

THE DEVELOPMENT OF

PUBLIC HEALTH ADMINISTRATION

IN GLASGOW

1842 - 1872

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SUMMARY

This thesis outlines the course of public health improvement in Glasgow between 1842 and 1872, through the medium of local government administration. After an Introduction in which the general sanitary condition of the city in the middle years of the nineteenth century is described, the thesis examines four main areas of public health - administration, cleansing, the control of epidemic diseases and improvement of working class housing.

Section I examines the reform of administration. Chapter 2 outlines the changing pattern of administration throughout the period. Chapters 3 to 6 describe the various local government bodies which existed prior to 1846 and their relationships, the extension of the city over the suburbs in 1846 which provided the essential administrative basis for reform, and the subsequent evolution of municipal and parochial public health administration.

Section II deals with the cleansing of the city in its widest sense. After an opening chapter, Chapter 7, which looks briefly at the problems of cleansing throughout the period and the methods adopted for tackling them, the various local authorities responsible for general sanitation are examined, the evolution of cleansing methods and the effectiveness of these in practice. Two final chapters in this section, Chapters 13 and 14, look at the related problems of sewage disposal and smoke control and the local authority's response to these, and

finally the successful introduction of a water supply.

Section III deals with the local authority's role in the control and prevention of epidemic disease. Chapter 15 looks at the whole spectrum of morbidity and mortality in Glasgow with regard to communicable diseases. Chapters 16 and 18 look at two different periods of exceptional epidemic disease and the varying successes of the local authorities in each period in coping with the emergency. Chapter 17, which links them, shows the gradual change of emphasis in local authority attitudes towards responsibility for epidemic disease and the changing role of municipality and parochial boards in this field.

The final section, Section IV, looks at the problem of housing the working classes in Glasgow. Chapter 19 outlines the build-up of the city from a comparatively small size in 1800 to a major conurbation by 1872, with inevitable divisions into rich and poor areas, and shows the changing pattern of working class housing throughout the period with a parallel change in middle-class attitudes towards the way in which the poor lived. Chapter 20 outlines the attempts by the local authority to solve the most pressing problems in housing, including overcrowding in small homes, the lack of any building regulations, the proliferation of common lodging houses and the increasing need for slum clearance. A final Chapter, Chapter 21, looks back over the whole period and attempts to assess the part played by local authorities in bringing about an

improvement in the health of the city.

It is hoped that this thesis will show not only how one city, a major industrial centre and a city with an unenviable reputation for dirt and disease in the mid-nineteenth century, attempted to put its house in order with regard to public health, but also the varying factors at work which made change possible. These included the development of national and local statute law to persuade and then compel public health improvement, the influence of major sanitarians with a national reputation and of dedicated individuals within the council and among the municipal employees in Glasgow itself, and finally the development of scientific theories which linked dirt and disease together. These factors were to assist in bringing about a change from general indifference to public health on the part of the general public, to an awareness of the need for improvement and so to a final acceptance of the reforms outlined in this thesis.

PREFACE

When I first began this study of Glasgow's public health, I had intended to make a survey of the whole field of public health throughout the nineteenth century. It soon became obvious that such a task would result in a thesis either too long to be readable or too shallow in content to be worth while, and I narrowed my field of study down to the thirty most formative years of the century, 1842 to 1872, a period which opened with the Chadwick Report, a Report which dealt a blow to complacent local authorities on the state of their towns and villages from which they were never to recover until major reforms had been made; and which closed so far as Glasgow was concerned with the appointment of the first full-time medical officer of health. I still hoped to be able to include all aspects of public health in this study in depth over thirty years, including private and charitable medicine, but the lack of adequate information on the workings of the various local authorities in Glasgow during the nineteenth century, of which there were a considerable number, led to several months' research into local administration. This inevitably channelled the thesis into a study of local authority involvement in the public health of Glasgow during the years 1842 to 1872.

Public health is a very wide field even given the limitations of study just outlined, and this made a selection of main topics essential if the thesis was not

to become too unwieldy in its final form. Administration had to be included, not only to guide the reader through the intricate network of local authorities but also to outline the essential developments in statute law without which public health reform would have had no framework within which to operate. Cleansing, considered so important in the nineteenth century, seemed unduly neglected as a topic of study, while forming the core of urban improvement. Glasgow was by all accounts the dirtiest city in the United Kingdom during the period to be investigated and therefore made a valuable case history. The section on cleansing has therefore become the largest section in this study in an attempt to reinstate general sanitation, including in this smoke control, sewage disposal and the provision of a water supply, to the prominent position it held in the opinions of nineteenth century sanitary reformers. Epidemic diseases, the catalyst for much public health improvement, and attempts to control them have also been included and finally housing conditions, the root cause of so much disease, dirt and suffering.

Many other important topics, such as the movement to control the adulteration of foods and offensive industries and the provision of municipal baths and wash-houses, have had to be mentioned only briefly or left out altogether. Important as they were, they are peripheral to the main theme. Other topics, such as the introduction of a good water supply, have had to be dealt with in less depth as they are already well covered by research and written material. The main aim of the thesis has been to throw

light on those less popular or less well explored aspects of public health administration, which at the same time form the essential basis of long-term urban improvement.

Most of the information in this thesis has been drawn from the minute books of the various local authorities studied. This has possibly given a one-sided aspect to the work, but on attempting to redress the balance by making a detailed study of local newspapers for insight into opinions outside the Council Chamber, the work proved so time-consuming that it had to be abandoned and only those newspapers could be used where evidence elsewhere pointed to relevant material. The large amount of contemporary pamphlet literature, articles and books on different aspects of public health have also proved a very useful counterbalance to the official viewpoint as stated in the Minutes of the various Committees studied.

This work could never have been undertaken without a considerable amount of help. My thanks are due in particular to Professor M. W. Flinn of Edinburgh University who has supervised the research and never failed to give advice and help, and also to Mr. Richard Dell, Strathclyde Regional Archivist, who guided me through the intricacies of the records and was able to provide me with much valuable material I might have overlooked. I should also like to thank the librarians of the other libraries and collections I consulted, in particular the staff of the Glasgow Room of the Mitchell Library in

Glasgow, the librarian of the Baillie's Institute Library, Glasgow, and the custodian of the Barlanark Collection, lodged in the library of the Faculty of Procurators, Glasgow. I also spent some time in the Search Room at Register House, Edinburgh, and have to thank the staff at both Register House and West Register House for their assistance. I have also to thank the Senior Assistant Clerk of the Records of the House of Lords Record Office for helping me in attempts to trace various missing documents concerning Glasgow bills, unfortunately without success, and for providing me with the notebooks containing evidence given to Select Committees in reference to major Glasgow Acts.

Finally, I should like to thank my family for the patience and forbearance they have shown during the time I have worked on this thesis.

ABBREVIATIONS

The following abbreviations have been used:-

General.

GCA	Glasgow City Archives.
PP	Parliamentary Papers.
TC	Town Council of Glasgow.

Manuscript Sources and Newspapers.

(Given in the order in which they appear in full, in the Bibliography on pages

PBM	Police Commission Minutes.
PCM	Police and Statute Labour Committee Minutes.
NRCM	Nuisance Removal Committee Minutes.
SCM	Sanitary Committee Minutes.
CHM	Committee on Health Minutes.
Special Committee Minutes.	Police Board Special Committees Minute Book.
CCM	Cleansing Committee Minutes.
GBM	Town Council Minutes (published volumes).
TCM (Ms)	Town Council Minutes (manuscript volumes).
WCM	Water Commission Minutes.
ITM	Improvement Trust Minutes.
City PBM	City Parochial Board Minutes.
Barony PBM	Barony Parochial Board Committee of Management Minutes.
Gorbals PBM	Gorbals Parochial Board Minutes.
Govan PBM	Govan Parochial Board Minutes.
NBDM	North British Daily Mail.

Published Works.

Where a work is frequently referred to, the full title has been given when first cited and subsequently a shortened version. Where an individual work appears several times in the same chapter, the author's name alone has been given, after a full initial reference.

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In 1736 the historian John McUre was moved by pride in the achievements of his native city to write an account of the history and progress of Glasgow.¹ Having traced the development of the town from its reputed establishment by St. Mungo in the Dark Ages to his own day, he then took his readers on a journey through the streets and wynds of the city, describing the principal thoroughfares and most notable buildings to be seen within the boundaries of the ancient Royalty. 'The city' said McUre, 'is surrounded with cornfields, kitchen and flower gardens, and beautiful orchards abounding with fruits of all sorts, which by reason of the open and large streets send furth a pleasant and oderiferous smell'.² While the remainder of McUre's book is infrequently read and quoted, this one small passage has never been allowed a similar obscurity, if only for the contrast it draws with the city as it was to develop in the course of the following century.

