flushing of the drains which is so essential at all times, and especially when sanitary defects abound; but it may here be observed that the sewers and drains of the town are however flushed to a great extent in consequence of the immense quantity of water which passes daily through them in the carrying on of the local industry.

Diarrhœa.—Only twelve deaths were referred to diarrhœa, ten being of infants under one year. In my 3rd Quarterly Report I stated: "the zymotic rate for this quarter is exceptionally low, and is to be accounted for by the small number of deaths referred to infantile diarrhœa. For this we have to thank the weather, which, though all that was unpleasant for holiday makers, being wet, dull, and comparatively cold, was in reality very favourable to health, by preventing the heating of the sub-soil upon which outbreaks of summer diarrhœa apparently depend."

Phthisis.—Forty-four deaths were referred to phthisis, against forty-three last year, and an average of fifty for the fourteen preceeding years.

Infant Mortality.—The infant mortality was at the rate of 144·3 deaths per 1,000 births: in other words, out of every 1000 children born in the borough over 144 would die before attaining the age of one year. There were thirty-one deaths of infants in the 1st quarter, thirty-five in the 2nd, thirty-nine in the 3rd, and thirty-seven in the 4th. The mortality last year was 175, equal to a rate of 184 deaths per 1000 births: the average of the preceeding 14 years was 167.

Cholera.—To the same causes, which operated in our favour with regard to the small mortality from infantile diarrhœa, may in all probability be referred the almost perfect immunity from cholera which this county has enjoyed.

Influenza.—In my 1st Quarterly Report I stated: "There were four deaths referred directly to influenza. A large number of people were affected, and as in former epidemics the number of deaths referred directly to this disease was small, but indirectly many deaths have doubtless occurred claiming influenza as their predisposing cause." One is constantly coming across people who state that their health has been chronically impaired since they were the subjects of influenza during one or other of its visitations.

Sanitary Inspections.—Last year the number of nuisances abated was 2,102. This extremely large number was accounted for by the tact and energy of our new Inspector of Nuisances. It would not speak well for our borough or for him if such a number was of annual occurrence; but it is extremely gratifying to find that the numbers have largely declined, and yet much, very much has been accomplished. Another year their number ought to be still lower, as many nuisances have been abated which fortunately can never occur again, having been finally, if tardily abolished. The following is the list of nuisances abated, the result of the Inspector's work, and in a small degree of our joint sanitary visits:

Drains and closets blocked	275
Broken bell traps	174
Defective closets and drains	89
No ash receptacles	65
Water closets out of order	61
Offensive smells and accumulations ...	59
Insanitary privies	47
Insanitary houses	42
Sinks not disconnected	40
Privies and dumbwells overflowing ...	29
Defective ventilating pipes	14
Pigs kept contrary to bye-laws ...	10
Other nuisances	59
Total ...	964

The Inspector states that 384 notices were served in connection with the above nuisances: he also wishes to thank owners of property for the confidence and consideration shown him by their attending in most cases without delay to his requirements. This is most gratifying reading, and is as it should be; for the Inspector acts not in the interests of individuals, but in those of the townspeople generally: a nuisance which gives rise to illness in one house only, may, if of an infectious nature, be spread broadcast, and be the starting point of an epidemic.

Privies.—Eighty-five privies were converted into closets: this only leaves about 91, of which 35 are in the far off neighbourhood of Round Green. At this rate the night carts will soon be without any occupation, and could be placed on view in a local museum as unsavoury relics of the past.

Sink Drains.—Forty sinks were disconnected. This may seem to some an insignificant statement, but it means that 40 households have had one constant source of danger to their lives removed. I am afraid there are still many people living in the borough in happy ignorance that they are living over—not a volcano—but over a source of danger much more prone to mischief, though insiduous, than even that dreaded enemy.

Collection of Ashes has, I believe, at last reached almost the pitch of perfection.

Dairies, Cowsheds, and Milk Shops.—These have been visited and found in a satisfactory condition.

