Bridgwater was not alone, of course, in having problems of sanitation and public health, and compared with a great many other towns and cities suffered little, but what problems it did have were bad enough. Previous chapters have shown briefly what the conditions in the town were like, and the discussion now moves to describe the efforts made in Bridgwater to improve matters.

The first half of the nineteenth century saw various political battles. This was the period of the fight to abolish the Corn Laws, and to introduce the Ten Hours Bill. It was the period of Chartist and Reform, and it was also the period when action was taken to improve the conditions of town life.

At this time there was no local government as we should recognise it today. In towns and cities government was by Corporations; some, like Bridgwater's going back many centuries. In 1835, the Municipal Corporations Act swept away the old Bridgwater Corporation, and in December of that year 18 new councillors were elected. The new council created committees for the watch, finances, the port and navigation, and as the century progressed took on more responsibilities, but it was not until 1867 that it became directly involved with public health. Before that time what measures were undertaken seem to have been very much on an ad-hoc basis. In 1838 the Poor Law Commissioners published a report on the effect on the poor rates of sickness and epidemics, caused by bad sanitation. This was based on evidence of the conditions in parts of London, and it was decided to produce another report covering the whole country. In 1840 a Select Committee of Parliament was set up - known as the Health of Towns Committee, which recommended a general Building Act, a general Sewage Act and that every town should have a Board of Health. The local Boards of Health were to look after the water supply, burial grounds, open spaces, lodging houses and slums. A pair of Bills was drafted to achieve this, and passed by the House of Lords, but in May 1841 the Whig government fell, and in the ensuing election was defeated. In 1842 the Bills were presented again, but in a watered-down version. They were postponed on the promise of a Government Bill, but in 1843 the government instead decided to set up a Health of Towns Commission, which reported in 1844 and 1845. Meanwhile in 1842 Edwin Chadwick (1800-1890) published the findings of the Poor Law Commissioners investigation in his Report of an enquiry into the Sanitary Conditions of the Labouring Population of Great Britain. In this he advanced the idea of concentrating on preventive group measures rather than the treatment of individual patients. His report recognised the correlation between poverty and illness, and his recommendations favouring such innovations as daily refuse removal, abolition of cesspools and a radical redesign of the sewers were later adopted.

In 1845 a Bill was put to Parliament based on the reports of the Health of Towns Commission, but the crisis over the repeal of the Corn Laws threw politics into confusion, the Conservative party broke up and Sir Robert Peel resigned. However, all was not lost, since Parliament passed two useful measures: one, the Baths and Washhouses Act which permitted boroughs to establish baths and wash-houses out of the rates; and the other the Nuisance Removal Act.

The Whigs were returned to power, and sanitary reform became part of their electoral platform. A Bill was introduced to Parliament in March 1847, but there was much opposition and its provisions were diluted and it was eventually abandoned. A new Bill was introduced in February 1848, the Public Health Act, which established a Central Board of Health in London, similar to the Poor Law Commissioners. Local boards were to compel owners or occupiers to provide house drains, to see that there was a sufficient supply of water, and to appoint a surveyor and inspector of nuisances. Other duties were permissive; they might make bye-laws about the removal of filth, alter sewers, pave streets, provide places for recreation and appoint an officer of health. The proposal to set up a central regulatory authority caused much opposition. It was represented as foreign to the English tradition, and roused the determined opposition of many town councils. After much weakening amendment, and the removal of many of the regulatory features, it finally became law later in the year. The Act set up the Central Board of Health for five years only. In a municipal borough the Town Council was to be the Board of Health. The Town Council might adopt the Act, under which it could exercise the powers without the expense of a special local Act. The Act allowed no powers of compulsory superintendence or inspection to the Central Board of Health, and if a local authority chose to neglect its duty it could ignore the Board of Health.
The Board lasted until 1854, when it was abolished, and some of its duties given to a committee of ministers, which lasted until 1858. The medical duties were given to the Medical Committee of the Privy Council, under Sir John Simon.

It seems that Bridgwater did not oppose the spirit, at least, of the new legislation, since by January 1848, before the new Bill had reached Parliament, there was already a health committee active in the town, presumably formed as a result of the Nuisance Removal Act, producing plans of the sewers and listing the health black-spots. No evidence has so far been found, however, that Bridgwater adopted the 1848 Act allowing the Council to be its own Board of Health.

For some years after 1854 no important legislation on public health was passed. In 1865-66 another outbreak of cholera appeared in England, and in the latter year an Act was passed compelling local authorities to provide sanitary inspectors, and allowing central government to insist upon the removal of nuisances, the provision of sewers and a good water supply. A Royal Commission was appointed in 1868 which laid down a number of requirements 'necessary for civilised social life', including - again - a good water supply, a proper drainage system, the prevention of nuisances (and for the first time smoke pollution was described as a nuisance), healthy housing, inspection of food, proper provision for burial and the suppression of the causes of disease. The Local Government Board was established in 1871 to undertake this work.