The Glasgow of McUre's day was a thriving community, its commercial life dominated by the established Merchants' and Trades' Houses and its intellectual life by the ancient university. In size it was compact, the tall, tenement houses straggling down the spine of a long hill, the summit of which was crowned with the ruins of the former Bishop's castle and the cathedral, and the foot of which ended at

1. John McUre, A View of the City of Glasgow (Glasgow, 1736).

2. Ibid, p.144.

the bridge over the river Clyde leading to the small burgh of Gorbals. The long, central street forming the main artery of the city was divided at the Cross by another throughfare leading from east to west. The four roads thus formed, the High Street and Saltmarket, the Trongate and Gallowgate, were for centuries the business and social heart of Glasgow. They contained many substantial buildings, such as the Tontine Buildings in Trongate and Gibson's Land in the Saltmarket, described by McUre as 'a great and stately tenement of land' standing 'upon eighteen stately pillars of arches, and adorned with the several orders of architecture'.¹ The arches of which McUre spoke formed in fact part of a continuous arcade, or piazza, down the length of the street, which enabled shopkeepers to display their goods and shoppers to inspect them with shelter from the worst of the weather. They gave a grace and elegance to the city streets which excited the admiration of Daniel Defoe when he visited Glasgow early in the eighteenth century.² The houses themselves, above the level of the shops and piazzas, were let out in flats, the size of the house and its position in the tenement determining the status of its occupant. The wealthiest citizens inhabited the lower stories where the rooms were frequently substantial both in size and number, while the poorest lived in the garrets under the steeply-sloping

1. McUre, p. 148-149.

2. Daniel Defoe, A Tour through the Whole Island of Great Britain (First published 1723. Everyman edition, 1928) Vol. 11, p. 334.

gable roof. Few people in McUre's day could afford to live in the style of house that some of the richer merchants were now building for themselves beyond the western boundary of the Royalty, where a whole building was occupied by a single family. The majority of Glaswegians approached their dwellings along a narrow entrance passage, or close, and then mounted the common stair to their landing, with a lobby at each level leading to the individual houses of rich and poor alike.

The ground immediately to the rear of the main streets was intersected with innumerable small lanes, or wynds, which gave access to the tenements standing originally on their own garden ground away from the bustle of the city. Many of these, such as Rankine's Court near the Bridgegate, a collection of timber-framed buildings with projecting upper storeys, and the Duke's Lodging in the Drygate, a former mansion house of the Dukes of Montrose,¹ were once inhabited by the nobility and gentry but by the middle years of the eighteenth century were divided up into lodgings. Their gardens even then were doomed soon to disappear. McUre reckoned that two hundred new lodgings had been built in the city between 1677 and 1736, presumably beginning the process by which the gardens and orchards of which he spoke were to give way to the closely-packed tenements and courts of a century later.²

1. Senex, Glasgow, Past and Present (Glasgow, 1884) Vol.1, p. 53.

2. McUre, p.156.

While a considerable amount of open space existed within the boundaries of the Royalty, the problems of an expanding community were not pressing. However, although by far the largest and most important town in its immediate vicinity, Glasgow shared its site with a number of smaller settlements. Most of these were little better than small villages, such as Camlachie to the east, Springburn to the north and Govan to the south beyond the river Clyde. The two nearest villages on the north bank of the river, Calton and Anderston, were to increase in size and importance sufficiently under the impact of industrialisation to achieve burghal status themselves in the first quarter of the nineteenth century and to link up physically with the larger burgh of Glasgow to form a continuous urban area by 1842 from the village of Bridgeton in the east to the banks of the river Kelvin in the west.

The existence of these villages and the topography of its site dictated the direction of future growth for Glasgow. The hill upon which the city had been built followed the course of the Molendinar burn, which marked the eastern boundary of the Royalty. At the highest point, near to the cathedral, the burn tumbled in a series of small waterfalls through a deep ravine, the opposite bank rising into a high, fir-clad hill. These geographical features effectively hindered Glasgow's eastward expansion, while further down the course of the burn, where the ground was

1. For a map of the city and suburbs of Glasgow in 1887, showing the position of the suburban burghs in 1842, see Map 1 at the end of Volume 2.

flatter and the stream no longer afforded a barrier to eastwards development, the city here found itself in competition for space with the established villages of Calton, Mile-end and Bridgeton. Glasgow was hemmed in to the south by the river Clyde and to the north, beyond the Town's Muir, by Garngad hill and the bog lands giving rise to the Pinkston burn. As a result, once the impact of an expanding population and an increasing industrial and commercial prosperity had exhausted the available land and buildings within the old boundaries and forced an extension of the city, the direction of growth was inevitably westwards. This westwards movement of the city, which began with the laying out of a new commercial and business centre on the Ramshorn and Meadowflats estates at the end of the eighteenth century, was to continue until the city boundaries reached as far as the river Kelvin and the burgh of Partick in the middle years of the century following.

The establishment of a new business centre away from the old town was matched by a corresponding shift among the residential population. The old pattern of occupancy by which rich and poor occupied the same building but on different floors was replaced by a definite movement of the better-off away from the old city to new, residential areas where the style of houses corresponded more to those being built in the New Town of Edinburgh. During the first half of the nineteenth century a series of very fine squares, crescents and terraces of domestic housing were built beyond the western boundary of the old Royalty, chiefly on the

Blythwood estate of Campbell of Blythwood, and with more limited success to the south of Glasgow on land belonging to Hutcheson's Hospital near the burgh of Gorbals.¹ From 1831 the proprietors of the South Woodside estate, McHardy and Fullerton, began the feuing out of the land at the western end of Sauchiehall Street, a development which resulted in such fine streets as Claremont Terrace (1842) and Lyndoch Crescent (1845). Although this whole area was already well supplied with open space, trees and garden ground, it was provided with Glasgow's second park, the West End, later Kelvingrove, Park, on the banks of the small but relatively unpolluted river Kelvin.

This flight of the middle classes of Glasgow away from the cramped conditions of their former homes to more modern and spacious houses brought into existence the type of social cleavage between rich and poor that had existed in Edinburgh since the building of the New Town beyond the Nor' Loch. Although the physical separation was not so pronounced in Glasgow, the division of the community into districts almost exclusively inhabited by the rich and others just as exclusively by the poor was no less significant. The commercial centre around Ingram Street, Queen Street and George Square, with its spacious offices, warehouses and counting houses, separated the new streets and crescents inhabited by the better-off from the delapidated tenements of the old town. It was perfectly possible for

1. For an account of the development of the New Town of Glasgow, see J.R. Kellett, 'Property Speculators and the Building of Glasgow', Scottish Journal of Political Economy, V111 (1961).

a businessman to leave his home near the West End Park and travel to his office along the Sauchiehall Road or Argyle Street, without ever being aware of the existence of areas of poverty hardly a stone's throw from his counting house door in the wide and spacious Trongate.

Chadwick himself remarked upon this fact after visiting Glasgow prior to the publication of his Report on the Sanitary Condition of the Labouring Population of Great Britain in 1842. 'We found' he remarked, 'the inhabitants of the front houses in many of the main streets of these towns (i.e. Glasgow and Edinburgh) and of the metropolis, have never entered the adjoining courts, or seen the interior of any of the tenements, situate at the backs of their own houses, in which their own workpeople or dependents reside'.¹ He and Dr. Arnott who accompanied him, also found the people within the wynds surprised to see them, for few men of their social position left the safety of the familiar city streets to enter the unfamiliar world of the back courts. Only a handful of devoted missionaries, the parochial surgeons, distributors of temperance and other tracts and occasionally an investigator wishing to become personally acquainted with conditions among the poor ventured into the wynds. Many of those unwary enough to find themselves there without the protection either of a friendly inmate or a police constable, lost most of their clothing and valuables as a result.²

1. E. Chadwick, Report, p. 397.

2. 'Hawkie', The Autobiography of a Gangrel (Glasgow, 1888), pp. 29-30.

It was unfortunate for the public health of the city that this ignorance should have existed, if for no other reason, since the majority of problems concerning public health were confined to the poorer quarters of the city, not only in the old town itself but later in the older parts of the suburban villages and in newer areas built specifically for working class occupation such as the Garngad and Port Dundas. The houses of the rich, both the new, terrace-style houses and the later tenements, were large enough to accommodate any sanitary improvement that might be brought in, and from the 1850s onwards were built with a water closet, piped water supply, a plunge bath and accommodation for at least one maid as a standard part of the amenities provided. Evidence for this can be seen in the many tenements built in the 1860s and 1870s still occupied in the university area of the city to-day. There were a few occasions when the West End was involved in public health controversy. The condition of the back lanes in the Blythswood area was criticised by the Glasgow Herald in 1849, while during the 1853 cholera epidemic, the practice of retaining stable and domestic refuse in deep dungpits in the stable courtyards of west end houses was made the subject of a paper read to the Medico-Chirurgical Society of Glasgow in 1853.¹ Even later, during the typhus epidemic of 1865, the grooms' houses over the stables in the west end were the subject of a special investigation and several in Bath Lane were condemned as unfit for human

1. R. Buchanan, 'On the Stable Nuisance in Glasgow', Glasgow Medical Journal I (1853), p. 359.

habitation, while the mews houses in Park Terrace Lane were measured and the number of occupants permitted were regulated under the 'ticketing' clauses of the 1862 Glasgow Police Act, a procedure normally reserved only for the small houses of the old town.¹ However, these examples are more an illustration of the relationship between a master and his domestic servants than of the insanitary nature of west end housing, as in each instance it was the stable area of the house and not the home itself that came under investigation. In the poorer areas of Glasgow it was the reverse of the case. So dark, dirty and insanitary were many of the houses in which the poor lived that they were compared unfavourably with stables, although where the householder had domestic animals such as a pig or two and a donkey, his lodgings had frequently to do service as both.²

