

BOOK TEN

THE STRUGGLE FOR THE PROVINCES

CHAPTER I

THE PROVINCES

I

ALL this time—throughout the cholera epidemic, and then the distractions and anxieties of the struggle for the Metropolis—the Board was ceaselessly extending the Public Health Act. Even in the gloomy winter of 1852 this aspect was cheering.¹

The progress had undoubtedly been rapid and impressive; 215 places had petitioned for the Act, and it was already applied to 98 of them, while in another 34 only parliamentary confirmation was wanting. The most advanced places had even finished their engineering works, and in at least seven towns Chadwick's 'arterial' system was actually in operation.²

These successes were undoubtedly due to the novel procedure for introducing the Act. This process usually started with a local petition to the Board asking them to apply the Act. The petition had to be signed by one-tenth of the ratepayers, but the Board was also prepared to begin proceedings on the petition of the local governing body. Although the Board had the power to initiate proceedings itself if the local death rate exceeded 23 per 1000, it used the power sparingly. It was generally kept in reserve to support petitioners who were subsequently outvoted by their neighbours.

On receipt of the petition the Board gave the locality fourteen days' public warning that its inspector was coming to conduct an Enquiry. This was held publicly, and his Reports, after submission to the Board, were also made public. They usually commanded so much attention that local editors and publishers eagerly reprinted them.³ They

¹ E. Chadwick to F. O. Ward, 13th November 1852.

² Parliamentary Papers, liii, pp. 2 and 3. MSS. Minutes, General Board of Health, 13th October 1852.

³ Chadwick donated a set to the British Museum. They will be found under the Catalogue heading of 'General Board of Health'. These reports are a mine of information on the physical and moral state of the towns. They are extremely extensive, running from 100 to 300 pages in length.

contained an analysis of the town's sanitary condition followed by specific recommendations and estimates of the cost. Opponents were now notified that they had one month wherein to contest the Report. Any serious protests brought about a supplemental enquiry. With this, the 'preliminary inquiries' were over. It was now for the General Board to decide, on the evidence, whether to apply the Act or not. If it did decide to do so, it circulated a draft Order to the townspeople for further objection and comment before official promulgation. Where local jurisdictions were left intact, this was accomplished by Order in Council. Otherwise, it was embodied in a Provisional Order Confirmation Bill, subject to parliamentary debate. Once the Order was promulgated the Act became operative in the locality: it had to elect its local Board which was endowed with the extensive powers contained in the Act.

This procedure was the one which Chadwick had urged before the Select Committee on Private Bills in 1846. He remained inordinately proud of it to the end of his life.

He took the greatest pains to gain goodwill and meet all objections in the preliminary phases. The inspector was instructed to associate himself with the doctors and the clergy. When he arrived in the town he was to call a public meeting prior to making the inspection, and to invite especially the Superintendent Registrar, the medical officers, the Surveyor, High Constable and Inspector of Nuisances, as well as a deputation of the petitioners. At this meeting he cited the relevant statistics and evidence and explained his procedure.¹ The inspectors' reports were designed to form local opinion as much as to inform the Board. This was consistent with Chadwick's practice at the Poor Law Office where he used gazettes, circulars, and reports to influence the Guardians, and consistent also with his long-expressed views on centralization.² The inspectors were also privately instructed to maintain existing jurisdictions as far as possible to allay local unrest. This had the further advantage of securing the application of the Act by an Order in Council and so evading parliamentary challenge. In fact the areas legislated for by Order and those provided for by Confirmation Act were roughly equal in number, and on the whole little local opposition was raised.³

¹ *Instructions to Superintendents*, Parliamentary Papers, 1849, xxiv, pp. 47-8. The Reports are remarkably full and outspoken. The one I have before me—G. T. Clark's Report on Bristol (1850)—is 224 pages long.

² E. Chadwick to Lord Morpeth, 23rd October 1848.

³ Lord Morpeth to E. Chadwick, 8th April 1849; 11th November 1849. Parliamentary Papers, 1852-3, xcvi, p. 2. Parliamentary Papers, 1854, xxxv, pp. 13-14.

Chadwick contrasted this quick, cheap, democratic procedure with the Private Bill method which it supplanted. Here, he alleged, the Bill was drawn up, privately, by some self-interested attorney. The local publicity was a farce: the Bill was advertised in technical terms unintelligible to the population, and the plans were deposited in obscure nooks where few knew of them. There was no public cross-examination of the promoters. Such opposition as there was came from other self-interested parties intent on compromise or compensation. All this was done at enormous cost which the uncomprehending public suddenly found themselves obliged to pay: Liverpool and Dundee had paid £20,000 and £30,000 respectively for Water Bills, Birmingham and Reading £10,000 and £8,000 for Public Health Bills. The average cost of unopposed Bills was £1627, for opposed Bills over £2000.¹ By contrast the Public Health Act procedure cost an average of £112. There was effective local publicity, a local examination by specialist officers, public cross-examination of the promoters' case by and before the ratepayers, effective publicity for the Report and Estimates and, finally, the public election of a responsible Board.²

II

Now a good deal of this spirited defence was beside the point. All the Act required was that a minority of ten per cent. of the ratepayers should petition the Board on one single occasion; all subsequent developments rested entirely with the Board. Thereupon, no matter what objections, no matter how many opponents were brought against the inspector's report, the Board had the legal right and the power to make a Provisional Order: and where no change in local jurisdiction was called for, this could not even be debated in Parliament. Nine-tenths of the local ratepayers might be opposed to the Act; nay—if the original petitioners should have changed their minds—all the ratepayers might be opposed to the Act: but provided that, at one time or another a petition had been made in due form, the Board was at complete liberty to apply the Act. And this is to exclude entirely the cases where the Board might intervene of its own initiative by virtue of the excessive-mortality clause.

But this extensive discretion of the Board was eulogized by Chadwick as yet another, and an inestimable, advantage of the new procedure, in

¹ *Edinburgh Review*, January 1850, p. 224. *Quarterly Review*, March 1851, pp. 442 et seq. Parliamentary Papers, 1854, xxxv, pp. 37 et seq.

² Parliamentary Papers, 1854, xxxv, pp. 40 et seq.

that it protected the minority against the majority, the Weak against the Strong : and neither in private nor public did he conceal the intention of the Board to cast its weight against the local opponents of the Act.

He savagely castigated such opponents as those

'Who from ignorance resist measures by which even their own property would be improved ; a class of men who have little to do but collect their own rents, attend to parochial affairs, and are found at parish vestries, and at poor law Boards, paying their own rents in the shape of outdoor relief to their own tenants : these men are amongst the foremost agitators for reform in every administration but their own : they are the protectionists and defenders of filth.

'Next to these are the shareholders and connexion of shareholders in bad water companies, who profit by the monopoly of inferior supplies ; chimney owners who talk of political enlightenment and befoul the population with soot : shareholders and connexions of foul trading interests : as well as the class of owners of ill-conditioned tenements for which exorbitant rents are exacted.'¹

'When an act is talked of to compel the owners of house property, to make them fit for Christian people to live in, and the powers are sought to see such a measure enforced in Towns and the poor protected : that is *Centralization* :

'When Inspectors are seen examining the places ravaged by epidemic disease and find there bad water, bad drainage, filth and removeable sources of disease, the consequences of the neglect of the local authorities ; when measures are taken up to do something and you find them opposed by house owners in the guise of town councillors, and by others who have done nothing : what they oppose is *Centralization*.

'When the supplies of water to a town are in the hands of a joint stock company who get high dividends for bad or scanty supplies of water, when efforts are made to get other and better supplies of water and cheaper and to provide for their being conveyed into the houses of the poor : and when town councillors are found to be incompetent or unwilling to the task, the means of having it done and of cheapness are *Centralization*.'²

He alleged that the chief opponents were slum-owners whose property was so bad that it had never paid rates and who feared the Act would end this exemption. Sanitary improvements brought no benefit to them because they usually held the fag-end of a lease ; nor could they recoup the charges from their tenants, for these were already paying exorbitant rents.

A mass of contemporary evidence supports all Chadwick's charges. In Lincoln the opposition is described as 'landlords of houses, men who have raised themselves by trade to some degree of independence

¹ E. Chadwick, N.D., 1852.

² Mss, N.D., c. 1853.

and have built a lot of cottages . . . they are retired tradesmen generally . . . they are afraid of the expense which as landlords they would be called upon to pay. . . . They will not look at places which have benefited but they point out any one place in which sanitary operations have not been successful.'¹ In Yarmouth they opposed because 'unlimited rates would be imposed upon them'.² In Ulverstone, attempts were made to adopt the Act and the Local Government Acts that succeeded it in 1853, in 1859, and in 1864 : in each case they were outvoted by 'the owners of cottage property'.³ Basingstoke was still without the elementary means of drainage in 1869, since whenever the promoters had a public meeting they were 'outvoted by the cottage ratepayers'.⁴ The ugly, mean, bigoted personalities of this class have been described by contemporary novelists, and these intended portraits, not caricatures. Kingsley describes the notables of Aberava—Mr Beer, the moneylender with a dirt heap in his yard ; Mr Treluddra, the fish chandler with his mounds of rotting fish ; Mr Trebooze, the slum-owner who would rather blow his property into the sea than spend money on it.⁵ Hood created the notables of Squashleigh—Mr Gollick, the 'vestryman and poulterer' ; 'the leatherseller who had been an unsuccessful candidate for churchwarden' ; the plumber who had 'contrived to become the lessee of a good deal of house property in the neighbourhood'.⁶ Dickens's satire on Cess-cum-Poolton is far less a parody than a simple statement of the facts.

'Ratepayers, Cess-cum-Poolton ! Rally round your vested interests. Health is enormously expensive. Introduce the Public Health Act and you will be pauperized ! Be filthy and be fat. Cess-pools and Constitutional Government ! Gases and Glory ! No insipid water ! ! ! . . .

'When people say that a small payment for health and strength brings in even a large money profit, and invite us to reason with them on the subject, we say, "Reason with you ? No, we don't do that. We are not talking about reason but about rates. We see no reason in them and we object to them."'⁷

The Board was supposed, by Chadwick's theory of Centralization, to be an 'authority of appeal and adjudication between rival or conflicting local interests'⁸ : but here the story of the Irishman who asked 'whom he was to be neutral *against*' is singularly applicable. Indeed, in a charmingly naïf sentence to a private correspondent Chadwick

¹ Royal Sanitary Commission, Qq. 11228-30.

² Ibid., Q. 11,416.

³ Ibid., Qq. 11510-11532.

⁴ Ibid., Q. 6953.

⁵ *Two Years Ago*, by C. Kingsley, chapters XIV and XVI.

⁶ *Rates and Taxes*, T. Hood, 1866.

⁷ 'Our last parochial war', *Household Words*, 1853, p. 265.

⁸ Parliamentary Papers, 1849, xxiv, p. 60.

actually said that 'I was always of opinion that it (i.e. the Poor Law Board) should occupy a judicial, an impartially judicial position; with however, a strong leaning for those who were unrepresented, viz. the labouring classes!'¹

This was undoubtedly the way he made the General Board work. The local Boards were 'unavoidably . . . of one class; that class the well-to-do class who do not look into districts inhabited by the labouring classes, and who will not believe anything stated about them. Inasmuch as it is the local government of a class I think it requires the securities of appeal and protection for those who are not of the class.'² As the *Edinburgh Review* said, 'whoever seeks to enforce a Public Health Act must lay his account with waging incessant war'.³ The First Annual Report stated the Board's bias in uncompromising terms:

'Considering the provisions made for the satisfaction of the ratepayers with the application of the act, we should hesitate to recommend the enforcement of its provisions against the general and deliberate wishes of the inhabitants of any town, when the intended measures were placed fully and fairly before them. But we should not accept as expositions of the aversion of "the people", or of the unwillingness of the town, declarations which we know to be got up on ignorant or false representations by the owners of the worst-conditioned tenements, in respect to which it may be requisite to adopt compulsory measures, or by local functionaries whose powers it may be necessary to supersede; or by one local party in the mere spirit of opposition against the measure which may happen to have been initiated by persons belonging to another, or to no local party whatsoever.'⁴

III

Assisted by the full weight of the Board, the 'clean party' (dubbed the 'intelligent minority') triumphed everywhere. The larger towns, which would undoubtedly have rebelled as London had done, put themselves, and incidentally the Board, out of danger by getting local Acts and going their own ways. The opposition was sporadic, and on the whole remarkably feeble. The weakness of the local opposition was attested twenty years later by one who by no means shared Chadwick's centralizing prejudices, but who became the Board's Secretary in 1852—viz. Tom Taylor. 'There was resistance in a few cases', he said. 'The Board incurred some local unpopularity but I do not think it was very serious.'⁵ Chadwick himself, defending the Board from

¹ E. Chadwick to J. P. (Josiah Parkes), 24th March 1848.

² Ibid.

³ *Edinburgh Review*, January 1850, p. 227.

⁴ Parliamentary Papers, 1849, xxiv, p. 67.

⁵ Royal Sanitary Commission, 1869, Q. 12429, 12430.

the charge of excessive centralization, alleged that its relations with the local Boards were most harmonious, and that in only six instances was it involved in dispute.¹

Now the summary procedure of the Act did not end the opposition, but side-tracked it. A minority introduced the Act into towns: and although by 1854 that minority had triumphed in 284 places, and had elected local Boards in over 170, there was scarcely a single instance where a large and disaffected 'dirty' party was not watching the proceedings in sullen discontent. The Board's procedure, in short, allowed no clear-cut decision: it created a situation of unstable balance between the local sanitarians and their rivals. Thus, Bacup sent two deputations to the Board, one in favour of the Act, the other, led by Wilson Patten and John Bright, in opposition.² In Bristol the opposition went so far as to petition Parliament.³ One example, that of Barton-on-Irwell, will illustrate the way in which difficulties were created. On 26th April 1851 Henry Whitworth forwarded to the General Board a petition of one-tenth of the ratepayers, praying for action under the Act. The General Board sent Rawlinson its inspector to hold an enquiry, and on 14th September his Report was circulated locally. Within the statutory month granted for local objections, a public meeting was held by the opposition, which forwarded two resolutions to the Board, the first that Rawlinson's report was 'one sided and overstrained', the second that the application of the Act was 'undesirable and unnecessary'. A month later another public meeting was held and no less than 560 ratepayers upheld these resolutions. Whitworth and the promoters now asked the General Board for these documents: but in the meantime the Board had discovered that the mortality in Barton was more than 23 per 1000, and therefore had a right to interfere. It promised Whitworth that a second enquiry would be held, but in the end simply put out a Provisional Order under the 'excessive mortality' clause and this was promulgated as an Order in Council in July 1854.⁴

Such behaviour created a swelling army of disaffected citizens throughout the provinces, who vowed they had been cheated and were ready for any mischief. Chadwick's reception of the protesting local deputations must surely have made matters worse. They came along weekly and even daily, to plead the existing pressure of rates and taxes,

¹ Parliamentary Papers, 1854, xxxv, pp. 53 et seq.