The Adulteration of Food and Drugs Act was passed in 1872, and required inspection and analysis of most foodstuffs before they could be legally sold. The Public Health Act of 1875 contained a complete sanitary code which, with adjustments and additions, is still in operation in the United Kingdom today. As medical knowledge increased during Victorian times, the origin of various diseases was discovered, and appropriate treatments devised.

The Cholera Epidemic of 1831-32 greatly increased interest in public health matters. Following the 1848 epidemic John Snow (1813-1858) suggested that the disease was spread by consumption of contaminated water. Six years later he produced epidemiological proof of this theory by demonstrating that water drawn from a pump in Broad Street, City of London, had been directly responsible for over 500 deaths which had occurred during the cholera epidemic of 1854. In 1883 Robert Koch discovered the organism which caused cholera, and in 1886 Theobald Smith discovered the means of immunising against the disease.

Typhoid and typhus fever were first clinically differentiated by William Gerard (1809-72) in 1837. In the mid C19 William Budd (1811-80) of Bristol suggested that typhoid was transmitted through the ingestion of infected material and that a contaminated water supply resulting from defective sewers was likely to be particularly responsible for spreading the disease. Carl Eberth (1835-1926) discovered the typhoid bacillus in 1880, and it was isolated in 1884 by Georg Gaffky (1850-1918). In 1896 a successful vaccine was discovered by Sir Almroth Wright (1861-1947)

Much pressure for improvement in Bridgwater seems to have come from the local doctors. During the 1831-2 cholera epidemic Dr Toogood wrote letters to the newspaper about it, and in the following year he was writing about smallpox. The gap in the newspapers means we have little idea of the conditions in the town until 1846, although the burial registers at St Mary's clearly show high mortality in the town during March - June 1840 and January - May 1842.

**Poor Law**

In 1834 the new Poor Law had established the local Guardians of the Poor and they set about building a Union workhouse in North Street. This would house the severely poor from a number of parishes, not just from Bridgwater Borough itself. The Board of Guardians employed a number of medical officers, as well as staff such as the workhouse Master and Mistress. The problem of bastardy was alleviated by sending children abroad. In 1874 a newspaper article noted below includes a discussion about sending two children to Canada at a cost of £12. 10s each.

The paupers were funded by the Vestry making a rate on all householders. The responsibility for assessing and collecting the rate was the duty of assistant overseers, and the Vestry minutes contain a mass of data about these gentlemen and their activities, including at least one instance where the money raised was stolen!
Forty surrounding parishes were involved and covered an area from Over Stowey in the west to Shapwick in the east; Huntspil in the north to Lyng in the south-east. The largest centre of population was Bridgwater, but most parishes had populations of little more than 100. Comprehensive statistics for the Bridgwater Union have not been compiled, though there is a mass of data in the Board of Guardians' records, and also in the frequent newspaper reports about their activities, but an example of the extent of pauperism is recorded in the *Bridgwater Mercury*, 20 May 1874 where statistics for each parish were tabulated. Then, 1 in 9½ of Bridgwater's population of 12,636 were in receipt of poor relief. Many paupers stayed at home and in receipt of outdoor relief, while a minority were residents of the workhouse.

It is clear from the evidence quoted to the House of Lords' enquiry into the working of the new Poor Law about the Bridgwater Workhouse scandal of 1837, that epidemic diarrhoea much affected the inmates of the old poor-house in Taunton Road (which was being used whilst the new workhouse was being built), between September 1836 and May 1837. The evidence also stated that epidemics of influenza, typhus and smallpox ran through the inmates during the winter of 1837-38.

**Reform in Bridgwater**

In August 1847 the Council was addressed by the engineer Edwin Octavius Tregelles (1806-1886) who was active at that time designing water and drainage schemes for towns like Banbury and Bideford. His system involved using the sewage as manure on surrounding farm land, and it was by the sale of sewage that the scheme was to be financed. He also proposed that a survey be made of the town to discover the needs for a proper water supply. During the discussion it was clear there was felt to be no money available, and so Tregelles was politely thanked and sent on his way.

The newspapers for 1849 record several meetings of the Town Council when the state of public health was discussed, and in November 1851 there was some argument whether the Council should pay for the plan of the sewers produced for it in January 1849. In succeeding years there were occasional letters and leaders, but very few accounts of the local Board of Health itself, and these seem to have revolved mainly around the removal of nuisances, rather than improving the water supply, housing and the drains. In 1857 they commissioned a survey of the town to identify potential cholera black-spots. During 1857 - 58 an epidemic of what was described as 'ague' broke out in Cannington, and there is an interesting series of leaders and letters from the local doctors about the measures they took to combat it.

