# Worksop Public Health Inspection 1850

By William Lee Esq., C.E., Superintending Inspector of the General Board of Health.

My Lord and Gentlemen,

In obedience to your directions I proceeded upon the inquiry into the sanitary conditions of Worksop on Wednesday the 3<sup>rd</sup> day of July last, in the Assembly Rooms at the Lion Hotel there, and the investigation was continued on the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> of the same months.

The inhabitants appeared to take a great interest in the inquiry, and a large number assembled at the opening. ... After the formal business had concluded, I made a careful inspection of the whole town and suburbs, and was assisted in this and other parts of my duties by William Willott, Esq., Samuel Watkins, Esq., maltster, Henry Hase Esq., Union medical officer of the district, John Whall Esq., solicitor, clerk to the Guardians, Mr Brailsford Carter, gentleman, Mr Frederick Hill, reporter, Mr D. Godson, land agent and surveyor, Mr Charles Pashley, agent, Mr Robert White, printer, Mr John Hancock and Mr Frederick Trachsel, teacher of chemistry at the Pestalozzian Institution.

# Description, Population and Number of Houses etc

Worksop is a market town and parish and head of the Union in the Hatfield division of the Wapentake of Bassetlaw, north division of the county of Nottingham. The parish comprises the townships of Worksop, Radford, Osberton, Scofton, Haggonfield and Shireoaks. The area of the parish is 18,220 acres. The Poor Law Union of Worksop comprises 26 parishes or places, 11 of which are in the county of Nottingham, 11 in the West Riding of the county of York and four in the county of Derby, the whole containing a population of 17,975 at the census of 1841.

The number of inhabitants in the parish in 1801 was 3,263; in 1811 it was 3,702; in 1821, 4,567; in 1831, 5,566; and in 1841 were taken for the townships severally, including Worksop, 4025; Radford, 1664; Gateford, 130; Shireoaks, 100; Haggonfield, 116; Osberton, 127; and Scofton, 35, total 6,197.

The number of houses in the whole parish in 1831 was 1,169; in 1841, 1,339 and in July of the present year the return made to me gives 1,301. I have reason to believe, however, that some mistake has been made, and that the actual number is nearer 1,450. ....

## Trade

Situated in a rich agricultural district, well wooded, and surrounded with the parks of noblemen and wealthy commoners, the town of Worksop has very little trade but such as is dependent upon the land. The staple trade is malting, which was, until a few years since, very extensively carried on. New modes of intercommunication between different parts of the country have recently caused the business to decline, but a revival is confidently expected, as a consequence of the opening of the Sheffield and Lincolnshire Railway, which passes through Worksop. Horticulture has been brought to a great perfection in the Worksop district, as to be surpassed only by the metropolis. Early vegetables are ready for market at least a fortnight before those in Sheffield, only 16 miles westward. The numerous parks and woods afford excellent timber, especially oak.

About half the population is engaged in agricultural pursuits, malting etc and the remainder in the ordinary town avocations. There is an entire absence of all manufacturing processes of the injurious tendency.

# Geology

Evidence of Mr Frederick Trachsel, teacher of chemistry at Dr Heldenmaier's establishement ... The subsoil is transported gravel. I do not know the thickness in the town. It contains a large quantity of magnesium limestone. The worst property of this new red sandstone is its power of filtration; any refuse or sewerage sinks in, and contaminates the limited supply of well water. Another evil of this character of the soil (without drainage) is that matters being mechanically left on the surface are very offensive...

# State of Disease and Mortality, and causes of the same

Back of Norfolk Street East. Mr George Cutts has some property, with a very foul privy and a piggery adjoining to it. Mr Hase, surgeon, said he has had cases of fever here. ... Mr Storey's yard, late Binney's property in Church Walk, Bridge Street. This place is in a very bad sanitary condition. There is a row of 5 houses, in every one of which Mr Hase said there had been fever, and altogether about seven deaths. It will be seen that there is an inaccessible drain or ditch between two rows of houses, where no current of air can penetrate. The premises contain, in addition, three or four privies, about 5 manure heaps and eight piggeries. The situation is low, the yard unpaved and no proper drainage. In the same part of town, Mr John Hancock complained of a yard containing a large quantity of ashes and a drain near his premises from about 50 houses, which I examined. The gas works are in the same neighbourhood; and he says that altogether the stench is so great that his men are sometimes obliged to leave off work. Two men of his died within three months, and he thinks they were injured by the stench.