² MSS. Minutes, General Board of Health, 7th February 1850. Bright's petition was dismissed.

³ Ibid., 17th June 1851.

⁴ Parliamentary Papers, 1854, lxi. (Correspondence, Memorials, and Reports relating to Barton-upon-Irwell.)

and the depressed condition of trade as reasons for exemption. 'My reply is, when they are left to me', he boomed heartily,—'Your depression being as you state, this is just the time for the application of the Act, for we particularly recommend it for the relief of existing local burdens, for we have recommended its application in no instance where we are not confident that it will effect considerable reductions'!¹

It will be understood that this rigmarole hardly increased the Board's popularity, and from 1851 cases began to be raised in the Commons. Sir Joshua Walmsley moved for a Select Committee to enquire why the Board had issued a Provisional Order to Yarmouth, contrary to the protest and remonstrance of its mayor and the large majority of its ratepayers—namely 1500 out of 2500. In 1852 the matter was put on a more general plane by the indefatigable Hume, who for the first time drew the attention of the House to the arbitrary nature of the Board's powers: the sense of the ratepayers was not taken, he complained. An inspector would appear and a few weeks later the ratepayers found themselves under an elected board, without even knowing who were the petitioning one-tenth.

But, to the end of 1852, these were the only parliamentary complaints of high-handedness brought against the Board's provincial administration. There was no concerted agitation, merely a feeling of sullen frustration, which was vainly seeking some cry and some leaders to unite it. Had the Board's general prestige remained constant after 1852, there is little doubt that it could have continued to apply the Act with little or nothing to fear in the way of a provincial rebellion. But at this stage, reeling from the disasters in London, the Board blundered into a life-and-death struggle with the powerful, independent and widespread 'order' of civil engineers. This improbable ally to the anti-sanitarian cause changed the entire course of the struggle. Shortly the Metropolis and the Provinces stood linked, via the medium of the engineers, in a bellicose agitation to destroy the General Board.

¹ E. Chadwick to ? , 28th March 1851.

CHAPTER II

THE ENGINEERS

I

THE engineers, particularly the railway engineers, were the folk-heroes of mid-Victorian England. The railway—the most revolutionizing technical invention of the whole century—struck the imagination of the nation like nothing else. Composers wrote ballads like *The Railway Bell*(e) and the *Railway Guard*, *Excursion Train Gallops*, and *Railway Overtures*. *Tracts for the Times* were parodied in *Tracts for the Trains*. Newspapers broke into a rash of 'Murders on the line', or 'Melancholy accidents'. Into half the villages of England drifted the navvies, legendary, hard-drinking roughs, who swaggered and swore in white felt hats, corduroy trousers, and scarlet plush waistcoats.¹ So, in the catalogue of inventors, iron masters, shipbuilders, and others, the railway engineers stood pre-eminent. In truth, they were not mere mechanical engineers. In that lusty infancy of civil engineering there were no specialisms: every man was expected to ply all branches of the mystery. The railway constructors drove tunnels, made cuttings, built locks, and drained marshes. They built undreamed-of bridges of steel, like the Britannia and the Saltash, and reared splendid and graceful viaducts, like those at Dutton and Llangollen, Monsal and Wharfedale.

These engineers were a peculiar social phenomenon. Most of them were of the humblest origin. Roger Scatcherd, in Trollope's *Dr Thorne*, might stand for nearly all of them. Robert Rawlinson's father was a builder, Rendel and Hawkshaw were farmers' sons, Stephenson was the son of a collier. They rose to fame and influence by their native ability and their gusty energies. By consequence they were intensely individualistic even for an individualistic age. It was they who invented the term 'private enterprise'. They obstructed the Railway department of the Board of Trade, the Harbour Commissions of the Admiralty, and the Board of Health, protesting against the 'mischievous flourishing of the functionary weed', and the 'difficulties thrown in the way of the rising generation of engineers by the governing classes of the country'. They would not, in their own words, be 'interfered

¹ See *Papers . . . on the demoralization and injuries . . . of labourers engaged in the construction and working of railways, etc.*, by E. Chadwick, Manchester, 1846; also *Edwin Chadwick and the railway labourers*, by R. A. Lewis, (*Economic History Review*, Vol. iii, No. 1, 1950).

with, restricted and controlled.' ¹ In alliance with interested M.P.s, parliamentary agents, and a venal Press, they fought a running battle with authority. We are told on Gladstone's own authority how his 'Railway Plunder Bill' of 1844 was defeated by a deputation of engineers, directors, and M.P.s, with solicitors and agents in the background, who filled the lobbies 'soliciting members for votes'. ² This same coalition had defeated the Water Bill of 1851. In their ruthless eruptive animal energy, the engineers showed a swashbuckling disdain for the social evils around them. 'Railways were meat and drink'. Nearly all of them were Tories and Protectionists in an era when Toryism was just beginning to become synonymous with a tenderness to vested interests and with Herbert Spencer's version of *laissez-faire*. Indeed, Spencer's *Man versus the State*, written when he had just ceased to practise as an engineer, may be taken as the social philosophy of the whole profession—civil engineering and social buccaneering.

The engineers were an 'order', a freemasonry, whose centre and sounding-board was the Institute of Civil Engineers. By mid-century this had transcended its original purpose. It was no more a simple self-improvement society, but a social club, a clearing-house for information, a bureau for employment. It aspired even to be a Senate. But one cannot read its 'Minutes' without being struck by its self-complacency and its professional bigotry. The whole Institute had a chip on its shoulder. Its emblem should have been the thistle, and its motto *Noli me tangere*.

11

From 1850, as Cubitt, Rendel, and Stephenson became successively its Vice-Presidents and Presidents, the Institute controlled the Metropolitan Commission of Sewers. Ebrington, the Commission's Chairman, was pushed aside, and the body proceeded piecemeal to dismantle all Chadwick's work.

Its first business was to analyse the 200 or so plans submitted for London main drainage. Austin's sump plan was rejected, because it was too original. It was 'correct in the abstract', said the Report; but Stephenson's caution shied from a scheme that depended entirely on machinery and which presented 'great mechanical difficulties in the storage or discharge of sewage.' Phillips's plan was also rejected—as sheer bad engineering. But the principle of the intercepting tunnel

¹ M.I.C.E., xiv, p. 312. Mr. Bidder, C.E. (Vice-President of the I.C.E.) loquitur.

² Hudson, *The Railway King*, Lambert, pp. 104-5.

sewer was favoured, and Forster was bidden prepare a more workable scheme. ¹ In August 1850 his plan for the Southern outfall was accepted, and in January 1851 the plan for the North bank. Thus the tunnel scheme had triumphed.

A similar fate befell Chadwick's plan for the drainage of Westminster. His last act at the Second Commission had been to rescind a large tunnel sewer scheme. The Third Commission reverted to it and in an evil hour the Victoria Street sewer was begun. Also, without even the benefit of a Court Order, the trial works, the experiments on the flow of liquids through pipes were abandoned—apparently on the initiative of Phillips. ²

Against this course Chadwick protested unavailingly both in private and in the Water Report of 1850. But once the Government had rejected his water plan, the chance of recapturing the Commission was remote. He could only hope that the Commission would so discredit itself as to be re-entrusted to him.

The Commission did indeed make a sorry hash of its work, and everybody was discredited—except the engineers! Throughout 1851, the vestries, *The Times*, and the Metropolitan members kept up a running fire of attack. ³ The sole result of these attacks was the resignation not of the engineers, but of Lord Ebrington.

On this, the Third Commission was formally dissolved and as formally reappointed, except that the chairman was now to be paid £1000, and the Commission was limited to a 3d. rate. The chairmanship fell first to E. Lawes the barrister, and on his death to Sir Morton Peto. Matters went from bad to worse. The Commission found that it could not raise loans on the security of its 3d. rate, and so was forced to defer the main drainage. Then the Victoria Street sewer collapsed; Crown buildings suffered heavy damage in the subsidence, and all the work had to be recommenced and heavy compensation paid to the Crown. Now it was Forster who resigned, throwing the whole blame on the Commission's *military* engineers.

Six months later the tunnel was still in ruins and had already cost £25,000, more than double the estimate. The whole Metropolis was in a rage. One might have thought that at last the civil engineers would be brought to account for their venture. So they must have thought, for in June the whole clique resigned. Their ostensible reason

¹ Report of the Third Commission of Sewers on the Plans sent in for London drainage, 1850. Cf. *The Times* ('Metropolitan Court of Sewers'), 16th March 1850.

² E. Chadwick to Sir J. Burgoyne, 9th December 1851.

³ *Hansard*, Parliamentary Debates, 16th May 1851, vol. cxvi, col. 1063. Cf. also *ibid.*, 24th and 29th July 1851; cxviii, cols. 1468 and 1700.

was that they could not raise the necessary money to execute the main drainage: but the opportunity was not allowed to pass without an attack on Chadwick's pipe sewers and 'Dilettante engineering'. The Metropolitan members blamed not only the Commission, but they blamed Chadwick also. Sir John Shelley accused him of discharging all the officers employed by the old Courts of Sewers and of replacing them by 'ill-informed men ready to carry out his foolish designs'. The Commission was bad: Chadwick was worse. 'He was a pest wherever he went'.¹ The new Commission (the Fourth), on which only five of the former members served,² and which was far more obscure than its predecessors, immediately reaffirmed its confidence in 'the profession' by appointing Cubitt and Stephenson as its consultants and Bazalgette as its chief engineer.

Thus the mere prestige of Stephenson was enough to avert from the Commission the just blame for its failures. By the end of 1852 his faction was still in the ascendant. Chadwick's programme had been dismantled; his counter-attack on the Commission had been broken; and he himself was censured for the Commission's mismanagement. At this time, while the Commission was tending towards an excessively conservative view of drainage under the direction of the Institute, the General Board was rapidly moving in a contrary direction.

111

It is imperative to stress that when the Board was set up in 1848 Chadwick was committing it to a system of drainage which was untried and which he knew to be untried.

He selected the Board's engineers by virtue of their heterodoxy. It was of course impossible to ask candidates for practical experience in the 'combined' system since this nowhere existed: but Chadwick said, 'we may consider of the best available *proximate* experience.'³ Applicants were therefore told to submit a paper showing how they would remedy the defective drainage of some supposed town and in the *pro forma* which explained the test to them, the following significant sentence occurs:—

'It will be evident to any one who has followed the course of the enquiries relating to Public Health Works that the principles that have been established for future operations will render inapplicable much of the experience that has

¹ *Hansard*, Parliamentary Debates, 8th August 1853, vol. cxxix, cols. 1571 et seq.

² Viz. R. Jebb (Chairman), Sir J. Burgoyne, Major Dawson, Capt. Vetch, and T. Hawes.

³ E. Chadwick to Lord Morpeth, 14th September 1848.

been formed in the execution of existing works of house, street, and land drainage, water supply and general cleansing.'¹

In this way he built up from the start a team of convinced champions of pipe sewers and the arterial system. Henry Austin, a fanatic for the new system, was the Board's Secretary until 1852, when he became Senior Superintending Inspector. In the field service there were appointed Rawlinson, Cresy, Ranger, Lee, and Rammel.

With a staff of his own choosing and his own opinion, Chadwick's views became ever more dogmatic. Even at the outset, and fully realizing that the Board's course was experimental, his bias was paramount. It was another example of 'judicial impartiality leaning towards one side'.² He told Morpeth:

'It may be asked, Are we to trust no one, not even men of the most eminent practical science? In such new and untrodden ground, I believe the reply must be still in the negative. We must trust solely to ascertained facts. Fortunately they are sufficiently numerous *if carefully collected* . . . *With the theory with us*,³ and with such stores of facts, we may proceed *stare decisis* and care very little for the adverse opinions of architects and surveyors under the Metropolitan Building Act.'⁴

To his credit, he did press on with experiment, which is more than the civil engineers deigned to do. The results were first published in the Report on Water Supply of 1850, and purported to show that pipe sewers were not only practicable but could be made even smaller than he had previously supposed. At first he had confuted the tunnel sewers of the old engineers and surveyors by the formulae of Thomas Hawkesley: then he confuted the formulae of Hawkesley by the tables of John Roe, which gave an even smaller dimension of sewer. But by 1852 he himself was confuting Roe for recommending sewers that were too big: 'This, I must again repeat, is a pestilent error which if again propagated, must entail excommunication. . . . I must admonish you to cleanse your breast from feelings akin to those of the perverse prophet who had rather Nineveh were destroyed than that his prophecy should not come true'.⁵

Chadwick's doctrine was finally crystallized in the autumn of 1852. It is necessary to recall the situation. The Interments Act had just been repealed; the water companies had won their battle; the engineers had just left the Commission with a smoke-screen of innuendo against

¹ 'Papers relating to the Reorganization of the Civil Service', 1855 (Parliamentary Papers 1854-5, xx), pp. 223-4.

² See above p. 436.

³ My italics.

⁴ E. Chadwick to Lord Morpeth, 18th September 1848.

⁵ E. Chadwick to J. Roe, 30th March 1852.

Chadwick. The prestige of the Board was at its lowest ebb. At this moment it published its *Minutes on House Drainage*. This was intended as the accepted manual for all its local Boards. Eleven thousand were printed off, and circulated gratis. It was a developed account of the arterial system and explicitly and implicitly a sustained attack on the engineers.