While the city beyond the wynds and closes continued to thrive and expand its commercial and industrial prosperity, the population of the other city that was growing up behind the wide streets and business premises, and whose members formed the workforce by which industry and commerce could continue at all, was having to come to terms unaided with the realities of urban life. By 1842 few people living in the old town of Glasgow or even the main suburban centres can have been born and brought up in the city. The building of the New Town of Glasgow,

1. SCM, 29 March 1866, 182.

2. Robert Perry, Facts and Observations of the Sanitary State of Glasgow during the Last Year, (Glasgow 1844), p. 20.

which might have been expected to provide those remaining behind in the original city with at least some extra living space, coincided with an unprecedented expansion of population into the whole urban area, city and suburbs alike. The first census in 1801 gave the population of the city and suburbs as 77,385. By 1821 it had risen to 147,043 and by 1851 to 344,986, with an average decennial increase over these fifty years of 34%.¹ Most of this increase in population took place in the surrounding burghs, equal to 543% between 1801 and 1851, while the rate of increase within the original town of Glasgow was 217%. The vast majority of these immigrants were of the lower income groups, attracted by the prospect of work in the new cotton mills, the chemical, bleach and dye-works and a host of other industries springing up in the wake of industrialisation. They had somehow to be provided with work, food and housing if the city was not to be brought to a halt by so many new arrivals. The provision of the first two in times of good trade and expanding market conditions was not difficult, but the third demanded land upon which houses could be built, and by 1842 in the heart of old Glasgow this was not to be had.

The three suburban burghs of Calton, Anderston and Gorbals which took the majority of the incomers for the first thirty years of the nineteenth century, were fortunate in containing a good deal of vacant ground, and expanded their domestic working-class housing considerably

1. A.K. Chalmers, The Health of Glasgow, 1818-1925, (Glasgow 1930), pp. 1-2.

in response to the influx of workers. This was to lay up trouble for the future, as the houses were not built with much regard to the health and comfort of the proposed occupants, but it eased the situation for the present. The old town enjoyed none of the advantages of available building sites and a relatively modern stock of housing. Since McUre's day, most of the remaining gardens had been built over and new structures had to be squeezed in between existing buildings without much regard to the easy access of light, air or even the inhabitants.

In the early years of the nineteenth century a certain amount of slack had still to be taken up in the provision of accommodation through the vacating of large flats by the departing middle classes, which could then be 'made down' to provide homes for several families. Once this process had been completed, the number of houses available could only be augmented by further making-down of homes into even smaller units, or by the use of unorthodox buildings as domestic dwellings. There are examples as late as the 1860s of ash-pits being repaired, roofed over and used as a home and factories were also converted profitably into several single rooms or rooms and kitchens.¹ Sir Archibald Alison, Sheriff of Lanarkshire, drew attention to the fact in 1841 that the census figures for that year had shown a population increase in Blackfriars parish, in the most densely-populated part of the city of Glasgow, of 40% since 1831, while the number of inhabited houses had

1. Report of the Medical Officer of Health to the Board of Police of Glasgow, October 1863, pp. 5-7; SCM, 24 May 1864, 46.

not increased at all. In Gorbals during the same period the population had increased by 20% since 1831 and no new buildings had been erected.¹ These figures presumably refer to the old burgh of Gorbals and not to the new Gorbals springing up around it on land belonging to the Trades' House of Glasgow, the Town Council and Hutcheson's Hospital jointly and feued out by them to developers from the beginning of the nineteenth century onwards. The new districts, Tradeston, Hutchesontown and Laurieston, provided the growth points south of the river but much of the land was taken up for industry or better-class housing, leaving the old burgh to absorb those workers unable to pay high rents for their accomodation. As Gorbals was a burgh of long standing, many of its houses were as old or older than those in the old town of Glasgow, and it thus duplicated conditions in the larger city although in a considerably smaller area.²

Whether they arrived on foot from the lowlands or highlands of Scotland or by boat from Ireland, the immigrants usually first made the acquaintance of the city along some road leading to Glasgow Cross, from where new arrivals fanned out to find accomodation. Many of them went to the suburbs, but for those who found lodgings behind the High Street or Saltmarket the introduction to city life must have been bitter indeed. The entrances to the wynds

1. Sir Archibald Alison, 'Social and Moral Conditions of the Manufacturing Districts of Scotland', Blackwood's Edinburgh Magazine, L (1841) p.669.

2. Senex, Glasgow, Past and Present, Vol.1 (Glasgow, 1884), pp. 21-22, 28.

were often no more than a gap four or five feet wide between the buildings in the main thoroughfare. They gave access to a whole series of smaller lanes, or closes, which led to the courtyards around which the houses were built. A further close gave access to another court behind the first and this frequently led to a third.

This series of connecting passage-ways and closes usually made it possible for the inhabitants to move about from one lane to another without much difficulty, and made the task of the police force in arresting criminals who made good their escape into the closes almost impossible.

The most graphic contemporary description of this arrangement of buildings and courts is to be found in the Report of Edwin Chadwick, who quotes Dr. Neil Arnott who went with him into the district known as Bridgegate and the Wynds to investigate living conditions. 'We entered' stated Arnott, 'a dirty low passage like a house door, which led from the street through the first house to a square court immediately behind, which court, with the exception of a narrow path around it leading to another long passage through a second house, was occupied entirely as a dung receptacle of the most disgusting kind. Beyond this court the second passage led to a second square court, occupied in the same way by its dunghill; and from this court there was yet a third passage leading to a third court, and a third dungheap. There was no privies or drains there, and the dungheaps received all filth which the swarm of wretched inhabitants could give; and we learned that a considerable part of the rent of the houses

was paid by the produce of the dungheaps'.¹

This description applies particularly to the area behind the Trongate and Argyle Street as far as the Clyde, but similar conditions could be found around the Gallowgate and among the closes on either side of the High Street. The closes and 'lands' to which they led often had names which to-day sound picturesque but which then suggested disease, crime and destitution, such as the Fiddler's Close to the west of High Street, a collection of timber-framed, thatched houses with an outside wooden staircase leading to the upper floors, the Blackboys and Anchor Closes near the Gallowgate and Lady Young's Close in the notorious Old Wynd. The Old Wynd typified the worst that was to be found in the old town. It ran between the Trongate and the Bridgegate, through the heart of the Tron parish, which was said by its parish minister in 1851 to have one hundred and fifteen places for the sale of intoxicating liquor and sixty three pawnshops within its bounds of less than eleven acres. At the time its population was almost twelve thousand, giving a density per acre of around 1,090.² Leading off from the Old Wynd were the customary closes and courts, the most infamous of which was Jeffrey's Close. Here existed in a single courtyard every insanitary feature the old town had to offer. It contained several common lodging

1. E. Chadwick, Report, pp. 97-98.

2. R. Buchanan, 'The Spiritual Destitution of the Masses in Glasgow' (Speech delivered to Free Church Presbytery of Glasgow, 8 January 1851). Quoted in J. Handley, The Irish in Scotland, 1798-1845, (Cork 1947), p. 230.

houses, among them one run by Billy Toye and frequented by Hawkie, who described it in his Autobiography.¹ Billy's 'hotel' had nineteen 'snoozes', or beds, available, the usual price for a snooze being 2d. per night. The lodging house appears to have occupied several floors of a building, for which an annual rent of between £6 and £7 was paid. In common with many other buildings in the area it was 'haunted with great legions of rats'. Hawkie himself recalls the gruesome case of a body left without a coffin for a night, which was found to be eaten by rats the next morning. Families throughout the old town rarely left corpses out of coffins for long for this reason.²

Jeffrey's Close was also the subject of a visit by the Police Commissioners in 1838, who needed to look no further to collect evidence on the growing problem of health and sanitation in the old town. The first building in the close, or front land, a tenement of four storeys in height, they found made down into many small apartments, 'in some of which the whole floors were nearly covered with what were called beds, but in many instances fitter to be burnt or thrown to the dunghill'. As many as seven beds were crammed into the small apartments, each occupied by two persons and let to a different set of lodgers at night, their original occupants presumably being thrown out on the streets to prowl about all night. At a payment of 3d.

1. Hawkie, Autobiography, p.102

2. Ibid, pp. 103-104.

per lodger, each bed realised for the keeper one shilling every twenty four hours. In this particular building the investigators found to their disgust a room on an upper floor used as a receptacle for domestic refuse, while recesses at each stairhead were given a similar function.¹ The courtyard to Jeffrey's Close contained, in addition to the customary dungstead, a row of pigstyes and the buildings were in an advanced state of decay. It is not surprising that the Town Council of Glasgow, once the decision had been taken in 1848 to buy up and demolish delapidated and insanitary property, made this close the object of their earliest purchases.²

Further down the Old Wynd were other courts almost indistinguishable from Jeffrey's Close in their insanitary features. Wood's Close was so narrow and the houses so close together that washing lines were passed between upstairs windows across the lane, completely blocking out the last vestiges of sunlight which with difficulty reached the ground-floor houses. Lady Young's Close had sunken dwellings on the lowest levels, their windows blocked by the dung-heap in the centre of the court.³ Another notable set of buildings off the Old Wynd was Rankine's Court, a timber-framed building with projecting upper storeys, once a fine mansion house of seventeenth century origin and now made down into numerous small homes.