Bake Houses.—These have been visited twice during the year and found in a satisfactory condition.

Meat and Fish Market.—I have frequently visited the market, but not a single case of bad meat or fish has come under my observation.

Attendance in Court.—My attendance has not been required at any time during the year.

Factories and Workshops.—The Inspector of Nuisances has not required my services during the year for any nuisance in a factory or workshop.

Manholes and Shafts.—There have been very few complaints about the manholes during the year, doubtless owing to the much greater rain-fall.

Water.—Seven samples of water were analysed, 2 of which were fit, and 5 unfit for domestic purposes: the usual steps were taken and a pure supply provided in every instance.

Food and Drugs Act.—Six samples of butter and 13 samples of milk were analysed and reported to be pure: I hope that this very satisfactory result will be followed by the examination of more, not fewer samples, in the ensuing year. Our infant mortality is large, and one of the few things we can do to lessen it is to ensure a pure supply of milk to

our poorer inhabitants. It is satisfactory to observe in the report of our County Medical Officer that Luton is well to the fore in the matter of analysis of articles of food. In my last Annual Report I spoke in the strongest language of which I was capable of the cruelty of milk adulteration, and of the name which should be applied to those dishonest people who lend themselves to it.

Disinfectants.—Last year I wrote: "Bearing in mind the absolute necessity of using such disinfectants as will effect the purposes for which they are used, viz.: to destroy germs and their spores, I advised you to have the carbolic powder and the liquid disinfectant submitted to analysis. Samples were therefore sent to our Public Analyst with the result that the powder was highly approved of, but the liquid was deemed to be nearly useless." Owing to the change of our Analyst during the year, I felt it my duty to again advise you to have our disinfectants analysed, for we give them to the general public *gratuitously, and trust so largely to them*, so that the least we can do is by frequent analysis to to see that we are not wasting our money on rubbish as is so frequently done. The result of the analysis showed that the powder was not up to the requisite strength: we have therefore substituted a carbolic powder of greater strength and much lighter in weight, and therefore much more economical. The analyst passed the fluid as one possessing the virtues claimed for it.

Sewage Farm.—I am pleased to note that the sewage farm continues to be more than sufficient to receive and dispose of the waste waters from the town, there having been no necessity to use the highest land during the year, except upon occasional days when the upper lifts have been worked to prove the satisfactory condition of the engines and pumping machinery.

Spittlesea Cottage.—Three cases were removed to Spittlesea, viz., two of scarlet fever and one of Diphtheria. All three made satisfactory recoveries.

Schools.—No school was closed during the year, nor did the subject of closing ever come up for discussion.

Sanitary Requirements.—In my report for last year I stated "It will be thus seen that three of our greatest needs are therefore in a fair way of realization," *so it seemed*. It will be remembered that it had been suggested that the Board of Guardians, the Rural Sanitary Authority, and the Corporation of Dunstable should combine with the Sanitary Committee of the Borough of Luton to erect a Fever Hospital. Two meetings were held for this purpose, and the first apparently augured well. When the second meeting was held, it was announced that the Borough of Dunstable did not see its way to join in the scheme. After much discussion it appeared that the meeting would come to no satisfactory conclusion, in fact it was so unsatisfactory that the Luton Sanitary Committee unanimously decided that whatever they did had better be entirely on their own account—and here the matter ended. This year the Borough has been so free from infectious diseases that we find ourselves still without the notification Act, with no increased accommodation for fever cases, and no steam or other disinfector. As I have before stated, another site has been selected for further accommodation of these cases, and this is almost adjoining Spittlesea. I am in favour personally of the erection of a small building some distance from Spittlesea, with two wards, to accommodate three or four males and the same number of female patients. Any further accommodation which might be required in case of a severe epidemic could be satisfactorily met by erecting a tent or tents similar to those on exhibition at the Sanitary Congress held in London in July: all we should have to do beforehand would be to select and prepare the sites for

erection so as to avoid any delay. I believe that the accommodation I have foreshadowed would be most satisfactory and would fully serve all practical purposes for a time to come. Whether the second building be erected or not, I am prepared, in case of emergency, to urge the erection of tents: of course having such a useful site as we have at our disposal, we are not in quite such a state of unpreparedness as would at first sight appear. I would urge the great necessity for a good disinfector in a manufacturing town the size of Luton, and one which depends entirely upon its staple trade for its daily bread.