Now in the matter of engineering practice the Board could exercise a very real influence. By the 119th clause of the Act—the one for which Chadwick had battled so hard—the local Boards were bound to obtain the sanction of the General Board before raising loans for their engineering works. Chadwick boasted publicly that he proposed to use this clause with the utmost rigour. The local Boards were made to submit their plans and estimates in the greatest detail to a Superintendent Inspector, and the loan was not sanctioned until he had certified them. Furthermore the completed works were not to be covered up or put into operation until he had reported on them once more. The spirit in which these examinations were to be conducted was made clear when Chadwick said that the precautions against 'ignorance' (i.e. the practice of the engineers) were more important than those against 'jobbing and waste'.¹ 'No one was to be clean except by Chadwick's patent soap'.² Small wonder that many Boards concluded that the quickest way to get the General Board's sanction was to approach the Board's engineers themselves. Now these inspectors were not full-time public servants. They were paid three guineas a day for such time as they spent on the Board's business, and were perfectly free to engage in any private activity whatever. Accordingly they were at liberty to accept the lucrative contracts offered them, and Chadwick, determined to spread the 'arterial system' as fast and far as possible, bent every effort to assist. By the end of 1852 no less than thirty-four Boards were employing the Board's inspectors—roughly half of the total number of Boards that had prepared plans.³ Chadwick fought a determined battle to exclude his particular enemies. At Grimsby he suggested to the Board that Rendel should be superseded by an Inspector. In Leicester he objected to the employment of Wicksteed.⁴ He harried Hawkesley from pillar to post, driving him from Coventry, objecting

¹ Parliamentary Papers, 1849, xxiv, pp. 62-5.

² *Engineers and Officials*, 1856, p. 128.

³ Parliamentary Papers, 1852-3, xcvi, p. 127, gives the number of 34. The Engineers said it was 44. By January 1854, the total number of plans laid out, approved, and completed was 114. The figure for 1853 is not given but would be considerably less.

⁴ T. Wicksteed 1806-71, mechanical engineer. Engineer to the London Sewage Company, 1847, dissolved 1848. Formed and managed Patent Solid Sewage Company at Leicester, 1851-65.

to him at Leamington and causing him extreme vexation at Dublin, where the Board disapproved his plans and insisted on modification and a large cut in the estimates.¹

The publication of the *Minutes* brought this dispute to a head. It was received by the Institute with a shout of rage. It was as though to-day no medical practitioner were allowed to practise unless he eschewed everything but osteopathy. Much as the Board's *Notifications on Cholera* had been denounced by the Royal College of Physicians and the *Lancet*, and for the same narrowly professional motives, the *Minutes* were denounced as a gross insult to the profession. What business had a lawyer teaching them? What business had he to deride the opinions and practice of eminent engineers like Hawkesley or Cubitt? The booklet was condemned as gross quackery, as erroneous and dishonest, as speculation and theory against common sense and practical experience. Yet unless the engineers bowed down in the House of Rimmon they would get no more contracts under the Public Health Act. They must renounce their past or renounce their futures.

The points of controversy could easily have been settled by experiment, and it is due to Chadwick to say that the onus was now on the engineers. But all the practice and experience were on the side of the profession. The railway engineers, in particular, had extensive confidence in the strength and durability of the brick arch and the brick-lined tunnel. Furthermore, all the formulae and experiments were on their side. It was not that they refused to appeal to experiment; in their view the experiments had already been done. The Board, said Bidder, 'had expended large sums in valueless experiments on a question already thoroughly understood by scientific men'.² Hawkesley said that it had 'the peculiar notion that little if anything definite is at this time known as to the discharge of water through pipes',³ and was 'chiefly interested in discrediting the previously accepted rules'. Rendel maintained that its strictures 'on the received practice of the profession were as uncalled for and erroneous as the theories promulgated'.⁴ Its experiments were therefore not taken seriously. Hawkesley investigated the 'thousands of experiments' conducted; on the strength of the fact that some were endorsed 'anomalous', 'incredible', by the mathematicians of the Second Commission and that many had been re-performed, he concluded: 'there was nothing in all that mass of

¹ Letter of Thomas Hawkesley to the Marquis of Chandos, on the Great Grimsby Improvement Bill, 1853. But, to judge by the Parliamentary return (Parliamentary Papers, 1852-3, xcvi), Chadwick failed to place his own men in Grimsby, Leamington, and Leicester. It is worth mentioning that R. Stephenson took up the cudgels for Wicksteed at Leicester.

² M.I.C.E., xiv, p. 312.

³ Ibid., p. 291.

⁴ Ibid., xii, pp. 25 et seq.

thousands of experiments from which a single safe conclusion could be drawn'.¹ This dictum, delivered by England's greatest water-works engineer, the inventor of the constant-supply system, was henceforth accepted by the Institute as an article of faith: the more especially when he claimed that he had reconducted his own experiments and found the Board's formulae 'entirely wrong and totally at variance with fact'.² The Institute operated from what it had practised and what it knew. As engineers their dicta were above suspicion and Chadwick's experiments were beneath contempt. Unfortunately for the dignity of the profession, engineers like Rawlinson, Holland, and Austin were supporters of the odious new theories. They were treated with leniency, and it was alleged, despite their hot protests, that they had to speak as their employer bade them. Thus the pretence of a united profession was upheld, and all odium, factiousness, and dishonesty were attributed to Chadwick.

IV

The Institute instantly launched an attack on the *Minutes* and it used the Metropolitan Commission as its stalking-horse. Thus once again Commission and Board fought a public duel. But this time the Commission took the offensive.

In October the Commission received a report from St Giles. This showed that the stoneware pipes had burst, the house drains had stopped up, and that those still working were accumulating deposit. This sufficed. The Commission forbade any further back-drainage³ throughout London. In future all main sewers were to be in brick, of man-size; and pipe was never to be used in lengths greater than 500 feet.⁴ After this drastic order, Bazalgette was instructed to find out whether pipe sewers were unsuccessful elsewhere. He found little to prove his case in Leeds and Manchester. But in London 122 pipes were pulled up and of these twenty-three were cracked and sixty-six either totally choked up or nearly so.⁵ A circumstantial and illustrated Report was immediately drawn up, and given the most extensive circulation.

¹ M.I.C.E., xiv, p. 291.

² Ibid., xii, pp. 25 et seq.

³ Back-drainage was a system whereby house drains were taken from the back of the house (where the W.C. was situated), and led into a branch sewer immediately behind the back door, this branch sewer being common to the whole row of houses. This was very much cheaper than the current system which gave each house a separate drain, but led it from the W.C. all the way under the house, from back to front, to the middle of the street where it led into a large brick sewer. The Board set much store by back-drainage, which was far cheaper than the old system.

⁴ Minutes, Metropolitan Commission of Sewers, 18th January 1853.

⁵ Parliamentary Papers, 1852-3, xcvi, pp. 511-59.

But this triumph was followed by an incident so dramatic that further argument seemed unnecessary. This was the celebrated Croydon case.

Croydon was one of the first places to petition for the Act. The chairman of its local Board was Cuthbert Johnson, Chadwick's friend and colleague.¹ Its plans, after amendment by Superintendent Inspector Ranger, were warmly approved by the Board as a model of the new system. It was one of the first Boards to set them in operation. In this Arcadia, which by all the rules should henceforth be free from every zymotic disease, there suddenly burst out, in November 1852, an extensive epidemic of fever which attacked no less than one in every ten inhabitants!

By January 1853 the ominous grumbling of the population turned into a full-throated roar—the new sanitation was to blame! Southwood Smith and Sutherland hurried there, but found themselves at a loss. The fever was, apparently, some kind of para-typhoid with which they were not familiar. The more obvious 'predisposing causes' were, for various good reasons, ruled out. They examined the water-supply: but Dr Way, the chemist, pronounced it wholesome, and no doubt it was, chemically, for the typhoid bacillus is insidious enough to slip through the defences even of the twentieth century. Perplexed at the absence of evidence the doctors turned the enquiry over to Henry Austin. He was appalled at the slovenliness with which the contracting had been carried out, at the poor workmanship of the pipes, and above all, with the fact that the bore of the pipes was clearly too small. To make matters worse, it was Ranger who had insisted on the last.²

The inhabitants now insisted on an independent enquiry conducted by the Government, and a Commission, consisting of Neil Arnott and Mr Page, C.E., was appointed forthwith. Of Page nothing was known except that he was an engineer of the Board of Woods and Forests.³ The first name was received with delight at the Board.

Their joint report came as a terrible shock. It confirmed all that the population of Croydon had been saying: the plan for sewerage had caused the epidemic, and the chief reason was the use of pipe drains and pipe sewers!

Chadwick was beside himself with vexation when the Report reached him. He ascribed the failures at Croydon to the bad workmanship of the jobbing builders and the lack of superintendence. The

¹ On the First and Second Commission of Sewers.

² Parliamentary Papers, 1852-3, xcvi, pp. 117 et seq.

³ S. Smith to E. Chadwick, 9th February 1853.

stoppages had occurred not because the inlets were too small but because they were too large. The pipes (as Page had admitted) were thinner than the Board specified: it was therefore a wonder there had not been more failures. Yet only 150 yards had been broken, in a very deep cutting, whereas no less than sixteen miles of sewers were working successfully. How could the epidemic be ascribed to the new works when its first visitation was at Oxted, three-quarters of a mile away? and how could it have been made more serious by the new works, when at Oxted it was three times worse than at Croydon and at Sheriff Hutton six times worse? ¹ He sat down and wrote an exculpatory reply; and it was all that Shaftesbury could do to persuade him that it was too polemical for publication and that he had best hand the matter over to Henry Austin.

Thus began a long battle of reports and counter-reports which continued into the summer of 1854. The civil engineers publicly attacked the Board while giving evidence before the Select Committee on the Great London Drainage Bill. The Board replied by calling the Home Secretary's ² attention to the Metropolitan Commission's plans for London drainage and warning him that they would be inefficient and cost three times more than was necessary.³ They followed this by Austin's reply to Page's Croydon Report.⁴ The Home Secretary now entered the field himself; behind the Board's back he wrote to six local Boards with pipe-drainage systems to find out how they liked them. The local Boards sent back favourable replies. He fired these at the Commission of Sewers who were quite nonplussed.⁵ Bazalgette was sent to visit the Boards, and his Report was forwarded to the Home Secretary.⁶ Not till this stage did the Board realize what was happening, and it instantly wrote its own indignant comment upon Bazalgette's Report.⁷ It followed this, and concluded the argument for the time being in the Synoptic Report in which it summed up its five years' work and asked for a further lease of life.⁸

To analyse the contents of these reports in any detail would be insufferably tedious, and in any case they belong to the history of sanitary engineering. But the tone of the dispute is another matter, and it calls for comment.

Despite their criticism of Chadwick's experiments as valueless, the engineers appeared to have little conception of scientific method.

¹ Cf. Parliamentary Papers, 1854, xxxv, pp. 50-1.

² Now Lord Palmerston (see below).

³ Parliamentary Papers, 1854, lxi, pp. 113 et seq.

⁵ Ibid., 1854, lxi, p. 139.

⁷ Ibid., 1854-5, lxv, p. 295.

⁴ Ibid., 1852-3, xcvi, pp. 221 et seq.

⁶ Ibid., 1854, lxi, pp. 298-306.

⁸ Ibid., 1854, xxxv, especially pp. 50 et seq.

They seemed to think that a few failures discredited a system: as if (as Henry Austin put it) every time a locomotive stopped, the principle of steam traction stood condemned. They never enquired into the circumstances attending a stoppage or fracture, and they never enquired why, although some pipe systems failed, others continued to work. Thus Bazalgette took St Giles as an example of the tendency of pipes to stop up, but did not see fit to mention that the water-closets were all broken, or that no water was available to run through the pipes.¹ He took up 122 pipes in London without mentioning that some were the earliest prototypes of pipe sewers, so thin that the earth was bound to crush them, that others were carelessly laid and jointed, that many were either served by scanty and intermittent supplies of water, or else led into tide-locked sewers in which the sewage was forced back up into the pipes.² Furthermore, 122 pipes was a very small sample on which to condemn 250 miles of pipe, laid on to 20,000 houses. In point of fact Bazalgette's methods are not above suspicion. The 122 pipes 'were sought for in a hurried manner, secretly and after nightfall by a surveyor and a contractor known to be opposed to the use of pipe drainage.'³ When he inspected the Board's works at Rugby, he did not even look at any pipes but got his information from the surveyor, who gave it from a sick bed. He took a very cursory look at Sandgate, arriving there late one afternoon and leaving early next morning.⁴

The engineers were also surprisingly undialectical. For instance, Bazalgette's main point against the working of pipe sewers in the six local Boards was 'In no place has sufficient time elapsed to give the system a fair trial. In four out of five towns there have been failures'. He did not see that if the second sentence proved anything the first could not be true. Even more astonishing is his comment: 'The drainage of houses into the pipe sewers only began two years ago . . . so that even if no failures had occurred they would afford no real experience on the subject.'⁵ The inarticulate premise is that sooner or later failures are bound to occur: which was just what he was being asked to prove.

¹ Further Report on Croydon Drainage, by H. Austin (Parliamentary Papers, 1852-3, xcvi, pp. 221 et seq.)

² Appendix to H. Austin's 'Further Report, etc.', op. cit. above.

³ Ibid.

⁴ Parliamentary Papers, 1854-5, lxv, 'Reports of Inspectors', pp. 16 et seq. Bazalgette bore a personal grudge against Chadwick. He had applied for the post of Assistant Surveyor to the Metropolitan Commission in 1849, submitting as his thesis a paper on 'The Establishment of Public Conveniences', a matter then commanding much Metropolitan attention, but was beaten by John Grant who wrote on the 'Working of Tubes in open ditches' (April 1849).

⁵ Parliamentary Papers, lxi, pp. 298-306.