It was not until the outbreak of cholera which appeared in the town in 1866 that the newspapers started to comment specially on the need for better sanitation and agitating that it was the duty of the Council to do something about it. During the summer moves were undertaken by the townsfolk to ensure a proper water supply, and a survey was carried out among the inhabitants to discover what they thought of the existing supply. This found that there were 241 complaints in Eastover, and 190 in the western side of the town. In both areas the bulk of the complaints came from the poorer residents. The Town Clerk sent a circular round to over 40 towns of a similar size to Bridgwater, and later these findings were incorporated into a valuable table showing the comparative costs and revenue of the different services.

The Council discussed the question on 31 October, when much opposition to the idea surfaced, and after several hours of inconclusive discussion the matter was shelved until 9 November. The main areas of argument were that since the western side of the town was better off for wholesome water than the eastern, the problem did not affect the town as a whole and should be seen from that perspective. There was also a considerable body of opinion that ratepayers' money should not be used for such a scheme, since the ratepayers would be paying twice, once out of the rates, and again for the water charges made to them. The ratepayers were only a portion of the inhabitants at that time, of course, and tended to be the better-off householders.

A public meeting of the inhabitants of Eastover was held on a day early in November at which it was agreed to ask the Council to do something about the problem, and calling on the mayor to convene a public meeting. The Council discussed this request at its next meeting, and it is clear from this discussion that there was a mood in Eastover that if the Council did not take action, the Eastover inhabitants would send a memorial to the Government asking that the Council be directed to
face up to their responsibilities. It was agreed that a Council committee would be set up to look into the matter and report back.

The Council engaged Thomas Hawksley, (1807-1893) who was one of the foremost civil engineers of the day, and who specialised in water supply, to undertake a survey of the area and to make recommendations. He made his report in September 1867. In it he discussed the various options for procuring a supply and recommended that the supply would be best obtained from the Seven Wells stream at Radlets Common, just below its junction with the Cockercombe Brook. This site was located about seven miles to the west of Bridgwater, beyond Cannington, in the edge of the Quantock Hills. He estimated that the cost would be £20,000, and that the scheme could supply an annual average daily amount of 320,000 gallons.

A public meeting was held in the Town Hall on 27 September 1867, which was attended by between 600 and 700 inhabitants. This was frequently interrupted and the supporters of the motion that the water scheme was to be funded from the rates shouted down. There seems to have been universal agreement of the desirability of a better water supply, but a distinct mood of hostility to the rates being used to fund it. Considerable doubts were expressed about the accuracy of Hawksley's estimate, which was held by some speakers to be too low. Another area of dissent concerned the proposal of the committee appointed by the Council the previous year to look into the problem, that some of the council's property assets which provided no income to it might be sold to provide some of the capital required for the scheme. The resolution to proceed with the scheme was defeated.

The Bridgwater Mercury published in October 1867 a series of reports on the question, including a detailed survey of all the possible sources of supply, Hawksley's report and estimate to the Council, the report of the Committee of the Town Council, a table summarising the returns from similar water companies, obtained the previous year, and a report from Mr Townson a local chemist on the relative hardness of water from the various sources. These reports were later published as a separate pamphlet.

Another well-attended public meeting was held in the Town Hall early in November following a petition to the Council by a large body of ratepayers. After the mayor had completed his opening remarks, two speakers from the opposing camps rose simultaneously and there was considerable uproar while the mayor regained control with difficulty. Again the argument that the Council was not the right body to fund the project was put forward. Several speakers claimed the poor were against the proposals, since their landlords would simply use the service an excuse to put up their rents. Others claimed that polluted water was not the cause of ill-health - it was dirt and filth. Several speakers intimated that the proper way of proceeding was for a private company to come forward, and if one was not forthcoming, because of the probable low financial return, it was hard to see what could be done. Another speaker asked whether the spokesmen of the side hostile to the project were prepared to accept the responsibility for being answerable for the consequences, should another epidemic strike Bridgwater. Alderman J.R Smith, one of the leading opponents to the idea, said that he was. The meeting voted overwhelmingly to reject the idea.