1. PBM, 26 October 1838, 155-156.

2. TC Special Minutes, 23 May 1848; 10 October 1849.

3. North British Daily Mail, 2, 4 and 5 September 1848.

The ease with which tenements such as Rankine's Court could be converted into many more dwellings than the builders originally intended accounts for much of the overcrowding in the old town. Newcomers to the city, who no doubt first sought shelter in one of the many common lodging houses in the city such as Billy Toye's, were faced with a bewildering variety of dwellings of all shapes and sizes from which to choose a permanent home, their choice naturally being limited by the state of their purse. Garret rooms were sometimes no more than five foot by nine foot in length and breadth, with a sloping ceiling no more than seven foot high at its highest. Cellar dwellings were frequently windowless, damp and with only the earth as flooring. Between these two extremes, whose inhabitants were normally forced by poverty to live in such miserable conditions, were the many small houses made down from larger rooms. John Smith, a minister who studied the problem of crime and pauperism in Glasgow, collected evidence of the living conditions of the poor at first hand. He found examples of families containing five members living in a single apartment nine foot by five foot, paying a rent of £2.16s. a year,¹ of ground floor houses sunk below the courtyard level so that the liquid of the dungheap ran into them, of a building so overcrowded that a single entry and common stair gave access to more than forty dwellings housing three hundred

1. J. Smith, The Grievances of the Working Classes and the Pauperism and Crime of Glasgow with their Causes, Extent and Remedies (Glasgow, 1846), pp. 18, 20, 26.

and sixty persons.¹ Rentals in this building averaged £3 per annum, but a single room nine foot wide by ten foot long with a ceiling height of only seven foot could fetch this sum. Two small rooms could be let for between £3.10s. and £4. per annum.² With such good returns on their property, owners of made-down houses had little incentive to either put them in good order or improve their amenities by the introduction of piped water or better scavenging facilities.

The problem of scavenging the refuse and ashes from the mass of humanity that lived in the old town and suburbs was certainly daunting. Most closes were too narrow to permit the entry of anything larger than a hand-cart and horse-drawn vehicles could only with difficulty make their way down the wynds. Dung and 'fulzie' had to be manually shovelled into small carts and wheeled from the courts through the closes to the wynds. At all points along this journey the contents fell from the barrows and added to the rubbish already lying on the footpaths. The local authority, who^{ich} was certainly responsible for cleaning up the public thoroughfares, including the wynds, had no right of access to the courts which constituted private property. Although Chadwick had remarked that rents were often paid through sale of domestic manure, in fact it was more common for a property owner to possess rights of thirlage over a courtyard dungstead and compel the local

1. J. Smith, Grievances, p.24.

2. Ibid, p.22.

people to place their dung and ashes in it.¹ If the owner then chose to have the contents of his midden removed only infrequently, the inhabitants had to suffer in consequence. The nuisance bye-laws under the various Glasgow Police Acts could be invoked to force a proprietor to clean up his middenstead, but the police authorities hesitated to incur the wrath of property owners by bringing an action against them in the baillie courts. Not until life in the back streets of the city had become a matter of public concern was anything concrete done to clean up the closes.

The day-to-day life of those forced to live within the wynds was problematic enough without adding to it that of trying to keep clean against impossible odds. Rubbish and 'slops' were thrown out of the windows from upper floors at the risk of a fine² since a trip to the ashpit often meant a long walk down dark, slippery and sometimes dangerous stairs from four storeys up, and then a journey across a dung-strewn courtyard to the overflowing midden. The occupants of an upper flat in Close 90, High Street, solved this particular problem by cutting holes in their floorboards and disposing of their dung and rubbish onto the heads of the unfortunate dwellers in the flat beneath, who consequently vacated the premises. The excuse given for this unneighbourly behaviour was the danger to life and limb involved in going up and down the rickety stairs.³

1. Senex, Glasgow, Past and Present, p. 36.

2. Ibid., p. 125.

3. Ibid., p. 127.

Obtaining water for cooking and cleaning, let alone drinking, was another operation so laborious to the majority of the poor that they performed it as infrequently as possible. There were several public wells scattered about the central urban area, some, such as Arn's Well in Glasgow Green, of considerable purity but others polluted to a greater or lesser extent. There were also a number of private wells to which some were fortunate enough to have access. The majority of the poor queued for their water at the public wells, bought it by the stoup from water-carts and even obtained it by the jugful from their local public house along with their beer.¹ The precious supply then had to be carried often some distance and up several flights of stairs before safe arrival at the consumer's house. It was not surprising under the circumstances that clean clothing and well scrubbed floors were not likely to be found among the overcrowded tenements of Glasgow.

Two water companies, amalgamated in 1838, brought a piped supply into the homes of the better-off, but the supply was only constant in the lower parts of the city and intermittent in the upper districts.² Effective filtration was only introduced in 1838 when the companies amalgamated and as the supply was drawn from the river Clyde, efficient filtration was essential. Discontent with the water supply to the city was to grow throughout

1. Glasgow Herald, 17 June 1853

2. Sir J.D. Marwick, Glasgow - The Water Supply and Various Developments of the City till the close of 1900 (Glasgow, 1901), p. 108

the 1840s and the issue was only resolved satisfactorily when the Town Council assumed responsibility for bringing sufficient pure water for the needs of the city from Loch Katrine in 1855. Until these works were opened in 1859, and in some instances for some time after, the poor struggled on as best they could to obtain sufficient water for their needs. In fact they could have had as good a supply as their neighbours in Blythswood had they been able, or their landlords willing, to pay water rates. When first typhus and then cholera hit the city between 1847 and 1854 the water company provided a gratuitous supply to the wynds and closes at very short notice and removed it again with equal alacrity before the emergency was completely over.

Overcrowded and insanitary living conditions within the home were not the only disadvantages to life in the poorer quarters of the city and suburbs in the early 1840s. Lack of building controls extended to industrial establishments no less than domestic housing, with the result that a tenement containing several hundred inhabitants might find itself sharing a court and close along with a private slaughterhouse, a blood works or small chemical company.² Where these preceded the housing, there was almost no way in which the inhabitants could have them removed to a place

1. PBM, 27 September 1847; 29 May 1854.
 2. An investigation of thirteen private slaughter-houses made by the Health Committee of the Police Commissioners in July 1844 revealed several established in back courts among domestic housing, badly kept and with sunken dungsteads. (PBM, 4 July 1844).

where they might cause less offense. Where a manufacturer set up his works among existing houses, the householders had first to wait until his operations had proved objectionable before they could bring an action for nuisance, yet if they waited for too long before bringing their complaint they were likely to fail to prove their case on the grounds that the works were well established and had not been complained of to the present instance.¹ The interpretation of the law on offensive industries was summed up by the Glasgow lawyers Mitchells Johnston, in a case brought against the St. Rollox Chemical Works for smoke nuisance in 1822. 'The law', they contended, 'as to the freedom of manufacturers in a manufacturing district bears a close analogy to the law on the liberty of the press in a free country. If the press prints anything offensive or hurtful to the state or individuals, one does not seize the type and the press. Similarly, the law in this country leaves the manufacturer free to use his rights with the proviso that if he uses them to the hurt of his neighbours he shall be liable to pay compensation on being convicted in a court of law'.² As defenders against the action, Mitchells Johnston used the argument that Glasgow depended on its manufactures for the support of its population, and if they were driven

1. Charles Baird, 'Report on the Legal Provisions available in Glasgow for the Removal of Nuisances'; Reports on the Sanitary Condition of the Labouring Population of Scotland. No. 5 (1842).

2. Mitchells Johnston Papers, GCA T-MJ 409.

out of the city by adverse laws, the prosperity of the whole community would be put in jeopardy. As a result the law only moved with extreme caution in cases of industrial nuisance, and hesitated to interfere in order to 'deprive the lieges of the use of their property aule causam cognitam'.¹

Under such circumstances, few attempts were made to limit the establishment of offensive industries and the inadequate procedures against nuisances were directed towards stagnant water pools or accumulations of dung, where prosecution was less likely to offend some substantial citizen. The exception to this, however, was in regard to smoke. By the 1840s the city endured an almost constant pall of smoke, which at times under certain weather conditions turned into what at the present day would be termed 'smog'. It was almost impossible to escape from the effects of this atmospheric pollution without leaving the city behind altogether, and possibly because it affected the man of means as well as the poorer citizens there was an attempt early on in the century to legislate for the control of smoke nuisance. Clauses controlling chimney heights were introduced into an Act of 1814, but they proved totally ineffective and the majority of Glaswegians, rich and poor alike, passed much of their lives under a blanket of smoke which blotted out the sun for much of the time and forced shopkeepers to use lamps and other artificial light, even in such dangerous trades

1. Mitchells Johnston Papers, GCA, T-MJ 409.

as those dispensing gunpowder and explosives, for a large part of the day.¹

The original settlement of Glasgow had been well placed for providing the inhabitants with a constant supply of fresh water through the innumerable small streams making their way down from the land to the north of the city into the river Clyde. These included, in addition to the Molendinar, the Camlachie, Germiston and St. Enoch burns, which flowed at various points into the main river, and the Pinkston burn which joined the river Kelvin just before its confluence with the Clyde. By the 1840s the purity of these water-courses was no more than a memory and they constituted a hazard to health in themselves, collecting on their journey through the city, the effluent from the many works and mills and the discharge from the growing number of water closets to be found a short distance from their banks. Having received this pollution of their waters, they then flowed past, and sometimes under, domestic housing. At times of heavy rainfall they frequently flooded the cellars and ground floors of houses unfortunate enough to be built nearby. In Burnside Street, a lane of tenements backing onto the Molendinar near to the old College Green, the inhabitants were provided with a peculiar amenity. If a hole about three foot deep was dug in the earthen floor of the ground floor houses, it would

1. Evidence given to the Select Committee of the House of Lords considering the Glasgow Police Bill, 1862. Evidence for 1862, Vol. 35, 74-75. House of Lords Record Office.

slowly fill up with water. The housewife would then cover it over with a wooden lid and use it as a private water supply.¹ This was small recompense, however, for the periodic floodings these same householders had to suffer.