Furthermore the engineers were capable of the wildest exaggeration. They alleged that the Board wanted to use nothing but earthenware. In fact over half of the plans approved by the Board made provision for brick sewers, and there is a large cut of an approved brick sewer in the *Minutes of Information*. They also exaggerated their differences. For example, they urged interminable proofs that back-drainage was theoretically objectionable: but when the Home Secretary confronted the Metropolitan Commission with evidence from the six local Boards, its Chairman, Richard Jebb, stated that it had no *abstract* objection to the principle; it had discontinued it because 'the builders did not like it'.¹ (Naturally they did not: it brought them in less employment). Again, Bazalgette scornfully declared that he preferred the 'Cloaca Maxima to pipes of fragile clay'² and that far from the pipe sewer being more self-cleansing than the brick man-size sewer the reverse was the case.³ This foolish remark was contradicted by the very *raison d'être* of the man-size sewer, viz. the need to clean it by hand. But again, when brought to the point by the Home Secretary, the Commission stated that its objections really bore upon the fragility of the clay pipes and that the Commission was expecting to use many more in the future.⁴

In fact, by the close of the dispute, it becomes very hard to see what the differences really were. The engineers appeared to have created a bogey called 'tubular drainage' and fought this shadow with every means in their power; but in fact, up to a point they were themselves using pipe drains and pipe sewers. Both Haywood (the City of London surveyor) and Hawkesley admitted to this.⁵ Even Robert Stephenson said that 'for certain localities, if pipe drains were sufficiently strong to resist human fracture and sufficiently large to avoid being choked up they could be used to connect houses and courts to man-sized sewers made of brick'.⁶ Yet Hawkesley could say that the Board's notions were 'peculiar', 'not one of which is countenanced by the most eminent and most practical men of the profession.'⁷ When taxed with this inconsistency by Robert Rawlinson, Bidder replied that the private engineers had used pipes 'under compulsory pressure of the Board of Health as by no other means could they have procured permission to execute the drainage works'.⁸ This was quite untrue, for the City of London, Manchester, Chester, and Leeds were all using pipes, and they

¹ *Report to Viscount Palmerston on the system of drainage pursued in the Metropolis*, R. Jebb, 1854.

² M.I.C.E., xii, pp. 25 et seq.

³ Ibid.

⁴ *Report to Viscount Palmerston . . . on drainage . . . in Metropolis*, R. Jebb, 1854.

⁵ M.I.C.E., xii, pp. 25 et seq.

⁶ Ibid.

⁷ *Letter to the Marquess of Chandos*, T. Hawkesley, 1853.

⁸ M.I.C.E., xiv, pp. 312 et seq.

were entirely independent. As a matter of fact, had it been true, it would have provided, from the standpoint of to-day, the greatest single justification for the sanitary despotism of the Board—the use of cheap replaceable pipe instead of brick.

The real strength of the Board lay precisely in that its system was cheap. It could sewer and drain a town for one-third of the former cost. Even if the pipes all had to be taken up again, the mere saving from the former labour of hand-cleansing was sufficient to replace them every four or five years. Once the Board gave the lead, at the cost of such stubborn opposition from the engineers, architects, and builders, the very economy of the system began, slowly, to ensure its triumph. In 1848 only 104 miles of pipe had been manufactured for the whole of England. By 1854 it was already 2600 miles, nearly one-third of its sewer-size. It was becoming 'as useless to persuade the public that pipe sewerage was a failure as to make a Manchester man believe that calico was an unfit article of clothing.'¹

This hard fact, which was indeed undeniable, brought the rancour of the profession back to its original grievance—the unfair competition of the Board's inspectors. The private engineers sought to give the public the impression that the 'tubular system' was forced by the Board upon unwilling communities: but the evidence of Hawkesley himself shows that the real difficulty the private engineers faced was that most local bodies *welcomed* the Board's system because it was three times cheaper than the older practices. The *Minutes* were attacked so bitterly because they brought home the cheapness of the new system to the local communities:

'Their experiments so indifferent, results so anomalous, and conclusions so worthless', said Hawkesley, 'had been republished after they were known to be perfectly incorrect; nay worse, they had been twice republished by Government authority and they had been presented to Parliament in that official form and had been circulated gratuitously by the Government to the extent of 11,000 copies: and upon that information nearly every magistrate, every chairman of a local board and almost every clergyman taking part in public affairs—every man in fact upon whom it was thought an impression favourable to the conclusion of that authority could be made, had been supplied with copies of these worthless books. The result was that wherever an Engineer was consulted upon public works connected with Hydraulics he was met by some one, antagonistically armed with one or other of these bluebooks who said "You are not an Engineer connected with the Government and therefore of course, practice according to the erroneous data which were in vogue before the discoveries of the General Board of Health"'. Then some one who either really had the interest of the

¹ M.I.C.E., xii, pp. 25 et seq.

ratepayers at heart but acted in equal ignorance and good faith, or had his own little job to perpetrate, or who while his real mission was to prevent any but his own scheme from being carried out, ostensibly professed to have the interests of the ratepayers at heart, said—"The plan which is submitted is not a plan which can be adopted—it is a plan which will occasion enormously unnecessary expense, for it is stated in the blue book that you can pass 3 times as much water through a potpipe as through a brick sewer: and therefore if you employ a Board of Health Engineer you will not want more than 1/3 of the area which this gentleman requires". The consequence of all this was great confusion and contention resulting generally in great expenditure under the guise of economy and ending in lamentable failure: forsooth it was stated that these data coming from the Government must be considered as authentic. Now all this evidently proceeded from the present mischievous tendency of unscientific amateurs who being appointed to Government offices took upon themselves to meddle with purely professional matters and employed persons still more ignorant than themselves to perform experiments and design works which required and had occupied the attention of men of the highest scientific attainments.¹

v

The results of this quarrel were far reaching. As soon as the results hostile to the Board had been discovered by Bazalgette, and especially when the Croydon Report was published, the Institute, anxious to break the Board's sanitary monopoly, circulated them assiduously throughout the localities. But there, they came as manna to the leaderless, discontented cottage ratepayers and slum-owners. Ways and means might be discussed for ever, since the results of sanitation were so much in dispute, and so they could emerge from their odium to claim that they were in fact not the 'dirty party' but the 'efficient party'. The Institute circulated its propaganda to break the Board's monopoly of local sanitation, but the local slum-owner used it to get rid of sanitation altogether. The same tract, with its pictures of the 122 choked pipes, served indifferently the engineer, the anti-sanitarian and the local champions of self-government; it proved to the satisfaction of each that the General Board's despotism did not even have the excuse of benevolence.

¹ M.I.C.E., xiv, p. 291.

CHAPTER III

THE END OF THE BOARD OF HEALTH

I

THE Board's span of life was due to end in 1854. Was Parliament likely to renew it? The shadows had begun to close upon the Board after the ignominious defeats of 1852; in 1853 they lengthened perceptibly. In London the duel with the Commission had recommenced under the worst possible circumstances, with the Croydon case in everybody's mouth. The vestry agitation was unceasing. A huge delegation from the parishes, in which eight of the Metropolitan members and one hundred vestrymen took part, urged on the Home Secretary the mismanagement of the Commission and the need for self-government in matters involving parochial expenditure: but—the General Board was regarded as a worse alternative, and it was denounced even more unsparingly.¹ In the background, the vested interests silently counted their numbers for the approaching parliamentary division.

Outside London the initiative of the Commission and its engineers brought new life to the local oppositions. Every private engineer became a public agitator. At Cardiff, for example, the opposition was led by a member of the local Board (who was a builder) on the strength of letters received from the former chief clerk of the Metropolitan Commission.² One group of private engineers reprinted *The Times'* report of the Commission's discussions on the St Giles drainage, and circulated it under the title: 'Metropolitan experience of the unsuccessful results of the system of pipe drainage'.³ Illustrated copies of Bazalgette's Report on the 122 London sewers were circulated in every town adopting or about to adopt the Public Health Act; in many cases every member of the local Board was supplied with a copy. In this instance the instigators were unknown: but in other cases the tracts were traced to 'the engineers connected with the Metropolitan Commission of Sewers and other engineers more directly connected with private waterworks'.⁴ Where no local board yet existed rumours were industriously circulated 'that the Public Health Act was a system of

¹ *The Times*, 14th February 1853. *Hansard*, 9th August 1853, cxxix, cols. 1571 et seq.

² Parliamentary Papers, 1854-5, lxxv, 'Communications from the General Board', p. 11.

³ *Ibid.*, p. 15.

⁴ *Ibid.*, p. 8.

centralization and that once adopted the towns would no longer have a voice in their own affairs: the local government would be destroyed: it would be over-ridden by the General Board of Health'. Where Boards already existed, it was said, 'that the cost of the works would ruin the towns, that the estimates which had been put forth were ridiculous and would be exceeded by two or three times the amount; and that the rates would be burdensome in the extreme; that the works would all fail and that the very idea of works for the poorer classes was an absurdity.'¹

Now, since the debates of 1848, no single Member of Parliament had cared to revive the charge of Centralization against the Board. But the vigorous propaganda had an instant effect on Parliament, and suddenly the anomalies of the Provisional Order procedure were attacked as a major attempt against local self-government, and a cry of despotism was raised against the General Board. The difficulties inherent in the procedure appeared clearly from the cases of Brighton, Ryde, Bromyard, and Hertford. In each town the petition of the statutory one-tenth of the ratepayers had been met by counter-petitions from much larger oppositions. The general sense of the House was hostile to applying the Act to any place where the majority opposed it.

Furthermore, the grievances of the engineers were closely linked with all these arguments. It was significant that the chief opponents of Provisional Order procedure were also the champions of a clause to put the Board's engineer on a fixed annual salary. Significant also was the fact that the M.P. who complained so bitterly about Ryde, viz. Col. Harcourt, should have moved for a return of cases where the Board's engineer had carried out the local works.² The intimate connexion between the two sets of grievances was given extensive publicity by proceedings in the Lords. There Thomas Hawkesley, witnessing before the Select Committee on the Great Grimsby Improvement Bill, made such serious charges against the Board that the Chairman, the Marquess of Chandos, asked him to put them in writing. The result was a vigorous pamphlet written in Hawkesley's characteristic mud-slinging style which caricatured the procedure of the Board and made free with charges of corruption and ignorance. The practices of the Board's Inspectors were 'unfair, obstructive and not infrequently

¹ Parliamentary Papers, 1852-3, xcvi. Appendix to H. Austin's 'Further Report on Croydon', p. 28.

² *Hansard*, Parliamentary Debates, cxxiv, col. 87; cxiv, col. 1350; cxxiv, col. 1430; cxxix, col. 86; cxxix, col. 239. The debates extend from 14th February to 14th July 1853.

corrupt'.¹ The 119th Clause (the loan sanction clause), 'a very simple and apparently proper and innocent' one, had become 'a system of central control over local authorities and of personal pecuniary advantage'.² His version of the Board's procedure was this. First there was a memorial 'purporting' to be signed by one-tenth of the ratepayers. This was frequently suggested to some local person by an inspector. Next, the inspector held his enquiry and 'invariably' his report was against 'all existing institutions and authorities'. After that the Board made and applied its Order, the local Board put up its plans, and these were reported on by the Board's five inspectors. But the Board was Edwin Chadwick, and the inspectors entertained his 'most peculiar' and entirely erroneous views. The inspectors refused to sanction the plans: the local Board must either sack their engineer and appoint an inspector, or carry on an interminable correspondence. Either the works were delayed or the local Board was forced to carry them out on Chadwick's terms: and these were the very ones that had failed at Croydon. This spiteful attack was garnished with many instances of the way Hawkesley or his friends had suffered, and by two personal slanders: he alleged that Inspector Lee had tried to steal his clerk from him to gain a knowledge of his methods, and that Ranger had copied the specifications of his waterworks at Darlington and reproduced them without modification at Southampton and Barnard Castle.³

I I

Since the fall of the Derby Ministry in December 1852, the Board had a new set of masters. Its President was the young, foppish-looking Radical M.P. for Southwark, the quondam friend of Chadwick in the palmy days of *The London Review* and Philosophical Radicalism—Sir William Molesworth. Molesworth had decided views about the Board's mode of proceeding. He promised the House that he would put the inspectors on a salaried footing, a concession which Chadwick was perfectly ready to accept;⁴ but he had not been two months in office when, without consulting the Board, he publicly announced that he would not apply the Act where a majority of ratepayers opposed it. Chadwick was furious. He demanded to know by what right a majority could deprive the minority of its common law right to pure air and a

¹ Letter of Thomas Hawkesley on the General Board of Health, 1853. It is worth while to contrast the charge made here, that the local Boards were being forced to comply with the General Board's system, with Hawkesley's outburst at the Institute (quoted above, pp. 451-2) which conveys the exactly opposite impression.

² *Ibid.*

³ *Ibid.*

⁴ E. Chadwick to Lord J. Russell, N.D., 1854.

means of healthy existence. 'Such a power', he said, 'would be a sovereign power and an arbitrary one'. If the Act had been left to local majorities, half the local Boards could never have come into existence: and this, the first step, was the one which counted. Once set up, the Boards gained local support and won the majority over. It is impossible not to sympathize with both sides—with Molesworth for trying to escape the ludicrous quandary of having to decide which local minority was the 'majority' party, and with Chadwick for arguing that this was of no consequence—that no people had a prescriptive right to be dirty.¹

The Treasury also caused the Board great anxieties. The detested Hayter had returned, as obdurately hostile to the Board as ever. His colleague, the Financial Secretary, was now James Wilson, the editor of *The Economist*; and in this he had assailed the Board without respite ever since the debates of 1847.

Surrounded, as it seemed, by enemies, the Board turned increasingly to the one Minister they might trust—the Home Secretary, Lord Palmerston. They did so with good reason. By a curious freak of marriage, he was Shaftesbury's father-in-law. Moreover, he was fond of Shaftesbury, who soon found himself dealt by with frankness and unswerving loyalty. At this time Palmerston was the strongest man in the Cabinet and undoubtedly the most popular. Furthermore, he turned out to be an astonishingly able Home Secretary. His ability to handle a department is well known: but in addition Palmerston had the habit, rare among Whig statesmen, of finding things out for himself, then making up his own mind and sticking to it. He had this great advantage, too, that electioneering held no terrors for him: he did not have to bend to public opinion because he was its incarnation.

Shaftesbury was amazed and even a little envious at the carefree way in which Palmerston succeeded where he and Chadwick had so dismally failed. In his father-in-law's hands the Interments Act of 1852 became a success: crowded graveyards were shut down in all directions. 'He cuts the Gordian knot!' exclaimed poor Shaftesbury. 'He enacts what is easy and omits whatever is the reverse. We devised a long and intricate scheme to lower, for the poorer sort, the expense of interments: he orders extramural burial and leaves the artisan to meet the increased cost as well as he can'. 'Alas! Alas!' he said, 'success is not what you do but what people say of it and they are almost always too ignorant, or too indifferent to judge rightly'.² (It was this last and

¹ Royal Sanitary Commission Second Report, cf. 1869-71, vol. ii, pp. 184-5.

