

A PUBLIC HEALTH PETITION

THE 1848 ACT AND MIDDLETON, A TOWNSHIP
IN LANCASHIRE

by

JOHN SIMPSON

THE industrial revolution, which consisted in the invention and utilization of machinery driven first by water and later by steam power, resulted in the employment of many workers in factories and workshops and led to the destruction of the domestic industries which were spread throughout the land. The textile industry, after that of agriculture the most important in the country, was the one chiefly affected prior to 1830. The manufacture of textiles was transferred to the sources of power, towns grew up without plan, houses were built without supervision or regulation, great masses of people gathered together without regard to health, decency or comfort, and soil, air and water were polluted without restriction. The rural-urban population movement was rapid and continuous; the population of England and Wales increased by 47 per cent between 1801 and 1831 and the rural labourer, who numbered two to every one town workman in 1790, only numbered one to every two of the latter in 1831.

The resultant evils, however, caused a reaction; the humanitarian movement gained impetus and, among other things, attacked the conditions that caused ill-health to be the common lot and which led to one in every thirty persons in the towns dying each year. Fear, however, was the more potent spur; disease is no respecter of persons and as the well-to-do were endangered by the conditions of the poor, the repeated visitations of cholera and other diseases were valuable auxiliaries on the side of reform.

In 1848 the first Public Health Act was passed: the Act created a General Board of Health which had powers to call into service local boards of health either on petition by the ratepayers or compulsorily when the death rate exceeded 23 per 1,000 population. To secure sound public health two important conditions require to be fulfilled: there must be a widespread desire among all classes to reduce sickness and disease and there must be knowledge furnished by science and technology. At the time of the first Reform Act some of the problems had come to be recognized but, though the will to apply them was strong, the machinery of government through which action could be taken was lacking. This was partially remedied by the Public Health Act (1848).

In the years that followed, many towns did petition the General Board of Health; and this annotated report, of a superintendent-inspector of the General Board of Health, records the efforts of one small textile town to bring some measure of order into its chaos. But the report has an additional importance for it refers to that period and phase in the conquest of disease which preceded the gradual ascendancy of medical science and technology. The details of the

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inquiry, which the report describes, demonstrate that the township of Middleton, in Lancashire, was vitally concerned with factors in the prevention of disease; not with the techniques of therapeutic medicine. Preventive medicine, which so dominated medieval and early modern times, was still a matter of major concern in mid-nineteenth-century Britain.

Petition

In 1853, Edward Brookes of Irk Bank House, Middleton, petitioned the General Board of Health:

Herewith I most respectfully transmit to your Honourable Board, a petition of the inhabitant ratepayers of the Township of Middleton, for the application thereunto of the Health of Towns Act, 1848, and Supplemental Act, 1849, signed by almost double the number required by the first-mentioned Act, and containing therein the signatures, not only of the largest employers of labour, but of nearly all the tradesmen and most of the owners of property in the said township.

The history of Middleton does not extend back many years: its name does not appear to have been known when the Domesday Book was compiled. In the year 1770 it was a village with some twenty houses and a population of approximately 150 persons chiefly, perhaps wholly, engaged in agricultural pursuits. The introduction of handloom weaving soon altered the condition of the place and caused a rapid increase in the population. In 1801 the population was some 3,265 persons. Middleton had expanded from a very small village into a rising and important manufacturing town, and the erection of factories about this period further added to its population. In his petition Mr. Brookes had this to say of the Middleton of 1853:

The township is pleasantly situated on the old turnpike road from Manchester to Rochdale, being distant $5\frac{1}{2}$ miles from each, and contains, at the present time, about 12,000 inhabitants, and standing upon elevated ground with on some sides a rapid, and others a more gradual descent, affords peculiar opportunities for drainage and sewerage, at a much less expense than in localities situated more on a level. In the town and its neighbourhood are large factories and other edifices for spinning and manufacture of cotton and other fabrics; gas-works have also been recently established by a company, whence the shops, public houses, and a great many of the private houses are lighted. Situated as it is upon the banks of the River Irk, a short distance from the canal from Manchester to Rochdale, and the trunk line of the Lancashire and Yorkshire Railway, and from its proximity to Manchester, Middleton must, ere long, become a town of far greater importance than it is at present.