The condition of the small burns, and even of the Clyde through the extension of water-closets, was causing grave concern by the 1840s.² By this period the St. Enoch burn had disappeared under paving stones and much of the Molendinar around St. Andrew's Square had suffered the same fate, but the remaining burns, particularly the Pinkston burn which received chemical waste from the St. Rollox works, were offensive to the population living nearby. They were also potential carriers of water-borne diseases such as typhoid, dysentery and cholera. The total effect of the urban environment in Glasgow was, in fact, inimical to a long and healthy life. Dirt and overcrowding fostered the louse-borne diseases of typhus and relapsing fever, the infectious diseases of childhood such as measles, whooping cough and scarlet fever and also smallpox. Poor nutrition and smokey atmospheric conditions increased the incidence of tuberculosis and bronchitis. Infected water helped spread the diarrhoeal diseases and typhoid.

The Glasgow Bills of Mortality, published regularly from 1821 onwards, drew attention in cold statistical facts

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1. North British Daily Mail, 23 December 1869, p. 4.
 2. Senex, Glasgow, Past and Present, pp. 130-131.

to the terrible destruction of human life brought about by conditions in the wynds of the city. Death rates rose from an average of 28.6 per thousand over the decade of the 20s to 34.2 per thousand for the 1830s, while in 1837 during a typhus epidemic it rose to 41 per thousand.¹ Although typhus was the most feared of the commoner infectious diseases, it was not in fact the most fatal ailment. For the seven years from 1838 to 1844, the deaths from tuberculosis and other allied diseases averaged around 1,344 per annum, with diarrhoeal diseases causing the second highest fatality rate at just under 950 deaths on average per annum and 'fever' third at 888 deaths. The three principal childhood ailments, whooping cough, scarlet fever and measles, added together, accounted for an average of 1,207 deaths.²

The districts most affected by high mortality rates were invariably the most overcrowded, but typhus and cholera had an unpleasant habit of spreading beyond the wynds to the more 'respectable' districts once an epidemic had begun. It was fear of this as much as anything that goaded the authorities into their first timid efforts at disease control. Those members of the Police Board who had visited Jeffrey's Close had found cases of smallpox in two of the apartments 'and your Committee were informed that from this tenement (i.e. the 'front land' to Jeffrey's

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1. Robert Cowan, Vital Statistics of Glasgow (Glasgow 1838); also 'Vital Statistics of Glasgow' Journal of the Royal Statistical Society, III (1840) p. 266-9.
 2. Alexander Watt, Vital Statistics of Glasgow 1843 and 1844 (Glasgow, 1846). Table 39.

Close) this frightful disease was spreading itself over the whole neighbourhood'.¹ The investigating Committee of the Police Board recommended 'the interference and exertions of the public authorities, to endeavour to remove or improve so that the cleaner and more Healthy parts may not be made to suffer by the continuance of such Nuisances within the city as your Committee have seen...'.¹ The only positive results of this particular investigation, although the connection is tenuous, were controls on common lodging houses incorporated into the next Glasgow Police Act in 1843, lodging houses receiving the major share of the blame for overcrowding and the spread of infection. However, the attitude of the Committee members who went into Jeffrey's Close towards those unfortunate enough to spend their lives within it was uncharitable if not hostile. They regarded them as 'thieves, prostitutes and vagrants of an aggravated description', which was probably true of many of the adults but hardly of the small children they found lying ill with smallpox in complete destitution. Their mission was to prevent the spread of contagion to other districts and to limit calls on the police facilities and Royal Infirmary from those suffering from infectious diseases, but they approached the problem from the standpoint of a nuisance rather than public health. A great deal of work had to be done to educate those in public positions as to the true nature of the situation and the remedies to be applied.

1. PBM, 26 October 1838, 155-156.

Some action for the improvement of public health in the poorer districts had been advocated since the first typhus epidemic in 1818 had shown up insanitary living conditions in a much smaller area of the city.¹ The issue had been kept alive over the years, chiefly by the doctors, both private and parochial, who obtained first-hand knowledge of life behind the imposing facades of the buildings in the High Street and Trongate. A formidable recruit to the ranks of the sanitarians was Robert Cowan, physician to the Royal Infirmary Fever Hospital, who in his statistical lectures and writings publicised the high mortality from infectious diseases suffered by the inmates of the wynds.

Just as informed opinion in the city was slowly becoming aware of the potential threat to their own well-being from the spread of disease and destitution in the old town, the whole issue of public health became the subject of a nationwide debate. Glasgow features in this in a very unfavourable light, the first outsider to visit Glasgow and relay his impressions of the city to the rest of Great Britain being J.C. Symons, one of the assistant commissioners investigating conditions among the hand-loom weavers. On the subject of life in the wynds and closes, he did not mince his words. 'I have seen human degradation in some of its worst phases, both in England and abroad,

1. An excerpt from a pamphlet by Dr. Robert Graham, Regius Professor of Botany at Glasgow University, entitled Practical Observations on Continued Fever, (Glasgow 1818), is quoted in J.B. Russell, Public Health Administration in Glasgow, p. 5.

but I can advisedly say, that I did not believe, until I visited the wynds of Glasgow, that so large an amount of filth, crime, misery, and disease existed on one spot in any civilised country'.¹

So impressed was Symons by what he saw in Glasgow, that he wrote on the subject in a similar vein in his book Arts and Artisans at Home and Abroad, so incurring the wrath of James Cleland, the well-known Glasgow author and statistician, who felt that Symons might with equal force have informed his readers that 'a city of palaces has sprung up for the habitation of the families of the princely merchants of Glasgow'.² However, Symons' opinions were reinforced by an even more formidable public figure in the form of Edwin Chadwick, who visited the city during the investigations leading up to the famous Report on the Sanitary Condition of the Labouring Population of Great Britain. After the publication of this Report in 1842, in which Scotland in general and Glasgow in particular came in for much criticism, the whole question of public health had become one of national importance. The conscience of the affluent section of society towards the poor, with more than a hint of fear for the consequences of neglecting the conditions under which they lived, had at last been aroused. It was to take many decades before local authorities and the general

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1. Reports from Assistant Handloom Weavers Commissioners, Parliamentary Papers, Vol. XLII. 27 March 1839.
 2. James Cleland, A Description of the City of Glasgow (Glasgow, 1846), pp. 33-35.

public were wholeheartedly behind public health reform, and meantime either inefficient local authorities or reluctant ratepayers might hold up much needed reforms for several years.

There was, nevertheless, to be no going back to the indifference shown by the better-off city dweller towards his poorer counterpart which was characteristic of the years before the Chadwick Report, and in some instances for some time after. From the mid-nineteenth century onwards there was a slow but steady improvement in the sanitary condition of British cities and towns, in which Glasgow shared. Between 1842, when the Report was issued, and 1872, when Glasgow Corporation appointed the first full-time medical officer of health in place of the former part-time appointment, the city had brought into the urban area a plentiful supply of pure, constant water, had established fever hospitals and begun to control overcrowding in domestic housing. These and other major reforms had first to be championed within the Council itself, cautiously introduced and then suffer criticism sometimes to the point where their very existence seemed threatened,¹ before finally being accepted and extended over a period of time. It is this process of reform, together with the implementation of the public health measures pioneered during the thirty years between 1842 and 1872, which forms the subject of this thesis.

1. An example of this can be seen in the threatened closure of the municipal fever hospital, established in 1865 during a typhus epidemic, in 1867 in spite of the fact that the Town Council had bound itself through the 1866 Glasgow Police Act to maintain such an institution.

V O L U M E I

SECTION I.

The local authority and the reform of
the administration of Glasgow.

Chapters 2 - 6, pages 32 - 152.

SECTION II.

The local authority and the improvement
of cleansing and general sanitation.

Chapters 7 - 14, pages 153 - 344.

Public health reform in any city during the nineteenth century rested to a very great extent upon legislation, through both public general and private and local Acts of Parliament, and finally on the city's administration to put these Acts in force efficiently. If Chadwick's Report could highlight the sanitary problem faced by Britain and suggest remedies, it was still necessary for central and local government to show the will to pass legislation and enforce it.

At the commencement of the nineteenth century there was very little which could be regarded as public health legislation in operation in Glasgow. The first Glasgow Police Act,¹ passed in 1800, was concerned chiefly with watching and lighting, the setting up of the Police Department in general and with the raising of a rate to pay for these amenities. The improvement of the public health was confined to clauses dealing with the cleansing of the city's streets and lanes, excluding the courts and closes which were, of course, private property. Nor was there much lead in the direction of public health improvement given by central government at this time, except in the field of quarantine regulations which affected Glasgow to a certain extent by virtue of its overseas trade and port.²

1. 39 & 40 Geo. III c. 88.