² Hodder, op. cit., at p. 444.

most bureaucratic sentiment that had brought the Board so low. Neither Chadwick nor Shaftesbury realized, as did Carlisle and Palmerston, and even, truly speaking, Molesworth, that 'England is not governed by logic: she is governed by Parliament'.) Nevertheless, Shaftesbury could not but admire Palmerston: 'No fear of wealth, capital or election-terrors', he wrote—'prepared at all times to run a-tilt if he could do good by it. He has already done more than ten of his predecessors.'¹

Palmerston even decided that he must take a stand on the incomprehensible dispute over 'tubular drainage'. Between 5th January 1853 and 25th March 1854 no less than 135 letters, many with enclosures, passed between him and the Chairman of the Metropolitan Commission, Richard Jebb. Many are merely petitions and memorials. A very large part deal with financial matters. But a third series shows him so interested in the main drainage plans that he goes back to the very beginning, reading the 'Report on Plans submitted for Metropolitan drainage', and working over Forster's plans for the Northern and Southern outfalls. A fourth set is still more revealing—he was shrewd enough to ask for specifications of the type and cross-sectional areas of the sewers which the Commission proposed to lay.² By the autumn of 1853, perplexed by the contradictory reports of the Commission and of the Board, he circularized the local Boards himself: and when he found them favourable to the 'tubular system' finally decided that the Commission was wrong and the Board was right. He sardonically transmitted the reports to Jebb 'for your information and to show the cheapness and efficiency of the tubular system'.³

Apart from the support which Palmerston might render them, the Board was never so isolated. It did not even have the Metropolitan Sanitary Association to drum up support, for this had collapsed. For five years now it had ploughed its own furrow, and it proved a solitary one. At every twist and turn in its policy it had thrown off one of the allies of 1847: and each cast-off friend joined the Adullam's cave of its

¹ Hodder, op. cit., p. 444.

² Parliamentary Papers, 1854, lxi, *passim*.

³ Parliamentary Papers, 1854, lxi, p. 139. This had an odd sequel. On 17th February 1854, F. O. Ward entered the fray by addressing to Palmerston an admirably concise letter in which he summarized the differences between the Commission and the Board. Palmerston transmitted this to Jebb with the comment that in his opinion the 'system pursued by the Board ought to be adopted'. At this the whole Commission resigned, to the consternation of *The Times* and nearly everybody else. Later, Palmerston gave Jebb to understand that this had been purely a personal opinion on his part and that he did not mean to 'pronounce a condemnation' but rather to 'elicit full materials' for Palmerston to pronounce on the best system of main drainage (Parliamentary Papers, lxi, at 8th March 1854). The Commission continued to carry on, while asking the Government to relieve them as soon as possible. In July, Palmerston decided to reconstruct it on a new basis (see below p. 462).

enemies. As the Board's popular basis narrowed, that of its enemies broadened, until by 1853 and 1854 the powerful position of 1847 was completely reversed. Then doctors, engineers, vestrymen, popular politicians had all formed part of a crusade which was the more powerful because its rallying-cry was a broad principle, an end, and one, moreover, of usefully vague philanthropy. That principle was now taken for granted: so much—indeed so very much—Chadwick had achieved, and this, rather than his handling of the General Board, constitutes his true claim to a place in the history of public health. Henceforth all England paid a lip service, if nothing else, to his ideal. But just as soon as the principle triumphed the movement had to pass from ends to means: and these were infinitely various. The problems became precise, actuarial, and mechanical. The imagination and the fire of the crusader no longer had a part to play: who could kindle his hearers by extolling the advantages of the 4-inch over the 6-inch pipe? And every tactical decision, administrative or mechanical, converted a former friend into a bitter enemy, until they mounted to the long dreary catalogue of deserters:—parliamentary agents, civil engineers, doctors, Guardians, Treasury officials, water companies, and Commission of Sewers—which Shaftesbury sadly drew up in his diary in the August of 1853.¹

III

Meanwhile the cholera stirred again.

In August 1852 it had burst out simultaneously at Kalisch in Poland, and throughout the Mississippi valley. The Board sent Sutherland and Grainger as observers and received the alarming news that it was 'steadily advancing upon its former track'.² Although the Nuisance Removal Act was not put in operation the Board made every preparation. An understanding was reached with the College of Physicians; the Guardians were co-operative.³ But the disease stopped short at Magdeburg.

Now, in the August of 1853, it was on the march again: but such was the isolation of the Board that it appeared as if the administration of the Nuisance Removal Act would be transferred from them to another department.

'The Globe', wrote Shaftesbury to Chadwick, 'is clearly under the influence of the Engineers or some of the Companies—I do not believe that it

¹ Hodder, *op. cit.*, p. 443.

² MSS. Minutes, General Board of Health, 28th August, 3rd September, and 13th September 1852.

³ *Ibid.*, 25th September 1852.

speaks, in this case, the sentiments of the Government: for, although they are amply hostile, the Ministers have not, in any case, formed their determinations. Our own credit, and our own (?) may require us to make some defensive statements: but it will be to no purpose as an effort to ward off a capital sentence. That our dissolution is resolved on, I cannot doubt; the very fact of the combination against us of the Metropolitan Members and the Subordinates of the Treasury would make our position very difficult to a bold and just ministry: it will render our (?) and oppression too certain and almost agreeable to a Government that is neither one nor the other. . . . I am grieved that the Treasury have refused us permission to send Grainger to Hamburg: it is a loss in itself and indicates moreover, an intention to take from us the administration of the Cholera Act. Should the Pestilence return this would be tantamount to an outrage, for our enemies even have not denied that signal success attended our measures in that department.

'We must keep ourselves right in this respect by minutely fulfilling all that could be expected of us: every preliminary should be observed and if possible, executed; take care that in *all instances* where you receive additional intelligence of the progress of Cholera you make a fresh application for power to the Treasury: but be very respectful, for be assured that the slightest expression will be magnified into a Crime by men who are resolved to remove us from our places and tarnish our reputation.'¹

Thereupon he wrote 'privately and earnestly' to Palmerston, to prevent 'our enemies' . . . ousting us 'from the administration of the Act'.²

Suddenly the disease burst with a three-fold fury on Newcastle and Gateshead. Between the 1st and the 14th of September there were 214 deaths. On the 14th alone, 58 died; on the 17th, 101. The Nuisance Act was put into operation on the 16th and on the 20th the Board had issued its long-prepared Notification, and its Regulations. Even so, Shaftesbury urged on Chadwick the need for every caution.

'Let me counsel you to take the most *conciliatory* tone with the Boards of Guardians, the Treasury and all authorities. One ground of our unpopularity is, as I have been told, that we were too dictatorial—I know that it was necessary to be so to overcome resistance: but let us be as forbearing *as possible*.

'Sir W. Molesworth must be persuaded to read our Reports and see for himself the advantage of the house to house visitation. He may otherwise fall into the hands of some conceited, ignorant Physician. Pray take care that we fulfill our engagements with "The College". I explained to Sir W. that there is a good understanding between us and them.'³

The Board fell back on its tried methods of precautions and the house-to-house visitation. This time it met with little obstruction. The College of Physicians concurred. The local authorities asked for the Board's advice, and tried to execute its orders. The co-operation

¹ Lord Shaftesbury to E. Chadwick, 28th August 1853.

² *Idem.*, 22nd September 1853.

³ *Idem.*, 17th September 1853.

between Guardians, Poor Law inspectors, local Boards of Health, and the Board's superintendents was described as 'cordial'. In the panic, another twenty small towns voluntarily petitioned for the application of the Act.¹ The Board received an excellent press. *The Times* expatiated on the connexion between cholera and filth.² The *Lancet* made a complete *volte-face* from its position of 1849, declaring that the only means of tackling the disease was 'anticipative and preventative, not curative'.³

The epidemic of 1853-4 proved three times as deadly as in 1848-9; but it was, for the moment, localized. In 1853 the full force of the epidemic fell upon Newcastle, and here was—or perhaps here should have been—the answer to the Croydon case.

For Newcastle was one of the towns which had legislated itself out of the Public Health Act. Half the families of the town lived in or even shared one single room: and in some rooms even twenty-five occupants were crowded! No less than two-thirds of the population, i.e. 15,000 families, had no access to a private privy. Drainage and sewerage hardly existed. In 1851 the local doctors begged the Board to apply the Public Health Act. The Inspector, in his report, concurred. But the Corporation resisted every effort, and finally secured powers to itself under a Private Act. Since that time it had done absolutely nothing, and even when the epidemics raged, delayed to begin the house-to-house visitation until in fact the crisis of the epidemic was over. All these facts and the most harrowing details of the town's conditions were revealed by the public enquiry which Palmerston ordered, and which Rawlinson and Grainger conducted.⁴ The *Lancet* drew the moral⁵; Palmerston reinforced it in his famous refusal to permit a national day of humiliation⁶; and twenty small towns heard it and hurried to put themselves under the protection of the Public Health Act.

IV

As the cholera died out in the winter months, the Board put the finishing touches to the document in which it sought to persuade Parliament that it deserved well of the country. It appeared in May:

¹ Parliamentary Papers, 1854, xxxv, pp. 1-13.

² *The Times*, 24th September 1853.

³ *The Lancet*, 1853, ii, pp. 300-2.

⁴ Report . . . on . . . Cholera in Newcastle-upon-Tyne and Gateshead, Parliamentary Papers, 1854, xxxv.

⁵ *Lancet*, 1853, 17th September.

⁶ *Life of Viscount Palmerston*, by Evelyn Ashley, vol. ii, pp. 13-14. 'The recent visitation of cholera which has for the moment been mercifully checked, is an awful warning given to the people of this realm that they have too much neglected their duties in this respect and that those persons with whom it rested to purify towns and cities and to prevent or remove the causes of disease have not been sufficiently active in regard to such matters.'

and it was at once made clear to friends and foes that the Board promised the same mixture as before. With one exception, viz. the recommendation that its inspectors be paid a fixed salary for full-time service, it declined any concessions whatsoever. It restated all its charges against the waste, the costliness and the inefficiency of the old system of drainage and devoted page on page to proofs that its own system was more cheap, more efficient, and was rapidly becoming more popular. It would not budge on the Provisional Order procedure. It denied that its powers were unpopular with the local Boards, and claimed instead that these more generally protested that the Board did not have powers enough. The fact that forty-four Boards had employed the Board's engineers was mentioned with pride, not shame, as proof of mutual confidence between itself and the local Boards. It claimed, probably truthfully, that out of 182 Boards only 6 were in a 'state of antagonism'; but did not mention in every town which had a Board a large and rich 'dirty party' was in a state of *highest* antagonism.

In unmeasured language the Report turned upon its enemies. First the parliamentary agents were singled out. The Provisional Order procedure had interfered with their professional fees: and the Report—an official document, be it remembered—actually cited a case where 'parliamentary agents (intimated) that the course adopted by the Board was an interference with their professional emoluments which would render it necessary on their part to raise opposition against the continuance of the Board itself'.¹ Next came the Trading Cemeteries, the Boards of Guardians, and the water companies of the Metropolis. These were hostile, said the Report, because the Board 'condemned the professional practice concerned in their former works, and militated against the interests of contractors for their maintenance and execution'.² The public were cautioned against their insidious propaganda: 'their hostility, coming from persons holding a public position and whose direct interest was unexplained, appeared to have been based on public grounds'. Finally came the turn of the engineers. The public was warned of their propaganda also, and offered exposures of its falsehood and misrepresentation. The extensive use of the Board's engineers for local works was extolled, rather than extenuated, by the claim that 'what there was of the old system had to be unlearned', and that the old works were as different from the new as 'old roads of the best construction differ from railways'.³ Far from promising to relax the General Board's supervision of local plans and estimates, the Report

¹ Report on the Administration of the Public Health Act, Parliamentary Papers, xxxv, p. 52.

² *Ibid.*, p. 49.

³ *Ibid.*, p. 46.

actually concluded 'We are satisfied from our experience that the examination of plans for work ought to be *extended* rather than diminished'!¹ The attitude of the engineers was described and explained as

'the active hostility of professional engineers who were unaccustomed to such checks (i.e. the Board's examination) and who were now called upon to change their principles and practice of construction and at the same time to reduce in particular cases their emoluments (always proportioned to the amount of expenditure).'²

No less than 4000 copies of this document were circulated among the local Boards. From the point of view of the Opposition, it was a plain warning that if the old Board had chastised them with whips, the new one would chastise them with scorpions. It is in the light of this truculent and polemical tract, resembling a pamphlet rather than a public document, that the battle in Parliament must be regarded.

On 6th July 1854 Palmerston went down to the House to see that the Board was granted its Supply. The Government had promised to continue the Board temporarily to November, but now asked for a grant to tide it over till April 1855. As soon as the vote came up, Sir George Pechell, the prime mover of the previous year's attack on the Provisional Order procedure and the dubious status of the Board's engineers, rose to demand that the Government go back to their original proposal. This gave Palmerston the opportunity to put his views. He pointed out that the source of the widespread opposition to the Board lay in the fact that each town had, what he called in his jaunty manner, a 'clean' party and a 'dirty' party. The Board pleased only the 'clean' party: so that opposition there was bound to be. But if the dirty party chose, it could even prevent inspectors making preliminary enquiries, not to speak of their power subsequently, to get the town struck out of the Provisional Order in Parliament. If Pechell's constituency (Brighton) wished, it could opt out of the Act altogether.

But some Board there must be. The cholera was impending, and the machinery must continue. Some towns, like Newcastle, were filthy, and the General Board deserved the thanks of the country. But, said Palmerston, he recognized that the Board's constitution was anomalous. He proposed to bring in a Continuance Bill, limiting the Board's life to two years, and constituting it as a body of two paid members and one unpaid, directly under the control of the Home Secretary. He therefore concluded by asking for the full vote of Supply.

¹ Report on the Administration of the Public Health Act, Parliamentary Papers, xxxv, p. 52.

² Ibid., p. 49.