There was opposition to the petition proposing adoption of the Public Health Act, 1848, to Middleton, and this seemed to have had its basis in a misapprehension concerning two points; the fear of a great burden being entailed by all ratepayers and that the local board of health, when elected, would be subjected to a continual interference on the part of the General Board. This fear of the centralized powers of the General Board of Health was widespread; it accompanied the Bill during its three years before the House and may well have

been largely responsible for the long delay, for the House had accepted the need for extensive changes in both the law and the administration of Public Health. Parliament showed great uneasiness concerning the centralization of power which Chadwick sought for the General Board of Health; and during the debate many large towns secured private Acts of Parliament for their own public health improvements in order to escape any possible central direction. In October 1853 a public meeting in Middleton, called to decide the propriety of applying to Parliament for a Local Act, concluded by resolving to delay all proceedings towards obtaining any such Act for a period of twelve months.

The Inquiry

In November 1853, a public inquiry was held:

Public Health Act (11 & 12 Vict. c. 63)

Notice—Whereas, in pursuance of the Public Health Act, 1848, the General Board of Health have directed Robert Rawlinson, Esquire, one of the Superintending Inspectors appointed for the purposes of the said Act, to visit the township of Middleton, in the county palatine of Lancaster, and there to make public inquiry and examine witnesses with respect to the matters following: that is to say:

The sewerage, drainage and supply of water.

The state of the burial grounds.

The number and sanitary conditions of the inhabitants.

The Local Acts of Parliament (if any) for paving, lighting, cleansing, watching, regulating, supplying with water, or improving, or having relation to the purposes of the said Act.

The natural drainage areas.

The existing parochial or other local boundaries.

The boundaries which may be most advantageously adopted for the purposes of the said Act.

And other matters in respect whereof the General Board of Health is desirous of being informed for the purpose of enabling them to judge of the propriety of reporting to Her Majesty or making a provisional order with a view to the application of the said Act, or any part thereof to the said township.

Now, therefore, I, the said Robert Rawlinson, do hereby give notice that on the twenty-third instant, at ten o'clock in the forenoon, at the Old Assembly Room, at the old Boar's Head, Long Street, I will proceed on the said inquiry and that I shall there and then be prepared to hear all persons desirous of being heard before me upon the subject of the said inquiry.

Dated this second day of November 1853

Robert Rawlinson

Sanitary Conditions in Middleton

In the year of the inquiry the death rate had been 21 per 1,000 persons; and for that year the superintendent-registrar reported that the greatest mortality had been from consumption; and that smallpox, although prevalent, had been found only among unvaccinated persons.

Mr. Nott remarked:

There is not much fever at present in the town, but there has been a great deal, principally in the high districts.

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Mr. Ogden stated:

Fever has been general in Boardman-lane.

Mr. Wrigley remarked:

There are two places at the top end of Wood-street where the water lodged and becomes stagnant, and there cases of fever have occurred every year.

As used in the early period of sanitary reform 'fever' was a term which included typhus and typhoid fever, the varieties of paratyphoid infection, and probably also, relapsing or famine fever (Newsholme 1927). It is also likely that, owing to a lack of knowledge concerning the natural history of disease, such conditions as cerebro-spinal fever and acute tuberculosis were occasionally inadequately diagnosed as 'fever'; but the two chief constituents of the term were typhus and typhoid. The 'fever' referred to here was probably typhoid, for a significant feature of that disease was its seasonal appearance. It was comparatively rare in spring but rose to a sharp peak in September and October.

Drainage

There was no general system of sewerage in Middleton. This is not surprising considering the rapidity with which the town had grown in less than a century; and at that time sewerage was regarded somewhat equivocally. In Roman times the so-called sewers were drains as well as sewers and functioned to carry off surface water, to maintain a low ground level of water, as well as disposing of sewage (Winslow 1952). Until 1815 the discharge of any waste except kitchen waste into the London drains had been prohibited by law; and in Paris a similar regulation persisted until 1880. Sewerage and sewage disposal date from the report of the Health of Towns Commission (1844); whereas in 1815 the London sewers were simply drains to carry off storm water, in 1847 it was made obligatory to discharge all household waste into them (Winslow 1952).

At the inquiry a Mr. John Butterworth, a landlord owning some eight houses, was questioned concerning a sewer he himself had constructed. He stated:

The houses are well drained; the sewer empties at the bottom end of Middleton, at the side of Middleton Mill. The sewer is not in front of the road, it is formed down the back side of the fence.