2. C.F. Brockington, Public Health in the Nineteenth Century. (Edinburgh, 1965). Chapter 1.

In spite of this unpromising beginning to the century, by its close there was a considerable volume of legislation on the statute book aimed at the improvement of public health, most in the form of local Acts designed specifically to suit the needs of the city of Glasgow, but augmented by important general measures, such as the Public Health (Scotland) Act of 1867,¹ which filled in the gaps in the local health laws to very good effect. The Town Council of Glasgow was responsible for much of this legislation, and for this reason had become a vital agent, often unwillingly, for sanitary reform in the city. This was essential if any headway was to be made in improving the urban environment, for questions of public health were to demonstrate, perhaps more than anything else in municipal enterprise, the need for central planning and the raising of large capital sums for such purposes as sewage systems, an efficient water supply and slum clearance. In the first half of the nineteenth century the provision of such amenities was frequently undertaken by joint stock companies, but urban growth outran the abilities of profit-making concerns to provide the capital for the extension of their services to cover the enlarged urban area. It therefore devolved upon the local authority to fill the breach left by the inadequacies of private enterprise.

However, in order to raise the necessary capital for large-scale public works without the fear of running into financial difficulties on the one hand or falling foul

1. 30 & 31 Vict. c.101

of the ratepayers on the other, there had to be an efficient system of local government as a basis from which to work. By the close of the nineteenth century the Corporation of the City of Glasgow was a powerful body, its financial viability not in doubt and the support of its ratepayers in most instances assured. Such a satisfactory state of affairs had only been achieved over a long period of administrative evolution, and for almost the first fifty years of the same century a very different situation had existed.

The pattern of local government in the Glasgow area throughout the course of the nineteenth century was complex and constantly shifting. Before 1846, the year in which Glasgow absorbed the suburban burghs that had developed around the Royalty, the various administrations formed a microcosm of almost all kinds of local government to be found at the time in Scotland. These included the royal burgh both unreformed and reformed (Glasgow); the unfree burgh of barony (Gorbals); the free burgh of barony with a limited burgess franchise (Calton); the free burgh of barony with a parliamentary franchise (Anderston); the village organised by means of the Feuar Court (Bridgeton); and the village where the heritors formed watch and ward for themselves (Woodside). With the exception of the first two mentioned, all of these were developments of the early years of the nineteenth century and were to exist as independent units only to 1846, when they became part of the enlarged Glasgow.

The first forty-six years of the century were, therefore, ones of hectic and generally constructive local government activity. At its commencement, before the passing of the first Police Act for Glasgow in 1800 added Police Commissioners to the local government scene, there were only two authorities in the immediate area of the city. These were the royal burgh of Glasgow, governed by a close corporation of thirty two or thirty three councillors chosen on a restricted franchise from among members of the Merchants' and Trades' Houses;¹ and the baillies of the Barony of Gorbals, numbering three, who were appointed by the Baron Superior of the burgh, who happened to be the Corporation of Glasgow. As the senior baillie of Gorbals was also a member of the Corporation and selected from among the town councillors without any reference to the community of Gorbals, and the other two, although chosen from the citizens of the barony, were creatures of the Corporation and dependent for their positions upon its good pleasure, the independence of Gorbals was strictly limited in practice. Thus the Town Council of Glasgow at the turn of the century was for all practical purposes the only municipal authority in the area.²

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1. The Council was elected by a small electoral court of past lord provosts and baillies, all members of either the Merchants' or Trades' Houses. The number of councillors varied between thirty two and thirty three according to whether the Lord Dean of Guild, always a member of the Merchants' House and ex officio a member of the Town Council, was elected or not. For further information, see below, pp. 55-56.
 2. For a map of the Glasgow area showing the suburban districts, see Map 1 at the end of Volume II.

This position of dominance does not appear to have been sufficiently important to the councillors to compel them to preserve it actively in the face of suburban development. The councillors themselves created the Police Commissioners through the 1800 Glasgow Police Act,¹ a body at first subservient to the Corporation but to increase in importance and prestige until it was to achieve something of the position of an overmighty subject in its relations with its originator. The Corporation was also instrumental in drawing up the first police bill for the burgh of Gorbals in 1809 and steering it through Parliament. However, both Glasgow and Gorbals were already within the Town Council's jurisdiction and it was therefore only to be expected that some administrative reforms should be made in Glasgow and Gorbals which would not be possible beyond the boundaries of royalty and barony. Although the Council did make efforts to get the boundaries of the Royalty extended on several occasions in the first part of the nineteenth century, it never succeeded in persisting with its case to a successful conclusion. As a result, new authorities grew up to cope with the complexities of administration brought by the flow of immigrants into what had previously been small settlements, over which the Town Council had little or no control.

The most dynamic factor in the Glasgow area in the first half of the nineteenth century was the development of the suburban villages. By 1821 the suburban population

1. 39 & 40 Geo. III, c. 88.

was larger than that of the city,¹ and with greater resources of land available for development, the physical spread of the suburbs was increasing in a way that of the city could not. The most immediate need was police regulation of unruly communities. However, as there was little statutory provision at this period for obtaining a Police Act to regulate a centre of population without its first being either a royal burgh or burgh of barony, charters of erection to a burgh of barony had often to be obtained as a preliminary to a police bill. This could be an expensive process, which inhibited smaller suburban areas from following the example of Calton and Anderston who became burghs of barony in 1817 and 1824 respectively.

The smaller suburban villages had to fall back on other methods to cope with the problems brought by the immigrants. These could be ad hoc bodies such as the Heritors' Committee for Watch and Ward in Woodside, or through making use of existing bodies such as the Feuar Court as in Bridgeton.² The only alternative to such arrangements was inclusion in one of the existing burghs, which extended essential services such as watching and lighting in return for the payment of rates and a certain loss of independence.

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1. The combined rate of increase of city and suburbs between 1801 and 1851 was equal to 346%. However, the rate of increase in the original city was only equal to 217% while that of the suburbs to 543%. The suburban population had overtaken that of the city by 1821. (A.K. Chalmers, The Health of Glasgow, (Glasgow 1930), pp. 1-2).
 2. Bridgeton Feuar Court appears to have been particularly inefficient, a Committee of the House of Commons recommending the policing of Bridgeton, when considering the 1846 Extension Act. (PBM, 16 May 1845, 66).

The benefits of inclusion in a police burgh were often rejected by the smaller communities and sometimes the initiative came from the larger units, who decided to take the disorganised elements on their doorstep under their wing, despite opposition from the local inhabitants. This was the case with Woodside in 1845, which was not at all certain whether it wished to become a part of the burgh of Anderston, which was attempting through a local bill before Parliament to extend its boundaries over the village, or lose its independence to the city of Glasgow, finally deciding that the latter had most to offer.¹ The lands of Blythswood, to the west of Glasgow, were difficult to slot into any particular pattern of administration. Various expedients were considered by the landowner, Campbell of Blythswood, and his principal feuars, including independent erection into a police burgh. They finally opted for a system of limited independence within the Glasgow system, accepting an extension of the burgh for police and judicial purposes but maintaining independence in every other respect.²

The result of this activity in the field of local government was the destruction of the administrative unity that had existed in 1800 and the creation of a series of administrations constructed in response to local conditions which, in spite of the proximity of one burgh or village with another, might vary considerably. Calton, for example, was largely occupied by the lower income

1. PBM, 10 February 1845

2. 11 Geo. IV & 1 Will. IV c. 42.

groups whereas Blythswood was almost totally middle class. The needs of such varied communities were obviously very different. Woodside, being a considerable distance from the main urban area, needed little besides policing and lighting. Glasgow and Calton had considerable cleansing problems, while Anderston, situated at the junction of two rivers, was concerned with water pollution. Most of the existing houses in the old burgh of Gorbals were over-crowded and ruinous.

The development of such varied local government forms in response to specific needs, indicates that efficiency was best served, at least initially, through small units held together by identity of interests. With little attempt from the largest community, the old-established Royalty, to dominate the direction of growth, the drive to achieve burghal status had to come from each community itself. For example, attempts to get Anderston to join in the second Police Act for Glasgow in 1809 and later with Calton in 1819 were unsuccessful, partly owing to the fact that in neither case was the offer made with much effort to gain acceptance, but chiefly because the village itself was not ready to accept administration, particularly from outside the community.¹ Through its own efforts a short while later the village first became a burgh of barony, in 1824, and then obtained a Police Act, in 1826, after which the new burgh exercised vigorous and expansive self-government until it was merged

1. Calton Burgh Minutes, 13 January 1818

with Glasgow in 1846.