The reaction was a set of personal invectives against Chadwick, unparalleled in the violence and coarseness of their abuse. One may ignore the sentiments of the Member for Newcastle who drew comfort from the fact that if his own town was bad, London was not much better, and also the views of Pellatt, the former vestryman and now the Member for Southwark, who, being a glass manufacturer, assured the House that the Board's engineering principles were entirely wrong. The two chief attacks came from Lord Seymour and Sir Benjamin Hall.

Seymour alleged that instead of the measures being brought in by the 'free will of the people', they were brought in by the 'despotic interference of the Central Board'. The Board, he contended, had 'set the Government at defiance' and 'the only way to stop these gentlemen was to stop their salaries'. Their local Reports were cooked: 'the inspector brought in the Board and then the Board brought in the inspector'. The Board's system of drainage was thoroughly bad, and condemned by the best engineers of the Metropolis. And what could defend its 'indecent' publication of a pamphlet to justify its so-called 'conclusions'. Chadwick, he concluded, was the trouble. He had made the Poor Law unpopular and now he had made Public Health unpopular. He and the Board must go and the vote must be withdrawn.

But compared with Sir Benjamin Hall's speech, Seymour's was courteous. Hall began by a reference to the Board's report—a 'mere pamphlet by Chadwick': and Chadwick remained the sole theme. Shaftesbury was the mere pliant tool of Chadwick and Southwood Smith. If the Board was to be reconstituted, all of them must go. The House had a duty to scrutinize the antecedents of public officers put forward for its approval: what were Mr Chadwick's?—'Mr Chadwick worked the (new poor) law with such severity . . . atrocious stringency. . . . His failure, his utter failure in the Poor Law Commission was a matter of universal admission. . . . Mr F. Lewis had denounced him as "an unscrupulous and dangerous man"!'. He had concocted the sanitary agitation for his own ends, 'got himself' appointed a Metropolitan Commissioner, then a Commissioner of Sewers; then the General Board was got up, under his auspices, 'Mr Chadwick himself getting appointed a Commissioner at £1500 per annum'. 'What the practical services were which he had rendered to the public remained to be discovered'. He had, with Southwood Smith, put forward nothing but 'mischievous vagaries and extravagances'. As for Smith, he had only come on to the Board under the 1850 Interment Act: this proved unworkable, had been repealed, and yet they were still paying his salary. He concluded by saying that he would even be

prepared to go on paying them their salaries if they would only go. 'For God's sake pay them the money, and send them about their business if you believe they have been of service to the State; but it is impossible to get on with them'.¹

How truly these attacks represented Metropolitan exasperation was seen two days later when *The Times* also threw its full weight against Chadwick. Chadwick was a mere 'theorist' and Smith was his 'double'. They had bamboozled Palmerston who had not read their Report and did not know what they were doing: and indeed all they had done was to 'scribble reports' and get through a 'certain amount of dirty work'. As to King Charles's Head (i.e. the purification of the Thames, with which the Board had nothing to do and for which the 'engineers and men of practicability' had been responsible for four years past), the Board had not brought this nearer: indeed, it was farther away than ever.²

Chadwick was overcome by the torrents of obloquy. His usual reaction was an excessive huffiness. But this was a special occasion, and even his health began to suffer. His letters show him adverting first to this, then to that unmerited charge. To Sir George Pechell he appealed as 'a gentleman and an officer' to put his charges in a proper manner and so give the accused party a chance to reply.³ To Lytton he wrote, 'You have known me at intervals for a very long period and whatsoever weaknesses I may have I trust you will believe I could not have acted in so foolish a manner as to set at defiance a Government and to prevent my chief from attending to perform the duties of his office'.⁴ He asked Hindley to tell the House that, far from being unpopular, the towns repeatedly requested him personally to come and explain to them instead of sending an engineer.⁵ To Brougham he wrote bitterly. "Some men labour and other men enter into their labour." After the bulk of the business of reorganization was completed there was comparative quiet in poor law administration. After the works under the Public Health Act are completed there will be quiet there too and if I leave the quiet will be ascribed, as in poor law, not to the business being done, but to my having left'.⁶ He recognized, as the historian must do, the

¹ *Hansard*, Parliamentary Debates, cxxxiv, cols. 1295 et seq.

² *The Times*, 8th July 1854. I strongly suspect that John Walter was responsible for the tone and the arguments of these and subsequent leaders. *The Times* had been very fair, except on the Commission of Sewers issue. It had taken a very balanced view of the Board's control over local engineers in 1853. The mention of the Thames issue, and later on the raking up of the New Poor Law scandals, hardly seems the line Delane would take, but would indicate John Walter.

³ E. Chadwick to Sir G. Pechell, 12th July 1854.

⁴ E. Chadwick to E. B. Lytton, undated, 1854.

⁵ E. Chadwick to Hindley, 9th July 1854.

⁶ E. Chadwick to Lord Brougham, 14th July 1854.

hypocritical nature of much of the opposition: 'The cry is now set up that we have made the measure unpopular. The simple fact is that the measure has now got so much hold on the Public Mind that it cannot be opposed, and the pretext of those who have opposed it is that they were never against the measure itself: they are only against the alleged unpopular mode of introducing it and they are opposed to the Reports by which popularity is circulated, and they sneer and scoff at them'.¹

The proceedings brought him numerous expressions of sympathy. Kay-Shuttleworth said, 'I need not tell you with what indignation I read Sir B. Hall's truculent speech and the subsequent "leader" in the unscrupulous *Times*. Where would our sanitary affairs have been had you remained quiescent or willing to accommodate yourself to ignorance and prejudice?'² Old George Nicholls also wrote in his usual bluff way, to try to cheer him: 'However it be', he said, 'you are not the man to be put down by a little vituperation, so keep of good heart, avoiding contention, but not yielding to it'.³ Many members of local Boards also wrote to say how unjust were the charges of 'coercion' and to express their indignation.⁴

But nothing could exceed the indignation of Shaftesbury. On the 14th he moved for papers in the Lords and made an eloquent defence of the Board which turned to anger when he came to Seymour's charges. Seymour did not quit the Board because he was voted down, he alleged, but simply because he was idle. As to the charge that 'the inspector brought in the Board and the Board brought in the inspector', this, he cried hotly, was tantamount to a charge of corruption and absolutely false.

This debate is memorable for the vindication of Chadwick's character by Bishop Blomfield and by the Earl of Carlisle. 'Mr Chadwick I have known for thirty years', said the Bishop, 'and I can say that a more efficient, active, diligent and honest servant of the public never existed. . . . At the root of Mr Chadwick's knowledge is an amount of benevolent interest for the poor'. Carlisle was more discerning. He agreed with the Right Reverend Prelate's references to the importance of the New Poor Law and to Sanitary reform, and added: 'the most efficient agent in originating and in producing those two great fundamental measures and in clearing away a host of obstacles was Mr Chadwick'. 'Perhaps', he continued, Mr Chadwick had 'a certain portion of positiveness and precipitateness more than was desirable; but I trust that our

¹ Undated fragment, July 1854.

² J. Kay to E. Chadwick, 12th July 1854.

³ G. Nicholls to E. Chadwick, 16th July 1854.

⁴ E.g. J. Clay (Preston) to E. Chadwick, 12th July 1854; G. Brown (Barnard Castle) to E. Chadwick, 12th July 1854.

contemporaries will not refuse to those who have established great principles and introduced large measures, some portion of that gratitude and honour which are certain to be awarded to them by an intelligent posterity.¹

'Gratitude and honour' were just the last things that the opposition would concede. A gigantic conspiracy was afoot. Its centre and its voting strength lay in the Metropolitan interests whom Chadwick had disturbed; its periphery, and that which gave it the false colours of a popular movement, was supplied by defence-groups of threatened industries and by the nation-wide canvassing of the engineers.

Obscure and sinister societies sprang up. One, for example, whose secretary was Mr Robert Baxter ('Solicitor and Parliamentary Agent'), was a defence group of fifty-three provincial water companies and all the London companies except the Lambeth. Another went by the name of the 'Private Enterprise Society'. It put out pamphlets of the most vehement kind, affecting the largest sympathy with the public interest.² Closely investigated, it turned out, first, that it held meetings at which no more than one or two score people ever attended; next, that all who did so were connected with joint-stock companies; then, that it was in fact sponsored entirely by large and important gas- and water-work companies, including the Lambeth and the New River Companies, and twenty-two provincial concerns; and, finally, that its secretary was Mr G. R. Burnell (Civil Engineer and Architect), and its chief working members, were Chadwick's bitterest enemies, Simpson of the Lambeth Company and Thomas Hawkesley.

Chadwick's contemporary letters show how the opposition went to work, and to what an extent it was a Metropolitan agitation taking its revenge.

'... The opposition is very strong in the House of Commons and Lord Seymour, upon its apparent strength and party combinations, to annoy the Government, has given notice of motion that the bill for the continuance of the General Board may be read that day two months. The second reading was to have come on today, but is now postponed until Tuesday. The water

¹ *Hansard*, Parliamentary Debates, 14th June 1854, cxxxv, cols. 234 et seq.

² E.g. (February 1855) 'The privileges of Parliament endangered and the Rights of the People Violated'. (Cf. Parliamentary Papers, 1854-5, xiii, pp. 131 et seq.)

³ Parliamentary Papers, 1854-5, xii, pp. 102 et seq., pp. 131 et seq. It is true that this relates to February 1855, but we are told that the Private Enterprise Society had then been in existence for one year. Its existence during the debates of June 1854-July 1854 is therefore a fair assumption. The swarm of defence organizations appearing in February 1855 gives some idea of the situation in July 1854, and it supports to the hilt Chadwick's analysis of the situation as a conspiracy of 'interests'. (See below, p. 471.)

company engineers, and the Parliamentary agents were crowding the lobbies and canvassing against it. Great efforts are being made to convince the Government and Lord Palmerston that the measure is so unpopular and particularly so with the local Boards that it cannot work and yet only two petitions were presented against the measure. . . .¹

'... The lobby was crowded with the water engineers at the head of whom was Hawkesley and with parliamentary agents and with Parliamentary counsel canvassing against the measure. Only one petition was heard *v.* the measure. On the other side we had to lament that there was none for.'²

'... The leading opposition is from representatives of the Metropolis with whose constituents our board had nothing to do . . .'³

The Times supported the opposition.

'The first and undoubtedly the greatest objection to the Board of Health is the deserved unpopularity of two of its members; the second, the vice of its constitution by which those members are empowered to carry out their perverse will, their petty intrigues and their wrong-headed dogmatism without restraint and without responsibility. Mr Chadwick and Dr Southwood Smith are just such men as always arise when a dynasty, a Ministry, or a Board is accumulating those elements of destruction of which it alone is unconscious. Possessing faculties by no means miraculously comprehensive, engaged upon a new and untried subject, and brought in contact with many honest prejudices and much not unreasonable scepticism, these men seem heated with all the zeal of propagandists and all the intolerance of inquisitors. Firmly persuaded of their own infallibility, intolerant of all opposition, utterly careless of the feelings and wishes of the local bodies with whom they are brought in contact, determined not only to have their own way, but to have it in their own way, and using the powers delegated to them to exercise influence over matters which Parliament has placed beyond their control, these gentlemen have contrived to overwhelm a good object with obliquity and hatred and to make the cholera itself scarcely a more dreaded visitation than their own.'⁴

Chadwick was now vainly striving to stem the tide by drumming up testimonials from the local Boards. By the end of July, five had replied—York, Penzance, Preston, Lancaster, and Woolwich.⁵ But by this time fatigue and anxiety proved too much for him. He seems indeed to have been subject to fits of nervous prostration at crises in his career. His old friend Dr Hodgson was called in and reported to Lord Shaftesbury:

'... The health of our friend Mr Chadwick has for some time been a source of much anxiety to me, and the state in which I have recently seen him, induces

¹ E. Chadwick to ? , 18th July 1854.

² E. Chadwick to F. O. Ward, 18th July 1854.

³ E. Chadwick to W. Brown, 20th July 1854.

⁴ *The Times* leader, 11th July 1854.

⁵ J. Clay to E. Chadwick, 27th July 1854.

me to trouble you with a short statement of my opinion of the causes and of probable effects of those illnesses from which he has suffered.

'In the spring of last year, I attended him during a very serious attack of Erysipelas of the Head by which his life was greatly endangered. This was brought on by exposure to cold in making enquiries in the country relating I believe to the Water Supply of London and was aggravated by a condition of great mental exertion and severity. On various occasions I have attended him on account of derangement of his digestive organs caused by irregular hours and habits arising from the peculiar nature of his avocations and engagements. During the last week I have found him suffering from one of these attacks and in a condition which caused myself and his other friends much uneasiness knowing as we did, how deeply his mind was agitated by the discussions in Parliament and elsewhere relating to himself.'¹

Meanwhile the Bill, which was to have received its second reading on the 18th, was repeatedly postponed, until a date was fixed for the 31st. As the date drew near Palmerston realized that unless Chadwick could be persuaded to retire, the Bill was as good as lost. This hard choice he made much easier, however, by the way he put it. Chadwick would retire from his present position on a pension until his services could be used again. It might not even be necessary for him to retire at all. Ill, and tired out, Chadwick could not but comply, and he put his resignation at Palmerston's disposal. Instantly Lord Shaftesbury followed suit.² Nothing that Palmerston said could make him alter his mind.³ Southwood Smith also resigned:⁴ and so, with the head and front of the offence removed, the Home Secretary went down to defend his Bill.

He clearly thought there would be little difficulty, for the Bill came on in the morning, a time when the House was usually very thin. His speech was long, florid, and forcible. He refused to give way to the House by surrendering the Provisional Order procedure. He pointed out that the cholera was in London while he spoke. He admitted all that had been said as to the anomalous nature of a Board on which the civil servants could outvote Ministers, but argued that his own proposals would eliminate such difficulties in future. He denied that the Board had made itself unpopular. An anonymous agitation had been set afoot, telling the local Boards to petition against the Public Health Act: yet only three had done so, while, he said, an overwhelming majority had commended the Board.

Then he turned to the members of the Board. This perhaps was

¹ J. Hodgson to Lord Shaftesbury, 28th July 1854.

² Hodder, *op. cit.*, vol. ii, p. 445.

³ Public Records Office, H.O.34.