These two newspaper reports make astonishing reading today, since the need for proper public health measures is now taken for granted. In the reported speeches of the opponents to the water scheme, the only consideration was financial; there was little acknowledgment in any of them that an unhealthy water supply was bad, and should be corrected. There was no acknowledgment that there was a duty to look after the well-being of the inhabitants, especially the poorer ones. It is clear there was a claue at the second meeting, which shouted down those in favour of the scheme, in some instances silencing them for long periods. There also seems to have been a hidden agenda behind many of the speakers' words, especially those in opposition to the water scheme. It is as if speakers from the hostile side were more concerned with paying off old political scores than trying their utmost to better the lot of their fellow-townsfolk. In such a climate the health and even the lives of the poorer inhabitants were given scant consideration.

This was the time that Bridgwater attracted considerable notoriety because of its corrupt political practices. The reforms of the Municipal Corporations Act of 1835 had good and bad results for Party politics began to have a role in local government. The most insignificant appointment made to the local government machine was done on party lines, and parliamentary elections were occasions of extreme party rivalry; in Bridgwater they were accompanied by extreme corruption. The Parliamentary Elections of 1837, 1841, 1847, 1852,
1857, 1859 and the four between 1865 and 1868 were all accompanied by bribery. A Parliamentary Inquiry was held in 1866, and another in 1868, and after the latter the voters were disenfranchised until 1886.

With this insight into the political culture of the town at that time, it is not surprising that so worthy a project as the supply of pure water should have been received by so many of the inhabitants with such a cynical disregard.

Another public meeting was held about the water supply in June 1868, and in August of the following year the Bridgwater Mercury published a leader about the drought and the lack of water. The Bridgwater Mercury for 28 September 1870 printed a powerful leader rehearsing the history of the previous efforts to obtain a proper water supply, and again reported on the condition of the town during the drought which had visited the town during the summer of that year. The newspaper reported that a private water company was being formed to rectify the problem. This concern was floated by some London-based speculators, and it was felt that little capital would be required from Bridgwater inhabitants. An Act of Parliament was passed for this scheme in August 1871.

This scheme attracted some opposition from the landowners who would be affected, including those involved in a scheme carried out in 1864 to supply water from the Cannington Brook under the River Parrett to water the grazing land on the Pawlett Hams on the north of the river. This had involved laying a 9" pipe under the river, and pumping the water up from it by a windpump situated on the river bank at Pawlett. In view of the tidal range of the river and the slimy nature of the river bed, this project would have involved quite extensive civil-engineering works.

The establishment of the Local Government Board in 1871 tightened up considerably the government's control of public health matters, and for the first time made it mandatory for boroughs to have a Medical Officer of Health. Dr F. J. C. Parsons was appointed as Medical Officer for Bridgwater in the summer of 1873, and quickly produced a report on the sanitation of the town. By 1874, the year of the measles epidemic, it became plain that the private water company was unable to raise enough capital to proceed with its scheme, and there were suggestions in the newspapers that the Council should take over the company's powers. Dr Blaxall made his inspection into the measles epidemic in June 1874, and presented his findings to the sanitary committee on 19 June. His report on the measles epidemic was published formally by the Local Government Board in December 1874, and during 1875 the Local Government Board issued a directive compelling the Corporation to establish a proper water supply. In January 1876 the Council wrote to the Board saying that while it was most desirous of providing a proper supply, their hands were tied by the existence of the 1870 Private Act, and also by the fact that the private company was proposing to ask Parliament to allow an extension to it.

The Council successfully opposed the extension to the Private Bill, and later in that year a Water Committee of the Council was established. Hawksley returned to Bridgwater for an interview with the Council during August, and in the ensuing months the newspapers reported that the Council was going to promote its own Bill. In December 1876 public meetings were held at which it was agreed that a Bridgwater (Corporation) Water Company Bill would be obtained, and this was finally passed into law by Parliament on June 18 1877.

We have thus seen that it took almost thirty years since the bad cholera epidemic of 1849 for a proper water supply to be established in Bridgwater. This was despite frequent epidemics of other diseases, which were reported on by local doctors and others. It was not until the government passed a law which empowered it to compel a defaulting council to act that Bridgwater local politicians finally capitulated. How much misery and death the population suffered over the years because of the blinkered vision of their leaders, which put a greater priority on the need to spend as little money as possible on civic amenities than on promoting good public health practices, can never be known.

Bridgwater's lethargy in the proper supply of water can be seen in the list of the dates of the formation of neighbouring water companies:

<table>
<thead>
<tr>
<th>Company</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnstaple</td>
<td>1858</td>
</tr>
<tr>
<td>Dorchester</td>
<td>1859</td>
</tr>
<tr>
<td>Shepton Mallet</td>
<td>1859</td>
</tr>
<tr>
<td>Taunton</td>
<td>1858</td>
</tr>
<tr>
<td>Weston super Mare</td>
<td>1854</td>
</tr>
<tr>
<td>Weymouth</td>
<td>Many years previously</td>
</tr>
</tbody>
</table>