If it is not altogether correct, therefore, to regard Glasgow in the first half of the nineteenth century as an expanding industrial centre surrounded by small, satellite towns whose existence were a bar to progress, it has also to be admitted that many of the other, smaller jurisdictions were little more than medieval survivals, exercising rights and duties for no better reason than they were already there before industrialisation and were jealous of any other body which might remove some antiquated privilege from them. Bridgeton Feuar Court, which appeared to do little to improve the condition of the village, conducted a lengthy law suit with Glasgow after 1846 for the payment of compensation for loss of financial rights. However, the suburban towns could, and did prove to be more enlightened than the Royalty. Calton, an extremely poor burgh, was ahead of Glasgow in tackling disease and overcrowding, winning the praise of Charles Baird, a local lawyer who undertook the investigation into the sanitary condition of the Glasgow area for Chadwick's Report. While its neighbours confined public health legislation to little more than cleansing, Calton introduced major controls on common lodging houses, limiting the numbers each might accommodate and instituting a system of inspection, with the principal aim of discovering cases of infectious disease. It was also the first to establish

1. PCM, 13 March, 1848, 523; 525.
2. Charles Baird, 'Report on the Legal Provisions available in Glasgow for the Removal of Nuisances'. Reports on the Sanitary Condition of the Labouring Population of Scotland, No. 5 (1842).

a municipal slaughterhouse in which all livestock intended for human consumption had to be killed.¹ Glasgow itself pioneered the control of smoke nuisance as early as 1814 and passed a local Act to control smoke pollution in 1827.²

There was, nevertheless, a good deal of co-operation and pooling of experience between the various authorities, in which Glasgow played the major part as the largest and richest of the individual units. In a public health crisis, such as the typhus epidemic which was threatening in 1817 and became a reality the following year, the Lord Provost and the Town Council of Glasgow organised relief measures and issued instructions to the other burghs and non-burghal communities for preventing the spread of the disease and for coping with cases of infection.³ The Glasgow Police Acts by and large formed the basis for all local legislation in the area, the suburban Acts frequently copying clauses word for word.⁴ This could operate in reverse as well, for the important clauses in the 1840 Calton Police Act controlling common lodging houses were introduced almost verbatim into the Glasgow Police Act of 1843 and the Anderston and Gorbals Acts of the same year.⁵

1. 3 & 4 Vict. c.28.

2. 33 Geo. III, c. 124; 7 & 8 Geo. IV, c. 43.
In neither case was smoke control the primary object of the Act.

3. Calton Burgh Minutes, 10 October 1817.

4. Ibid, 30 September 1817.

5. These clauses in particular, and control of common lodging houses in general, are discussed more fully in Chapter 20 below.

Nevertheless, suburban local government was becoming an anachronism by the fourth decade of the century. The overwhelming problems brought about by urbanisation could no longer be left to a variety of authorities to tackle. The result was the 1846 extension of the city, through which the suburban burghs became mere districts of Glasgow.

The existence of so many local authorities had thus done more than merely bring the Town Council of Glasgow, over a period of years, to the point at which it felt compelled to take over the administration of the area. The burgh councils, police boards, statute labour trusts and Courts of Birleymen that had flourished since 1800 had provided a school of local government whose members were then able to continue their efforts on a wider stage. Several notable town councillors, among them Baillie Bankier, a former provost of Calton, first came to local government through the suburban authorities. This applied to employees as well. Captain Smart, the police superintendent of Calton and the man largely responsible for the energetic implementation of the public health bye-laws in the burgh, was later to become Chief Constable of Glasgow.

The absorption of the suburbs in 1846 only restored the administrative unity to the area for a comparatively short period. The general Police Acts for Scotland of 1850¹ and 1862², which enabled centres of population with first twelve hundred (1850) and then seven hundred (1862)

1. 13 & 14 Vict. c. 33.

2. 25 & 26 Vict. c. 101.

inhabitants to become police burghs, resulted in the formation of a number of small police burghs beyond the boundaries of the enlarged city. The first of these was Partick in 1852, but it was soon to be followed by Govan in 1864 and by a succession of others, including Maryhill, Hillhead and Kinning Park, up to 1891 when a further extension of the city brought most of these once more into the municipal area. The notable exceptions to this extension were Govan and Partick, which remained independent until 1912. There was little the city could do to prevent this proliferation of local authorities, particularly as when created they were separated from the main urban area in some cases by open countryside. Once villages like Govan and Pollockshaws had merged into the city, a case could be made for their absorption. Nevertheless, a lot of energy had to be expended by the city authorities towards the end of the nineteenth century, without complete success, in order to reimpose the unity achieved in 1846 and lost again soon after.

These burghs were, of course, external to the city and therefore the problem was one of liaison with an outside authority sharing the same geographic district. A far more important factor in breaking up the administrative unity of Glasgow was the introduction of a new authority, operating within the city itself. The Poor Law Amendment (Scotland) Act of 1845¹ introduced an entirely new element into the local government scene, that of the locally

1. 8 & 9 Vict. c. 83.

elected body under the control of a central authority, the Board of Supervision, which had its headquarters in Edinburgh and from there supervised the operations of the parochial boards set up in the various parishes throughout Scotland.

Although division of authority and function between various organs of local government was nothing new to Glasgow, there was an important difference in practice between the old system of four separate burghs and the new system of municipal corporation and parochial boards. Formerly the areas of authority were geographic. Now they depended on socio-economic factors, on the separation of people into groups within society, rather than on mere physical boundaries. The line of demarcation was to be pauperism. Those citizens who fell below the line of pauperism were the responsibility of the parochial boards, while those who remained above it, however poor, were not.

Many of the activities in public health given to the parochial boards were designed with the rural parish in mind, where the local Parochial Board formed the chief if not the only administrative body. They often did not transfer so easily to such densely populated parishes as those in Glasgow, where the municipal authorities in any case performed certain public health functions already. For example, it was traditionally the role of the city authorities to clean up the streets and the parishes to attend to the sick. With the development of the idea that dirt can itself generate disease, the distinction between cleansing and medical aid became blurred and the

demarcation of roles less valid. The parish authorities were not slow to complain when they considered the cleansing of the city was being carried out so inefficiently that disease was likely to break out, with consequent destitution and a burden on the poor rates.¹ The Council officials for their part were constantly pressing the parishes to improve their medical facilities.

The situation was made even more confusing by the fact that the municipality contained four separate parishes. Two of these, the City and Barony parishes, lay entirely on the northern bank of the river Clyde. Of the other two, the tiny parish of Gorbals lay to the south of the river, while Govan straddled the river on both banks, including within the parochial boundaries the village of Govan and a large part of the municipal area of Gorbals in its southern portion and the whole of the burgh of Partick in its northern. The City parish was entirely urban, as was Gorbals, but both Govan and Barony parishes had large landward areas and so were given the constitution of country parishes. The major part of the population of the Barony lay within Glasgow itself, so that the impact of its landward area on parochial administration was not large. This was not the case with Govan. The parish had its headquarters in a small fishing and weaving village downstream from the city, and from there controlled the heavily populated industrial areas of Tradeston,

1. City PBM, 19 September 1851, 247.

Laurieston and Hutchesontown in the former barony of Gorbals.¹

The result of the passing of the Poor Law Amendment Act so far as Glasgow was concerned therefore was to increase administrative confusion. The municipal authorities had to deal with four separate parochial boards of such vastly different sizes as Gorbals (28,489 acres) and Govan (6,940 acres), with a disparity of population that matched the geographic. While the whole question of responsibility was bound up with pauperism and the use of ratepayers' money, acts of unwitting injustice and even cruelty could occur. The police authorities might delay sending cases of sickness brought into the police station to the Royal Infirmary for treatment until they were certain that the poorhouse was not their correct destination. The parishes themselves delayed giving aid while they tried to establish rights of settlement, and none of the parsimonious Parochial Boards were ^{as} anxious to undertake any action that involved money when ultimately the responsibility might be found to lie with another authority altogether.² This was very clear at times of exceptional sickness or unemployment, when the authorities went to great lengths to rid themselves of pauper vagrants, particularly the Irish, and rigidly enforced rulings which forbade the assistance of families of able-bodied paupers.³

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1. For a map of the Glasgow parishes, see Map 2 at the end of volume 11.
 2. Gorbals PBM, 9 June 1854.
 3. City PBM, 29 December 1846, 40. 5 March 1847, 77.

This was considered the province of charity, and although the Parochial Boards assisted in the formation and running of Relief Committees whenever these were formed, they did not extend their help to the provision of money from the parochial funds until a change in the interpretation of the law on the able-bodied pauper compelled them very reluctantly to do so.¹

Nevertheless, in spite of the fact that their sphere of activity was limited to the pauper, the Parochial Boards were to become increasingly important in local government between 1845 and the end of the century, particularly with regard to public health. As a result, a situation developed in which there were two authorities in the same city, both responsible for different areas of public health administration and attempting to pursue their allotted function in co-operation with each other but without poaching on each others' preserves. Such a situation could not continue once public health had become an issue of major importance in local politics, and ultimately the municipal authorities were to find themselves assuming sole responsibility for the discovery, treatment and prevention of communicable diseases in the city, whether paupers were involved or not.

It is important to remember, however, that much of the co-operation between the two local authorities, municipal corporation and parochial boards, was due to the close identity of interests between their members.

1. Barony PBM, 26 January 1865.

Those citizens who actually made up the membership of the Parochial Boards had far more in common with members of the Police Board of the Town Council than with those on the Board of Supervision in Edinburgh.¹ Often a citizen sat on both Town Council and Parochial Board. Sir Andrew Orr, who was Lord Provost of Glasgow in 1858, was at the same time a member of Gorbals Parochial Board. Obviously citizens who were in constant contact with each other in their working, civic and social lives were going to find it easier to iron out the day-to-day problems of municipal administration in a local context than when dealing with the centralised Board of Supervision in Edinburgh whose permanent staff might be quite unknown to them.