In reply to a question by a Mr. Wrigley, he went on to say:

The refuse used to run down by the fence before the houses were built and it has been turned for convenience. There are sewers along the side of the ditch. In some places the ditch would drain the sewers and in others it would not. The sewer is 2 feet 6 inches high and nearly square in form. It is constructed partly of brick and partly of flag.

Mr. Wrigley gave this evidence as to the disposal of soil refuse from the privies:

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The refuse from privies is carted away to the land by farmers. The cottagers also manure potatoes with it. It is sold for about 2/6d per load.

Mr. Oswald Dickin, surgeon, gave evidence:

The irregularly situated town of Middleton is quite as healthy as any other district in Lancashire, considering how deficient it is in drainage. I know of no town, however, in this part of Lancashire better capable of efficient drainage than Middleton. Nature could not have placed the gradients in a more favourable position. Main sewers are imperatively called for . . . I believe that many cases of malignant typhus owe origin to defective drainage, decomposing cesspools, disused factory lodges, many of which have not been cleaned out during the last thirty years.

Mr. Dickin has referred to 'malignant typhus' but when regard is paid to the aetiological factors which he describes it seems clear that the disease entity in question is typhoid. In the early years of the nineteenth century typhus and typhoid were confused and the term 'typhus' was frequently used to describe both disease entities.

The basic principle which underlies all methods of sewage disposal is to get rid of the sewage as speedily as possible with the least nuisance to the smallest number of people, with the least damage to health or property, and at the smallest cost. In the latter part of the nineteenth century statistics showed that the abandonment of privies and the substitution of sewerage systems reduced the death rate in many cities: in Nottingham, over a ten-year period at the end of the century, typhoid cases occurred in 2.7 per cent of houses still provided with privies, in 0.38 per cent of houses where there were pail-closets, but in 0.18 per cent of houses with water-closets connected to sewers. In Munich, when sewers were constructed (1856-9) the typhoid fever rate fell from 242 to 166 per 100,000; later, after the water supply had been improved, the typhoid fever death rate fell to an even lower figure (Whipple 1921).

Water Supply

Like so many other towns which grew rapidly, Middleton's water supply did not keep pace. From remotest antiquity the highest value has been placed upon an abundant and pure water supply and centres of population sprang up around those points where it was readily available. With the growth of larger communities, the problem of water supply proved of steadily growing importance. The ancient city of Jerusalem was provided with a system of cisterns, wells and conduits, while Rome built mighty aqueducts to bring water from the distant hills. A report by Dr. Angus Smith, of Manchester, draws attention to the fact that although the old town wells were largely abandoned, a waterworks company had not been created to cope with the problem of water supply; instead, new wells had been constructed outside the town.

Mr. Thomas Wild remarked:

The inhabitants of Middleton are satisfied they have good water and good springs; nineteen out of every twenty of the inhabitants are satisfied. People have to go a distance of only two or three hundred yards for their water.

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Mr. Wrigley said:

The water at the principal well is very good but there are others that are bad. There is one in my neighbourhood; it is very hard and very clear but is not fit for use. There are a great many public springs.

Mr. Shuttleworth remarked:

There was talk of starting a waterworks company. Mr. Grundy of Bury had it in hand.

Mr. John Booth, referring to a neighbouring township, stated:

The Heywood Waterworks Company charges twopence per week per cottage for water.

Dr. Angus Smith reported:

It happens sometimes that persons are obliged to come out as early as one o'clock in a morning to secure a supply of water for washing day. . . . As there is no reservoir the water must be taken as it issues or it is lost. A large proportion of the population is therefore employed catching water as it flows. There is no intermission, excepting that period when the population is asleep and even that time is occasionally broken into. The people, therefore, even where water is abundant, see it escaping whilst they can secure so very little.