⁴ E. Chadwick to Lord J. Russell, 29th July 1854.

his fatal slip, for his remarks seem to show that he had by no means reconciled himself to parting with them. All the members had put their resignation in his hands, he said; but then he warned the House sternly and with authority:

'I propose a clause in committee assigning retiring allowances to such officers of the Board as may be entitled to claim them on the usual scale of retiring allowances, so as to make it easy for the Government, *if they should think fit*, to enable members of the Board who may by former services have a just and fair claim, to retire.'¹

As he sat down Seymour took the floor and broke into a sustained diatribe which tells more about the man than about his victims. It contained errors of fact and emphasis such as: 'I have no personal or private dislike towards the members of the Board'.² 'The Board of Health has exercised its powers without either judgement or caution or forbearance.' He raked up the old gibe about the Board 'going off to Paris.' He repeated the audacious lie that he had refused to attend the Board because it had voted him down. The speech was also a confession of faith: 'I have great respect for Lord Shaftesbury's personal character, but I entirely object to the Noble Lord's grand principle of Government—the centralization of everything, the interfering with everything and everybody'. He then pushed together in one sweeping indictment every grievance that had ever been alleged against the Board.³ The censures of the engineers hung heavy over his charges. He concluded forthrightly: 'The present members of the Board have entirely lost the confidence of this House and it is therefore absolutely necessary that they shall be removed.' He insisted on this before any proposal to reconstruct the Board was accepted and therefore moved its adjournment that day three months.

He was answered, unfortunately, by Monckton Milnes, nominally a Conservative, but detested and jeered at by most members of his own party. What Milnes said was good sense, but it brought heavy rebuke from the bovine Henley, with his big head, snow-white hair and bushy eyebrows. Henley always aspired to be considered as the Nestor of the Tories. Hence his flatulent and ponderous style, suited to a man who imagines that put in this way banalities become statesmanship. If Milnes wasn't satisfied with Seymour's 'show up' he would be satisfied with nothing at all, was Henley's summing up.

The debate was clearly going so badly that Lord John Russell rose

Hansard, Parliamentary Debates, 31st July 1854, vol. cxxxv, col. 77. My italics.

² *Ibid.* col. 980.

³ *Ibid.*, col. 993.

to support Palmerston: and his speech is very remarkable. Sir John Simon seemed rather more impressed with Russell's criticisms of Chadwick than his praise.¹ But Russell, with no cause to love Lord Palmerston and with not the happiest memories of Chadwick's contumacy, delivered a speech which was if anything more uncompromisingly faithful to the General Board and to Chadwick than any in the entire set of debates, and it reflects a nobility in Lord John not often ascribed to that asperate and waspish figure. He told Seymour flatly that in his opinion one-tenth of the local ratepayers was quite sufficient to introduce the Act. As to centralization he had warned Chadwick twenty years ago not to overlook the habit of self-government; but some central bodies, as in Education, Poor Laws, and Public Health were necessary. Some advice proffered by the Board was wrong, but some was excellent, notably that on cholera. 'No public Board ever rendered a greater service to the community than was rendered by the compilation of this report.' That the local Boards were 'bound hand and foot' was sheer moonshine. They themselves provided all the local administration.

Then he too turned to personalities. Lord Shaftesbury needed no praise. But as to Chadwick, he was 'A man of the greatest energy and with a spirit of enquiry which induced him to labour by zeal, by unremitting attention to the work in hand, to go to the bottom of it and to attempt some remedy for the evils which he conceived himself to find there.' The Poor Law Act was his idea: it 'had saved the country from great social evils if not from social revolution.' 'The Constabulary was . . . very much the result of the Enquiries which Mr Chadwick had made into the subject'. But, said Russell, 'Like so many other men, ardent reformers, he very often in his zeal for amendment as he conceived it overlooked and disregarded the objection and repugnance with which his views and propositions were received by others. . . . With respect to this Health of Towns Act, no doubt in many instances Mr Chadwick's acts had given offence: for obviously many towns would rather be let alone. . . . There were likewise many persons who were pecuniarily interested that the plans of the Board should not be adopted and it was very probable that Mr Chadwick had not observed towards these classes of persons the most conciliatory tone possible'.²

¹ J. Simon: *Sanitary Institutions*, p. 231: 'he seemed not able to withhold from the House that in his opinion Mr Chadwick had been an injudicious administrator'.

² These are the words quoted by Simon (op. cit., loc. cit.), to justify his opinion that Russell was being critical. In my own opinion Russell's references to towns 'that would rather be let alone', and the 'pecuniary interests', if read with his earlier remarks, are clearly a sarcastic reference to the motives of the opposition.

Russell concluded by the powerful appeal:

'After twenty years of labour which he had applied to the public service at the cost of his health now much impaired, it would not be deemed unfair that were he to retire, his services should be compensated by a retiring allowance commensurate with the nature of the duties he was at present discharging.'¹

As he concluded, Heywood, distantly related to Chadwick, rose to say that he had been 'authorized to state on behalf of Mr Chadwick that his medical advisers had recommended him not to continue in the Board.'² With this the debate ended. Normally, the hostile amendment would have been withdrawn: for Supply is a Government measure, and the whole Government front bench was supporting this particular demand.

But to Palmerston's astonishment, Seymour insisted on pressing his amendment to a division! It was an ambush! It was a morning sitting, and only a thin House attended. But during the debate the coalition of London's threatened interests had, silently, taken their places. London was taking its revenge. (Four days earlier it had triumphed with the Commission of Sewers. After a meeting of an hour and a half over the vestry representatives Palmerston had yielded to them. Pending a fully representative body for London, a temporary commission would be set up on which six Government nominees would sit with six Metropolitan members, one for each constituency.) Now London showed its force again.

'Two of the opponents in Parliament were interested in a plan for an outlay of £40,000 which we had condemned. Other opponents were engineers whose works and profits we had reduced considerably. One member who owned a great manufactory of soap from whence noxious smells were diffused among the population³ told me distinctly that if there was any interference with that manufacture it would be the worse for me. But the most powerful opponents were the directors and shareholders of the trading companies supplying gas and water to the metropolis. . . . With the directors and shareholders of water companies were allied the directors and shareholders of other companies, the wealthy engineers who raised a subscription with which the press was largely subsidized to get up an agitation. . . . None of the moving sinister interests appeared on the surface—nothing but a patriotic concern for the larger political interests of the community. . . . Altogether a formidable phalanx was constituted.'⁴

¹ *Hansard*, Parliamentary Debates, cxxxv, cols. 998 et seq.

² *Ibid.*, col. 1003.

³ This is John Bennet Lawes.

⁴ *A Minister of Health*, by E. Chadwick, 1878, p. 25.

It moved into the division lobbies, and on its emergence it found it had beaten Palmerston by 74 votes to 65! 'The foulest vote I have ever known in all my parliamentary experience', growled the Minister as he stumped out.¹

The Board had not resigned. It had been kicked out! It is true that in the next few days members tried to make Chadwick's parting a little easier. Molesworth introduced a simple Bill to put the Board on the same basis as the Poor Law Board, with a President seated in the House and a salaried full-time staff under him. One clause of this Act, on which the Government insisted, was that *one* member (unnamed) of the expiring Board was to have £1000 per annum salary as compensation. The opposition did not demur. Seymour, publicly reproached by Shaftesbury for charges that were 'an act of gross and intolerable indecency'² made an *amende honorable* to Chadwick.³ Henley also agreed to it in principle, although, he grumbled, he would not like to say whether it was the right sum or not. Hume, who had voted against the Board, stressed that Chadwick was a capable man and might be well used elsewhere.⁴ Henley slowly realized that this was an excellent way to save £1000 going to absolute waste, and made the same suggestion: after all, he said, ruminatively, in some respects he had rendered considerable service.⁵ Molesworth agreed: and James Wilson, the Financial Secretary, assured the House that whatever pensions were granted, the Government reserved its right to find active employment for pensioners who were capable of filling it: Edwin Chadwick was 'well adapted, when in health, for performing valuable public services.'⁶

The Board did not terminate, officially, until the 12th August. Till then Chadwick was, nominally, still a Commissioner. But despite the parliamentary soft soap, the demise was not peaceful. *The Times* greeted his downfall with almost obscene delight. Its leader is usually quoted for the now hackneyed references to 'Master John Bull being scrubbed, etc.', and England's 'perpetual Saturday night'. There is even more of such silliness there, for Chadwick is successively referred to as Aesculapius, as Jupiter, Hades, and Neptune rolled into one, and as the 'Wizard of Whitehall'. But the hard core of the leader is a long sneer against matters in which *The Times* itself had previously not only

¹ Chadwick constantly quoted this in all seriousness as an example of how badly Palmerston felt his defeat. In my own view it is one of Palmerston's usual puns, which Chadwick with his absence of a sense of humour, quite failed to see.

² In the House of Lords. *Hansard*, cxxxv, cols. 1079 et seq.

³ *Hansard*, Parliamentary Debates, 1st August, cxxxv, col. 1138.

⁴ *Ibid.*, 3rd August, cxxxv, cols. 1223 et seq.

⁵ *Ibid.*, 4th August, cxxxv, cols. 1352 et seq.

⁶ *Ibid.*, 3rd August, cxxxv, cols. 1225 et seq.

applauded but encouraged him, his Interments Plan, his Water Plan, and his system of house-drainage; and the article concludes:

'The truth is, Mr Chadwick has very great powers but it is not so easy to say what they can be applied to. Lord J. Russell refers to the meritorious service of twenty years, including, of course, his valuable assistance to the Poor Law Commission. Perhaps a retiring pension with nothing to do will be a less exceptionable mode of rewarding this gentleman than what is called an active sphere. We beg however to protest versus one reward which we humbly submit Mr Chadwick has already anticipated and can no longer want. When he falls at last a sanitary martyr to a choked two-inch pipe drain and is carried by policemen in one of Shillibeers patents to an extramural cemetery he will want no monument. A thousand costly but now useless union workhouses will attest his humanity and prescience. Let a few words inscribed in some conspicuous position in every one of those piles inform ratepayers and paupers to whom they are indebted for the pleasure of building and occupying them.'¹

The knife still twisted. Three days before the Board expired Chadwick learned who in future was to direct the reconstituted Board of Health. It was the final, sardonic triumph of London: for his successor was the prince of London rabble-rousers and his own bitter enemy, Sir Benjamin Hall.

'All that the anti-centralisers will have gained', he burst out, 'is a huge imposture of a man who will be engaged 10 hours a day in parliament, who will have what he calls the duties of society to attend to, and his constituents to attend to, who having come into office entirely ignorant, will have no time and little opportunity to explore and gain knowledge for himself and who will be the mere puppet of an intriguing secretary whose interests and time have been away from his duty, who is shallow in his knowledge and incapable of himself [*sic*] of making any substantial progress.'² The only chance for the public is that either he or the president be advised by some of the inspectors and being under the motive to do something and to shew a contrast, may adopt the advice. *The Times* and our enemies in the House or out of it, will have the motive to shout up everything that is done in order to make or heighten a contrast . . .'³

On the 12th the Board came to its end: and with it Chadwick received his valediction:

'SIR,—I am directed by Viscount Palmerston to inform you that he cannot allow you to quit the Board, which this day ceases to exist, by the expiration of the Act of Parliament by which it was constituted, without conveying to you the full approbation of Her Majesty's Government of the zealous able and indefatigable manner in which you have performed the important duties which

¹ *The Times* leader, 1st August 1854.

² E. Chadwick to F. O. Ward, 14th August 1854.

³ This is applied to Tom Taylor.

have belonged to your official situation : and his Lordship desires me to express to you the great regret which he feels, that an adverse Decision of the House of Commons as to the arrangement which his Lordship had proposed for the reconstruction of the Board of Health has led to so abrupt a cessation of your employment . . .

There was only one flaw in this moving farewell : Southwood Smith had received an identical letter.

EPILOGUE

BUREAUCRACY AND DEMOCRACY

I

It is quite idle to pretend that Chadwick was not a bureaucrat. Letters and papers written between 1855 and 1859 reveal a glorification of the public official and a contempt for national habits that is extreme even among civil servants. Instead of his experiences at the Board of Health teaching him (in Simon's phrase) that 'deliberate national consents had to be obtained',¹ they taught him exactly the reverse : namely, that public opinion should be heard less and official opinion heard much more. Inherently, the man was bound always to make his administration unpopular. As an administrator he might typify Prussia : in England he is unique.

II

He astonished his contemporaries by claiming ever wider fields as proper to state enterprise. This was perfectly consistent with his earlier views—the national and social balance sheet was different from the sum of individual profit-and-loss accounts, and chequesparing annual estimating might merely 'economise the means of economy'. In such circumstances, *laissez-faire* was 'letting mischief work, and evils go on which do not affect ourselves'.² 'It is no justification to say that the sum of good is greater than the attendant evils. The real question is, are the evils themselves necessary, or greater than they should inevitably be?'³

But during the 'forties and 'fifties certain features that were hitherto only latent in this philosophy pushed to the foreground. The Poor Law administration was a machinery for enforcing competition, for creating a highly competitive labour market and keeping it so. Its purpose was absolutely to prohibit parishes from 'going into business' in competition with independent labour. Yet in the 'forties and 'fifties Chadwick was advocating that the local authorities should go into business, and provide their own municipal waterworks and cemeteries.

¹ J. Simon, op. cit., p. 233.

² *On Unity*, by E. Chadwick, 1885, p. 99.

³ *On Railway Labourers*, 1846.

The contradiction is only apparent. The Public Health Enquiries brought him into situations where competition would prove more expensive than monopoly. Where the initial capital outlay is vast and fixed, competition may merely duplicate or triplicate the necessary equipment and the public must lose, inevitably. His solution was to let out the field of service to a kind of Dutch auction, inviting contracts from private joint-stock concerns and accepting the one which guaranteed the best service for the lowest charges. This he called 'Competition for the field' as against 'Competition in the field' of service. Alternatively—and especially where the capital sums had already been laid out—he urged that the capitals should be consolidated under one ownership and placed under the direct control of the State.

This was the reasoning behind his attempts upon Metropolitan burials and water-supply, and he was prepared to apply the principle to gas supplies also. But it was capable of much greater extension. Why should not railways and telegraphs be publicly controlled? And by a similar mode of reasoning, why should only the large, fixed-capital concerns be amalgamated? Why not the multitudes of tiny capitals such as one found in the innumerable London transport companies, bread shops, or even cabs? In the aggregate these were far in excess of the equipment necessary. By consolidation huge sums could be saved.