There has been much fever at Marecroft. At Miss Pearce's and James Tarry's property, I found the privies a few yards from the doors and very foul. Mr Godson said that two or three years since he valued 12 cottages there, and on examining, found that for want of drainage, the refuse had accumulated and found its way into the wells, and the people were drinking drainage water. There is only one privy, with a very filthy ash-pit for about 60 persons. At Mr Hancock's property the refuse goes into a pool in the vicarage field adjoining. The stench and appearance were abominable. The privies consist of rough boards nailed together with open joints, without doors or ash-pits ...

Henry Hase, Esq., says in his evidence:

'I have been practising as a surgeon 15 years in Worksop. I have been medical officer of the Worksop District of the Union 13 years. I have the whole town of Worksop and the workhouse under my care. There is a considerable number of persons receiving medical Union relief. In the workhouse and the parish I average 25 patients per day. I have had very extensive opportunities of becoming acquainted with the condition of the poor people. Labourers obtain from 10 to 12 shillings wages on average. In a majority of instances each family occupies a separate tenement, but not universally. In the Low Town and Marecroft there are several families in one house. In the crowded parts where the poor live, the rooms are 8 to 10 feet square and from 6 to 8 feet high, but some are much less than that, and are low, confined places and in bad repair. The average would be 5 inmates per house, as near as I can tell, but perhaps more in Marecroft. I have seen, in cases of fever, 4 in a bed, and in some instances 5; and I have seen grown up sons and daughters of the

same family sleeping together. The cottages have seldom more than 2 bedrooms. There are many with only 1 bedroom. Many of the windows cannot be opened. The lodging houses are in an abominable state. I have seen in harvest 90 persons in a house in Norfolk Street with only 7 bedrooms and a garret in the tiles. There are 7 of these houses in Norfolk Street. They will average 12 to 15 persons per night. There are no water works in the town. The people obtain water by means of wells, pumps and the river, which latter receives refuse from numbers of houses. Poor people would have to fetch water from 100 yards and upwards, on the average. I am not aware of one cottage with a supply of water in it. They are not drained. There is not such a thing as a house drain in the town. Filth, manure, and excrementitious matters are generally thrown close to the doors, and I should say that the privies are not generally 10 yards from the houses, with 5 to 10 houses to 1 privy. The usual prevailing epidemics found in this town are influenza, dysentery and diarrhoea, frequently running into fever of a low typhoid character. We usually have such attacks twice a year, in spring and in autumn. They arise from causes that might in great measure be removed. There are also diseases in the town that I consider to be imported in consequence of the vile system of mendacity and vagrancy, such as measles, scarlet fever, small pox, itch etc, arising from the filthiness of the lodging houses. ...

It varies in intensity in different neighbourhoods, and I find it worst where houses and their inmates are dirtiest and the ventilation most defective. As a few instances I would name Marecroft, the Low Town, Norfolk Street, Duck Row, and Bedlam Square. Church Row is also a bad place, and the houses there are new. ...'

I have obtained, through the kindness of John Whall, Esq., superintendent registrar of the district, some returns of births and deaths; and with returns made to the Registrar General in 1841, have made some calculations of vital importance to the town and parish. I intreat the serious consideration of the inhabitants to the following facts. The proportion of deaths to the population in the whole registration district of Worksop in 1841 was 1 in 60, or about 17 to 1000. In 1847, the proportion in the parish of Worksop was 1 in 38, and the rate of mortality 26.6 to 1000. In 1848, the proportion was 1 in 43, equal to 23.3 in 1000. And in 1849, the proportion of deaths to the living was 1 in 37, or 27.2 in 1000. The last is equal to about 1 death to every 7 houses in the whole parish during the year and 1 death to 20 houses more than the mortality of the whole registration district in 1841.

The comparative rates of death among infants is considered by all who have paid attention to the subject, one of the best criteria of the sanitary condition of the districts, because infants are more susceptible of atmospheric influences, and the rate of mortality among them the least affected by migration and immigration, and not at all as the adult classes are by the physical circumstances attendant upon their occupation. Under this view I find that the proportion of deaths of infants under I year, to the births of the whole registration district of Worksop was, in 1841, one in 9. But in the parish of Worksop it was, in 1847, one in 5. In 1848, one in 7; and in 1849, one in 6. ...