The water of the town wells is acknowledged to be very bad and it is generally avoided. To see the clear wells around Middleton one would fancy that it must be fully supplied with water and to see the population coming with pitchers upon their heads drawing the water without price makes the careless observer think that they are free from many of the expenses and inconveniences of a town. It turns out, however, that this is only in appearance. The water used here is, in fact, worse than that used in places where less pure water is obtained, and the price paid is greater than in these places which complain of the cost, although here it is obtained for nothing. The great trouble in bringing water home causes it to be used again and again until it becomes exceedingly filthy and in this state it is employed at last to wash the floors. The labour is sometimes put on special water-carriers, whose charge, even for the smallest supply of a cottage comes to 8d per week while washing day demands 1/3d. But whether done by water-carriers for a whole street, or by the families themselves, this may be said to be the price of a limited supply of water at Middleton . . . and a short supply means an impure supply, as it inevitably becomes much more impure before being thrown away than if the supply were abundant.

Middleton, with a considerable supply of water, is in actual want of water in every cottage; with a free supply it is actually paying largely for it, and, with a comparatively pure supply in a few of the more frequented wells, it is stinted to impure water.

From analyses made at that time it is clear that the wells of the town were grossly impure, largely the result of a population encroachment and ground and subsoil pollution. A high degree of hardness and traces of nitric acid are found when a surface well is subject to impure drainage. Dr. Smith reported that Parson's Well was the best of the existing wells but that Church-Croft Well had gone beyond the bounds of tolerated impurity; its water caused illness when drunk. Church-Croft Well lay at the lower part of a sandy hill upon which the church was built: it lay immediately under the church yard.

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Parson's Well

	<i>grains per gallon</i>
Sulphate of lime	5.4165
Carbonate of lime	0.9573
Carbonate of magnesia	0.1829
Chloride of potassium	0.2628
Chloride of sodium	0.4666
Silica	0.32
Trace of iron	
	7.6061
Organic and volatile matter	2.52
	10.1261

Mr. Hugh's Well

	<i>grains per gallon</i>
Sulphate of lime	18.787
Carbonate of lime	5.423
Carbonate of magnesia	3.339
Silica	0.72
Alkaline Salts	18.28
	41.549
Organic matter	11.2
	52.749

Iron & nitric acid in quantity

It is, perhaps, important to make a distinction between a polluted water and an infected water: the terms are not synonymous. A polluted water is one containing organic matter and the products of decay, either animal or vegetable. An infected water is one that contains pathogenic parasites. A polluted water is to be suspected; it is not necessarily harmful to health. But an infected water is practically always polluted and is the greatest hazard to man.

Mr. Rawlinson's Recommendations

In his conclusions Mr. Rawlinson, superintending inspector, had this to say:

The present rate of mortality is large.

The government of the township is imperfectly carried on under the general Acts of the country, there being no Local Act of Parliament in force.

There is neither efficient drainage nor sewerage.

There are many nuisances dangerous to health.

There is no public water supply.

There are privies with open cesspools attached to dwelling-houses and there are many nuisances arising from middens, stagnant pits, and from foul ditches.

Preventible disease (fever) is common and mortality from such disease is excessive and costly.

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He recommended that the prayer of the petitioners be granted and that the Public Health Act, 1848, be applied to the township of Middleton.

Comment

The application of this Public Health Act gave nineteenth-century Britain sanitation as a basic element in life. Health is of the greatest importance to society and, at times, may even determine its existence. Since the number of those who cannot contribute to the general advance of society, through partial or complete lack of any industrial potential, depends as much on the environment as on any other factor, the responsibility for maintaining a healthy environment becomes a primary social duty. Sanitation measures were by no means new; it is unnecessary to go farther back than the Elizabethan period for a comprehensive sanitary code (Larkey 1934). But medieval traditions concerning contagion as a cause of epidemics were still strong in the early nineteenth century, physicians being more concerned with isolation than with sanitation; however, the value of sanitary measures was soon verified in the marked mortality declines which followed the establishment of such controls. At the same time, medical care of the poor seemed to promise so little for this was a period of medical nihilism, the old medical 'systems' having been discredited through the use of clinical statistics. It was not until the development of bacteriology and pharmacology in the latter part of the century that there came a revival of interest in the direct medical care of the poor; and this came at a time of political and social change.

The sense of responsibility that society has for the individual, which this report discloses, has become accentuated until now it is a characteristic of our present era. The motivating force, which began as a charity, became humanitarianism in the eighteenth century and utilitarianism in the nineteenth century; but whatever the driving force, society's assumption of responsibility toward the individual is the criterion of a civilized commonwealth. The machine has thus created a social solidarity that no industrial society can escape.

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