'Why not indeed?' Chadwick echoed. His damnable heresy lay in the fact that he *was* prepared to consolidate and publicly manage each and every industry where (in his own words) enquiry showed the need for 'authoritative intervention' rather than 'voluntary means guided by an advance intelligence'. To his aghast critics he truculently replied:

'The earlier politico-economical doctrines as to competition must now receive considerable modifications. The waste and possible saving of capital indeed admit of as little dispute as do cases of the waste of mechanical power, or the direction of the means of economy. *To the questions sometimes put to me,—where I would stop in the application of my principle—I am at present only prepared to answer: "Where waste stops"*.'¹

But the most surprising feature of this doctrine was his vigorous denial of what may be taken as the Englishman's axiom in respect to Government—that it was 'torpid', inefficient, wasteful in itself. He asserted that, on the contrary, it was already far in advance of private enterprise. The postal administration was unsurpassed by any existing administration of large commercial establishments. Foreign countries

¹ *On different principles of Legislation and Administration in Europe*, 1859.

were imitating the tubular drainage system by which three towns were drained at the expense formerly incurred for one. 'The measures proposed by Howard whose position as a philanthropist is almost classical, have been far surpassed by the Prison Inspectorate'. Commercial associations had failed in their attempts to colonize, while government-assisted emigration was successful. 'Even now', he concluded, 'in promptitude and efficiency, these branches are so advanced as to be beyond a large proportion of joint-stock management, and equal to professional or private establishments under individual direction. They sustain the conclusion that it is practicable to place the civil service generally in advance at every point of that private management which has been held up for imitation'.¹

III

The question then arose, how was this advance to be made general? Briefly, the answer he gave was: by 'scientific legislation'. But this, in the last resort, boils down to Chadwick's avowal: 'I care more for the good of the service than for putting it in what is called Harmony with the House of Commons'. For to him public opinion was something to be overcome. In the fragment on 'Police', written in 1832, this dangerous doctrine appears, innocently tucked away, but in all its naked sincerity. 'The law must be made to conform to public opinion or the public opinion must, by means of public instruction be made to conform to the law'. It was the second alternative which he followed.

That he had little or no use for the local representative assembly must by now be evident. It was corrupt, and it was ignorant.² These particular difficulties could be simply overcome by subjecting it to central control. The centre would insist on guarantees against jobbery, and communicate the necessary technical knowledge; indeed it would even provide the expert assistants.³ The real difficulty lay in that the controlling authority was itself controlled by Parliament, which in many respects was as bad as a local assembly. The parliamentary head of a department was too busy to be well qualified: necessarily eight or ten hours of his day was spent in the House. Nor was the House itself a good judge. It was not learned, and though he would not say it was entirely corrupted by gold, it was certainly corrupted by worse—the desire for popularity. His views are expressed in a remarkable letter,

¹ Letter on Civil Service to the Prince Consort, by E. Chadwick, N.D., 1855.

² Cf. *On Unity*, 1885, p. 72.

³ Cf. *Parliamentary Papers*, 1854, xxxv.

written to his kinsman W. R. Greg, as a comment on the latter's article on Representative Reform in the *Edinburgh Review*.

'I do not think I should have borne so heavily on bribery in the existing state of things. In my Poor Law Report, 1832, I ventured to aver that corruption for the sake of popularity was worse than corruption for money and I should be able to sustain that now. Lord John was bribed for Rothschild: the men bribed were the longshoremen, the Thames Watermen: bribery with money (much of which they bought things with, or put by) was less injurious to them than bribery with beer, and still less injurious than bribery or corruption for the sake of popularity with them: the corruption of mental excitement would have enabled a Newton to oust Lord John. Bad though they may be who pay for their seats, yet as a class they are superior to the Metropolitan members who do not: or than the Mills and the Foxes and the representatives of such places as Oldham or Rochdale or Nottingham, where Cam Hobhouse, ceasing to pay, was ousted by Feargus O'Connor whose corruption was by popularity. Much of that tact which dreads the ballot is a dread of the loss of aristocratical influence which prevails by gold, and of the gain of the influence which prevails by popularity; unless learning were expressly represented and with other arrangements such as the mode of taking the votes, for bringing the less excitable portion of the community to bear, I should dread it too. . . .'¹

Scientific legislation meant, in the last resort, taking the opinion of the permanent official rather than that of Parliament. He said that nobody realized what extensive labour was necessary to prepare even a single measure: and that few realized the truth of Lord John Russell's remark, that parliamentary leaders could not 'give their attention to a great subject, and look at the consequences to the country of the measure they have adopted'. The parliamentary head could not do it: the civil service must. 'The business of the civil servant is the preparation of administrative improvements, is to examine consequences carefully, the ultimate and contingent as well as the immediate, the collateral as well as the direct. His business is to place before the Minister or through him to the Legislature, a sketch of the probable future more correct and complete than would have presented itself to his view in the midst of present influences'. Because as many facts were needed to execute a measure as to prepare it, 'the executive hand must for safety belong to the devising hand'. Because the work was laborious, even 'repugnant', the civil servant must be offered special encouragement, must be shielded from parliamentary attack, and publicized through annual Reports.² He was excessively bitter against the treatment meted out to what he regarded as 'an aristocracy, elevated above the 'Demos.'³

¹ E. Chadwick to W. R. Greg, 14th October 1852.

² Letter on the Civil Service to the Prince Consort, by E. Chadwick, N.D., 1855.

³ E. Chadwick to Sir Charles Trevelyan, 22nd November 1854.

'It is said that public appointments are paid by the honour they receive. If so, it is a payment of which the Liverpool and Manchester economists do their best to deprive them: at the least, Mr Cobden gives the lead in the case of Sir Thomas Hastings, by objecting to his complaint against aspersions calculated to render him contemptible, that he was a paid servant of the public. These very officers in question, the secretaries of the poor law, would seem to have been selected for public contumely.

'With low pay, titular honour at the least is the source of embarrassment, and with incessant labour the subordinate officers have little opportunity of enjoying any other honour.

'Is payment by honour the rule at Liverpool where they give £2000 a year to their mayor, or in London, where the allowance to the Lord Mayor, for his retinue as well as himself is equal to that of five Cabinet Ministers.

'There are few professional men who have quitted their professions for equal income in subordinate public office . . . who have not expressed their disappointment at the change. . . .'¹

He maintained that there could be no comparison between the legislation devised by the politician and that by the specialist civil servant. The one was 'closed' inexperienced investigation, the other 'open' and experienced. The one was the result of casual irresponsible labour and the other of constant responsible labour. The one was the result of broken and forced attention, the other of individual and sustained attention to one subject. The political head was forced to pay attention to public opinion—'of all sources of guidance in devising remedial measures, the most deplorable, being in nine cases out of ten the mere opinion of individual journalists'. He was supposedly responsible to Parliament. In practice, as in Sir Benjamin Hall's Board of Health, 'the responsibility has been more to sinister interests in Parliament'.² By all means have a Minister: but only as the supervisor and the defender of 'the specialists, the chief permanent officers'.³

'In the present condition and practice of legislation', he said roundly, 'no measure based on administrative principles, partaking of science or system, goes into the House of Commons that as a general rule, does not come out worse than it went in'.⁴ 'Of this', he continued (showing how far this judgement represented his own personal frustrations), 'the measures for the application of sanitary science and those for the application of administrative science to the Poor Laws may be presented as examples'.⁵

¹ Fragment, c. 1850.

² *A Minister of Health*, 1878, and 'Letter on the Civil Service to the Prince Consort', 1855.

³ Ibid. ⁴ *Results of Poor Law administration*, 1863. Cf. also *On Unity*, p. 100. ⁵ Ibid.

IV

His solution was two-fold: an improved method of legislation, and an improved quality of civil service.

The first was designed to bring to bear on the legislature the greatest possible weight of facts: its basis was the high opinion he conceived for the Royal Commission, a device which to his mind had three supreme advantages. 'It admits of complete investigation as to the state of information and opinion in even the most obscure nook and cranny'; it prepares and informs a public opinion while disarming opponents by its cogency and information: it divests legislation of any Party complexion. One has only to consider the way in which Chadwick rigged the circulation of his Royal Commission reports to understand that here he was generalizing from his past experience.

His suggestion for improved legislation was, virtually, to permit none that was not based upon such minute investigations. There was to be 'a representative Committee of the Privy Council, aided and armed with adequate means for subordinate enquiry'. For every matter of importance—for example, the extension of the franchise—there would be a standing committee of experts sworn of the Council; and to each committee there would be attached a body of assistant commissioners to carry out the actual investigations, if necessary by local enquiry. Only upon the Committee Report would the parliamentary debates take place. The presumption was that both Parliament and public opinion being thus informed, the discussion would eschew 'popularity', sinister interests would be exposed for what they were, and the final piece of legislation would be 'scientific'. The suggestion was, in fact, a cross-breed between a generalized Royal Commission of Enquiry, and the French parliamentary procedure.¹

To improve the quality of the civil service he felt that recruitment by open competition was not, in itself, enough. The machinery of government needed overhauling. It was full of incongruous functions. All these must be examined 'with a view to any consolidation or interchange or combination of functions and duties'. Next came methods of departmental management—the 'recording of individual services' by making clerks and inspectors fill in diaries of the way their time was spent. (This innovation he had already employed both at the Poor Law

¹ Cf. *The Chief Methods of Preparation for Legislation, etc.*, 1859. This suggestion is clearly the germ of the passage in J. S. Mill's *Representative Government*. Mill himself approved warmly E. Chadwick's suggestion when it was first delivered, as did Sir J. Stephen.

Office and the Board of Health.) His ideas on this are startlingly modern. He was demanding 'time and motion studies' and cost-accounting, openly admitting that 'the most eminent private professional commercial or manufacturing success is due to . . . the analysis of the time occupied in each stage of production, bringing home the accountability for service in return for payment made to every individual person engaged, and getting out the total cost of each transaction'.¹ The departments themselves must, by annual reports, also account for their time, and their reports must be submitted to periodical comparative 'audit of service' by a body of government examiners. He anticipated modern practice by suggesting that these should not be exclusively servants but that 'one or two experienced managers of private establishments conducted successfully on a large scale'² could be usefully added. Finally, the whole machinery of government was to be kept under constant review by periodical investigations and reports of the Board of Examiners.

With Trevelyan's scheme of open competitive examination he was in fullest sympathy: his outstanding difference was as to the subject-matter of the examinations. He summarized his important contribution to the 'Papers relating to the Reorganization of the Civil Service thus:

'I have delayed writing my letter to the Chancellor of the Exchequer for some information from abroad, which however I have not got. But I send it in today having shewn it to John Mill and adopted his suggested correction.

'He thinks so highly of the facts I have given as almost to encourage me in putting it forth as a pamphlet. I have associated the local and parochial patronage with the political patronage and shewn the effects produced even by imperfect examination and securities for fitness in the appointment of the permanent officers of the local Boards. He wishes me to fortify this position with additional illustrations—

'You will see that I have provided examples in answer to the objections that the abolition of patronage will impair the working ability of the executive. . . .

'(J. Mill) declared to me that he thought it the best political measure which had been brought forward during the time. But he said he troubled for the execution:—it would be so easily spoiled by bad appointments or failures of untried examiners or by taking wrong points for examination or by acting on the supposition that any one simple or single would suffice—He was uneasy in this respect for the new examinations for the India Service.

'I have the same feeling. I find it very prevalent amongst people who are very favourable to the principle of the measure. I adopt the objections of the persons who assume that the examinations will be on an old University basis

¹ Parliamentary Papers, 1854-5, xx, pp. 193, 201 ('Administrative Diaries'), and 205 ('Use of the Annual Departmental Report').

² Ibid.

whilst I conclude against their objections. I think I state more strongly than the objectors do, the claims of the specialities to precedence. I have found the specialities and the presentation the only means of preventing jobbing which would have been effected by means of general qualifications—I have not stated as I ought to have done, the importance of competition, as a means of checking the examiners, though I have long felt it very strongly—Mill is also very strong upon this point—

'I would ask your more especial attention to the propositions in the last part of my letter on the systematizing the accountability for time, by diaries and annual reports, and entrusting the supervision of this work to your examining Board.'¹

This Report, unlike any other that Chadwick wrote, was based upon what was intimately his own experience, and one stretching back for twenty years. Of all his official works it is the most wise and the most balanced. Fully carried out, it would doubtless create a smooth running machinery of more than ordinary efficiency. It is not until one examines the social role he intended it to play that one realizes, with a shock of dismay, that this instrument was to respond only to impulses which it had itself exclusively generated.

¹ E. Chadwick to Trevelyan, 18th April 1854.

BOOK ELEVEN

THE THIRD CAREER OF EDWIN CHADWICK

CHAPTER I

ON THE MARGIN OF ADMINISTRATION

I

DURING the Crimean War Chadwick was on the margin of official life. He still considered his retirement as temporary, and made several offers to return to public service. His preferences now were for some new enquiry, rather than executive work. But these, from one circumstance or other, were defeated or laid aside, and by the end of the war, when he moved to a cottage in Richmond, he had begun to act as though he were a private person.

He himself realized that a return to Public Health duties was, for the moment at any rate, unthinkable. He was still under attack. *Engineers and Officials*, and Rumsey's *Essays in State Medicine*, both of which appeared as late as 1856, and Sir Benjamin Hall's retrospective attacks on the first Board of Health all kept the polemic alive. *Engineers and Officials* was a scurrilous pamphlet, published anonymously, either by, or on behalf of, some of the Metropolitan water engineers. It purported to review Chadwick's sanitary career. In fact, it is a travesty, written with every violence of expression and with an evident dishonesty of purpose. What Chadwick had undeniably done was derided. What he had not done was alleged to have been the work of his faction. He himself was accused not only of ignorance and incompetence but of corruption, and his career was expressed in terms of intrigues and jobbery undertaken exclusively for self-advancement and greed for power. Rumsey's work was more balanced but it had little to say that was good of Chadwick. It regarded his administration as disastrous. He himself was treated as intellectually dishonest and his reports and enquiries as partisan. It gave him credit only for a successful and a necessary agitation for Public Health, and even this left-handed praise was severely qualified. Rumsey, like many thinking medical men such as Budd, Farr, and even John Simon, deplored the twist which