Continuing the same comparison, I find that the average age of all who died in the registration district in 1841 was 35 years and 10 months. In the parish of Worksop, the average age in 1847 was 33 years and 2 months. In 1848, 32 years; and in 1849, it had fallen down to 29 years and 4 months.

Again, the average age of all who died above 20 years of age was, in the registration district in 1841, equal to 61 years and 6 months. The average in the parish of Worksop in 1847, was 59 years. In 1848, 52 years and 4 months; and in 1849, 53 years and 11 months. As compared with the registration district of Worksop, the deaths excess in the

parish of Worksop amounted in 1847 to 63; and in 1848, to 42, and in 1849 to 69. Total human lives lost in excess during the three years, 174. ... The loss on labour might have been taken on all the deaths, but I have only included those in excess.

# Drainage and Sewerage etc

There is a public drain in Westgate, but I was informed that only five houses make any use of it. Late Owen's property has a very foul privy and stable with some ashes spread on the road. I was told this was done to make it decent during the enquiry. There are about a dozen undrained privies with the soil oozing through the walls upon the same public highway.

There a numerous stagnant ditches in and about the town, but a description of the foul condition in which I found them would only go to prove the fact admitted, that Worksop has no proper drainage whatever. ...

In the market place is one of the worst underground drains I ever saw. It is from four to five feet deep, and lies under the footpath, with openings at short distances, covered with boards for the purpose of cleansing by hand labour. I had it opened in front of Mr Fitzpatrick's shop, and though it was said to have been recently cleansed, there was nearly three feet deep of stagnant fluid, covered with a thick black spume, and the stench was very great. In Park Street there is a similar drain, and many complaints were made of the effluvia from both.

# Insurance, Fires and Means of Extinguishing Them

On this subject, intimately connected with the water supply, I received some evidence from Mr Robert White, who said:

I am an agent to the County Fire Office. The property in Worksop is not generally insured, although there are eight agencies in the town. There is nothing particularly hazardous here, except timber yards and agriculture machine makers premises. I have lived in Worksop all my life and have known fires. I recollect three fires in the town, only one of which caused much destruction of property; that was 2 ½ or 3 years ago. The damage was estimated at £200. I was not present, but I believe there was great difficulty in obtaining water. The wells failed one after another, and there had to be a very long file of persons to hand it in buckets. It had also to be brought in buckets from the back yards. There are two fire engines belonging to the town; one is an old inferior and small one, on solid wooden wheels, the other is a good one, but 24 years old; it is not a powerful engine. The length of the hose I cannot tell; I should think about 60 yards. They are in the care of Mr William Wrigglesworth, who receives from the churchwardens £6 per annum. The churchwardens pay that out of the church rates. There is no name on the door of the place were they are kept. He brings out the engines four times a year and keeps them in order for that sum. There are no firemen except him and Mr William Curzon, the constable.

#### Condition of Dwelling Houses and the Appurtenances

The town is generally well laid out for ventilation of the public streets, and the construction of the houses is plain but substantial. Some of the court-yards are very confined and the privy conditions have been already alluded to as most objectionable. In addition to them, numerous swine are kept so as to be injurious nuisances. The following are a few of the minutes of my inspection.

In the Bull Inn Yard there are some foul privies and the soil running over the surface to the street. The property belongs to Mr John Eddison and the yard is well paved. Under the gate way is a water closet cesspool, which breaks out on the surface below. I was informed that the butcher fixes his stall over it at times. The piggeries in the same yard are complained of.

There are similar complaints of piggeries at the Red Lion, Norfolk Street, east side, Owen's property. There are some privies at the top of little gardens; they were complained of, that during rain the cesspool, having only a boarded fence, overflows and the soil runs down into the houses.

At Mr Barber's property near the river there are two dilapidated privies, without doors, and almost without roofs and seats, used by a least 12 families. They cannot be used with any regard to decency. Richard Bell's wife says:' We cannot go in at night on account of the filth, nor in the day because they are so exposed.'

At Mr John Eddison's property in Rhode's Yard, there is a foul channel between the buildings, and Mrs Parkin complained that it smelt dreadfully. There is one privy for nine families, consisting of 34 persons, four pigsties and one pump. The grate in the yard is very offensive, and the pavement dilapidated. ...