Of the five requirements mentioned in my last annual report, I have now disposed of three, and these if unsolved are not so because you have not been thoroughly alive to their importance, or because you have not taken any trouble with regard to them —we have been somewhat the victim of circumstances. The fourth requirement was the further abolition of privies. I have elsewhere stated that we have done away with no fewer than 85 this year, leaving only about 91 in the Borough, including 35 at Round Green. The fifth requirement was the efficient flushing and ventilation of the sewers, and I am pleased to say that my recommendation with regard to the flushing tanks was favourably received, and I would suggest that the fever returns for the year "seem" to show the efficiency of our system of drainage.

I still hold to the opinion expressed last year that a public abattoir is not necessary for Luton, nor do I consider it to be practicable.

Infectious Diseases (advice as to).—In April I advised you that in view of a possible epidemic of smallpox some further provision for fever cases ought to be made, and it was in consequence of this that you visited Spittlesea with the Sewage Committee in April, and took over from them a site for the further accommodation of fever cases.

I would here mention that in July I had the honour of visiting the Sanitary Health Congress as a delegate with the Mayor, the Borough Surveyor and the Inspector of Nuisances, and later had the pleasure of reporting, with the Mayor, the result of our attendance at the Congress. The lecture and discussion on the so-called aerial distribution of smallpox was most interesting to me, and I came away with the strong impression that that method of distribution was non-proven. Speaker after speaker showed how impossible it was to keep the public away from the neighbourhood of a small pox hospital, and alluded to the necessity of sentries and barricades for this purpose. The subject is a most important one for all sanitary authorities, for if the aerial distribution of smallpox be taken for granted, it necessitates smallpox hospitals being erected on sites at a considerable distance from those for the other infectious diseases, and so adds considerably to the expense. It was stated that the adherence of the Department to this theory of distribution of smallpox had deterred, and was deterring, many sanitary authorities from moving in the matter of hospital accommodation for infections diseases at all.

In conclusion, I would remind you that I have for nearly sixteen years urged the necessity of immediate notification of infectious diseases, it seems highly probable that the Act which is now only compulsory in London, but which has been adopted by the large majority of the sanitary authorities all over the country, will sooner or later be made compulsory, and that it will be rather ignominuous for us to be compelled to adopt an Act which must be for the public good, or some strong outcry would have been raised against it long ere this: as a matter of fact this Act protects the poorer classes more especially, from diseases which press most heavily upon them (both in loss of life, in numbers and in pocket) and which they, without the assistance of the Act and of infectious hospitals are powerless to avert from those near and dear to them.

I am pleased to believe that the great trouble I took last year to write a very full report and to give all the statistics asked for by the County Council has not been thrown away, as my efforts have received most generous recognition from Dr. Wilde, Medical Adviser to the County Council.

I am exceedingly obliged to you for the confidence you have reposed in me during the past year. I am becoming old in your service, but am more than ever anxious to be useful to my native town, and I am pleased to say that the work, owing to the result of recent investigations, becomes more and more interesting year by year to me.

I am, Gentlemen,

Yours obediently,

HORACE SWORDER.

To the Members of the Sanitary Committee of the Borough of Luton.

BOROUGH OF LUTON.

REPORT

OF

Mr. Horace Sworder,

MEDICAL OFFICER OF HEALTH,

FOR THE YEAR ENDED 31ST DECEMBER, 1894.

GEO. SELL,

TOWN CLERK.

GEO. DALTON, Printer, 43, Cheapside, Luton.