Mr Robert Latham was opposed to the inquiry. He had been frequently on the jury of the Court Leet and acknowledged that they had no jurisdiction over nuisances on private property, which were very numerous. He was convinced that there had been some misconception in the preparation of the petition against the application of the Act, and said: 'If we had the control of it, I should wish everything to be done to the town that it may require in the way of improvement.' ...

### Watching, Lighting and Gas

The watching and lighting are both very defective. The gas works are the property of a company with a capital of £5,500. John Eddison Esq is one the directors. He says, 'The consumption is principally by meter and the price is 6s 8d per 1000 cubic feet, with the exception of the Railway Company, with whom there is a special contract. Gas is consumed in shops and inns. It is used in private houses of the better class to a considerable extent. It is left open to the consumer to employ whom he pleases to fit up. but the meters are under the supervision of the directors. Beyond the common smoke condenser, I am not aware of any mode of carrying off the products of combustion. The concern is in a prosperous condition. The last dividend was five per cent, and the previous one six per cent. The shares are at a par. I cannot give an opinion as to whether it would be desirable to give the Local Board of Health powers to purchase the gas works from the shareholders. The town is partially lighted by voluntary subscription. The General Watching and Lighting Act is not in force here. There are about 40 lamps, but they do not cover the whole town. We take what we can get as a remuneration. Last year the amount was £47. The company, would, of course, prefer that the town should be better lighted. The company finds the lamps and lights, repairs and extinguishes them.' ...

# Conclusions and Recommendations

It only remains for me now to sum up, for the consideration of your Honourable Board, the conclusions to which I have come upon this inquiry, and the recommendations consequent thereupon.

- I. That the parish of Worksop is exceedingly unhealthy, the rate of mortality being higher than that of any other place I have visited of equal proportion; that epidemics are frequent and low fever almost endemic.
- II. That fully one half of the disease and mortality is preventable by proper sanitary arrangements.
- III, That the contour and natural drainage of the district and its geological character are all favourable to health.
- IV. That the great attention paid to artificial land drainage and agricultural science has improved the climate, and made it more genial than any other with which I am acquainted in the same latitude.
- V. That nothing in the avocations of the inhabitants can be appreciably injurious to health.
- VI. That the excessive disease and mortality are due to the following serious defects:
  - a. No public or systematic water supply.
  - b. Absence of all proper drainage.
  - c. Unpaved and ill paved courts and alleys.
  - d. The town uncleansed.
  - e. Dilapidated, filthy, obscene privies, with open cess pools.
  - f. Bad ventilation and crowding of houses.

VII. That such of the necessary improvements as are of the nature of public works, may in all probability be accomplished at the following rates per week for a cottage house:

- a. A constant supply of pure water with a tap in the house at one penny.
- b. Systematic drainage of the site of the town, including the houses, courts, and water closet or improved privy with the use of soil-pan apparatus at one penny.
- c. Impervious and durable pavement of the courts at one farthing.
- d. Perfect cleansing of all the streets, courts etc at one half penny.
- VIII. That the above charges taken altogether would be less than the cost of the present miserable substitutes for a water supply alone.
- IX. That the present loss from preventable sickness and mortality in the parish is about £8,536 per annum.

- X. That the decomposing refuse which now destroys the health and lives of the inhabitants, might be applied with great facility and advantage to the agricultural land within the district, so as to increase its fertility, and yield a considerable revenue to the public funds of the town.
- XI. That there is no Local Act of Parliament in force within the district for any of the purposes of the Public Health Act.

Whereupon I respectfully recommend:-

- 1. That the Public Health Act (1848) except the section numbered 50 in the copies of the Act printed by Her Majesty's printers, should be applied to the parish of Worksop, in the county of Nottingham.
- 2. That the Local Board of Health, to be elected under the said Public Health, shall consist of nine persons, and that the entire number shall be elected from the whole of the said parish, or district.
- 3. That one third in number of the said Local Board shall go out of office each year, as provided in the Act.
- 4. That every person, at the time of his election as a member of the said Local Board, and so long as he shall continue in office by virtue of such election, shall be resident, as in the said Public Health Act is required, and shall be seized and possessed of real or personal estate, or both, to the value or amount of not less than £700, or shall be so resident, and rated to the relief of the poor of some township within the said parish upon an annual value of not less than £20.

I have the honour to be, My Lords and Gentlemen, Your very obedient Servant, William Lee, Superintending Inspector, The General Board of Health.