The whole field of local government administration in the Glasgow area during the nineteenth century was therefore dynamic and experimental. Many of the forms adopted were in response to new conditions within the city brought about by urbanisation, and though some were found inadequate, others were improved upon and brought to a point of efficiency which enabled major reforms in all areas of municipal life to go through. The century, seen as a whole, falls into two parts, the dividing line coming in 1845 and 1846 with the creation of the Parochial Boards and the extension of the city. Before 1846, local government was split up between a number of different bodies, so that the trend in administrative development was first towards diversity and then towards unification of function.

1. The Lord Provost of Glasgow was, ex officio, a member of the Board of Supervision.

After 1846 a single body, the Town Council of Glasgow, controlled municipal affairs within the parliamentary boundary of the city, although divided to some extent through the medium of Boards, Trusts and Commissions, set up to control various facets of administration with the councillors forming their membership. Before 1845 the parishes of Glasgow were controlled locally, in the case of the ten city parishes by the Town Council and General Session, and were not subject to the direction of a central lay administrative body. After 1845 the Parochial Boards had an important administrative function and were supervised from beyond the city by the Board of Supervision in Edinburgh.

In the remainder of this Section, the growth of urban and suburban administration between 1800 and 1846 will be examined and the various local government bodies with their functions outlined. The fight for the extension of the city forms the subject of Chapter Four, while the following chapters deal with municipal administration in the post-1846 period and with the establishment of the four parochial boards as organs of local government.

In order to clarify a complex subject, the first three chapters of this section have had to look back to the years before 1842 and even into the previous century. This has been found necessary as no concise account of local government administration in the Glasgow area exists for the period up to 1846, outlining all the functions performed by the various bodies so frequently referred to in the sources

on the subject of public health. It is hoped however that this section will help throw some light on a complicated but important part of the development of public health administration - the achievement of effective local government.

A retrospective survey of local government in the Glasgow area in the first half of the nineteenth century would bring to light a bewildering variety of official bodies - Statute Labour Trusts, Courts of Birleymen, Police Boards, Feuar Courts to name a few - all of which had some specific function to perform. In spite of this apparent diversity, the structure of administration in the Royalty of Glasgow and the three suburban burghs, the authorities with which this chapter is concerned, shows a basic similarity.

Ultimately local government consisted of a division of authority in each burgh into four main units. The most important of these consisted of the town or burgh council, including a provost, magistrates and named number of councillors. The second unit, and often the larger numerically and in function, was the Police Board, upon which sat a named number of Police Commissioners. The third was a Dean of Guild Court or Court of Birleymen, which from the seventeenth century in the case of Glasgow had decided upon the 'linings' or position of new buildings; and the fourth was the Statute Labour Trust for the parish or district.

Within this framework, there was considerable diversity. Up to 1833, for example, Glasgow Town Council was a closed corporation, although after the reform of Scottish burghs it was elected on a more liberal franchise. Both Calton and Anderston on the other hand had from the outset



relatively liberal franchises for the election of councillors and police commissioners and Anderston had the added distinction of being the only burgh council whose members were ex officio police commissioners without further election. Gorbals was never to break free from its subservient position to Glasgow Corporation.

The exception to this diversity was the Statute Labour Trust for each burgh. These had been set up under two acts of Parliament known as the Statute Labour Acts for Lanarkshire in 1772 and 1807.¹ These acts provided that statute labour work, including making and repairing the roads and forming common sewers, should be controlled by Trustees for every burgh or parish, who were empowered to raise money by means of a conversion rate known as the Statute Labour Conversion money. This prevented the haphazard formation of separate paving and sewerage authorities and in general vested control of statute labour in the local authority. Where a parish was in control upon a district achieving burghal status, the new burgh generally obtained the right, on payment of annual compensation, to raise and control the conversion money and perform the statute labour in place of the parochial authority. This happened in the case of Calton, who took over the powers of the Barony parish statute labour authorities within the burgh boundaries soon after the passing of its Police Act in 1819.²

1. 12 Geo. III c.82; 47 Geo. III c.45.

2. Calton Burgh Minutes, 15 February 1819.

The odd man out so far as statute labour was concerned was Gorbals. The burgh council had considerable difficulty in obtaining from the Govan parochial authorities the right to levy the rate and perform statute labour, and the issue was only decided after a lengthy battle, settled ultimately through an Act of Parliament. By and large, however, the Statute Labour Acts had the effect of imposing uniformity on the Trusts set up to administer them, in contrast to the lack of uniformity shown by the other local government bodies. The development of these bodies and their function within each burgh is outlined below, commencing with Glasgow as the largest and first established burgh and continuing with Gorbals, Calton and Anderston, the latter having the shortest life of all, existing for a mere twenty-two years from 1824 until final extinction in 1846.

* * * * *

The administration of the Royal Burgh of Glasgow, both before and after the reform of municipal government in 1833, was vested in four bodies. These were the Town Council; the Police Commissioners; the Dean of Guild Court; and the Statute Labour Trust. Of the last two little need be said. From the passing of the first of the two Statute Labour Acts for Lanarkshire in 1772 the duties had been performed by the Town Council as Trustees. In 1821 a separate Trust was formed from among the Town Council, the Merchants' and Trades' Houses, but this was disbanded and

the duties given to the Police Commissioners in 1837, who performed them from that period until the disbandment of the Police Board in 1846. The Dean of Guild Court had been in existence since 1605, when the Letter of Guildry of that year gave the Court, among its other duties, that of 'decerning all questions of neighbourhood and lyming within this burgh; and no neighbour's work shall be stayed but by him...The dean of guild and his council to oversee the common work of the town, above the master of work...'¹

The main function of the Court was to decide the correct position of new buildings upon the ground, to make sure that no encroachments took place, either on the line of the street or on neighbouring property, and to arbitrate in disputes involving property. More important in the cause of public health improvement, the Court could order the demolition of unsafe and ruinous buildings. It was the duty of the Police Commissioners to seek these out and bring a prosecution, the Dean of Guild Court being a court for judicial purposes only. The Lord Dean of Guild, who headed the Court, was always a member of the Merchants' House, and he was assisted by eight other members, four of whom were also from the Merchants' and four from the Trades' House.¹

The Town Council itself at the beginning of the nineteenth century was the source of all authority within the

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1. Senex, Glasgow, Past and Present (Glasgow, 1884), Vol. 1, p. 4.
 2. Ibid, p. 10-11.

city. It was a closed corporation, consisting of the Lord Provost, five baillies, the Dean of Guild who headed the Merchants' House; the Deacon Convenor who headed the Trades' House; and thirty two or thirty three councillors.

All the Councillors were members of either the Trades' or Merchants' House of Glasgow. These two bodies have a recorded history going back to 1605, the year in which a Letter of Guildry first established them as legal Corporations of the city, sharing between them all municipal and political authority.¹ All members of the merchant rank who were burgesses and who could pay an entry-money of ten guineas were entitled to become matriculated members of the Merchants' House. The Trades' House was composed of representatives of the fourteen Trade Incorporations, all of which had been established before the Letter of Guildry was drawn up.² From their large Halls situated first in the old town and later in the new business centre of the city, the Merchants' and Trades' Houses exercised a monopoly of power. They provided directly the membership of the Town Council and Dean of Guild Court, and the Town Council then provided the Statute Labour Trust and elected from its membership the senior baillie of Gorbals. The Council also appointed a representative to elect a member of Parliament. The municipal reforms of 1833 destroyed much of the political power of the two Houses and the

1. Senex, Glasgow, Past and Present, p.2.

2. Ibid, p. 17.

Extension Act of 1846 swept away the last trading privileges jealously preserved by the Trades' House to that point. Nevertheless they survived with much of their prestige intact and continued to provide the membership of the Dean of Guild Court, while the heads of both houses, the Dean of Guild for the Merchants' and the Deacon Convenor for the Trades', were ex officiis members of the reformed Town Council.

Before the first Police Act of 1800 established Police Commissioners, the duties of the Town Council covered a wide field and included the rudimentary watching, cleansing and lighting it could afford to maintain. Once these duties had been taken over by the Police Commissioners, the activities of the Council were principally the judicial functions exercised through the Baillie Courts, the control of markets and fairs and the superintending of statute labour. The Council maintained the corporate property of the city and collected the ladle dues and multures from which much of its revenue was derived. It also exercised the sole right to initiate legislation in the Royalty, a right it used to its own advantage whenever the Police Act came up for renewal. The Town Council also operated poor relief within the city. The Town's Hospital acted as a city poor house and lunatic asylum and the distribution of relief to the outdoor poor was delegated to the Kirk Sessions of the ten parishes into which the old City parish had been divided.

The magistrates and council also took a considerable

interest in the establishment of charitable hospitals in the city. They granted charters to such institutions as the Glasgow Lunatic Asylum, founded in 1806, and the Lock Hospital, 1807, and gave subscriptions from their funds to the various lying-in hospitals founded for the poor women of the city.¹

The 1833 reform of municipal corporations in Scotland followed close on the heels of parliamentary reform, which had given Glasgow two seats in Parliament in place of the one previously shared with Dumbarton. The parliamentary boundary drawn for Glasgow covered an area of 5,791 acres,² and included the burghs of Gorbals, Anderston and Calton and the villages of Woodside and Bridgeton, together with a large area of surrounding countryside. In drawing up these boundaries, the Parliamentary Burgh Commissioners of Enquiry prepared the ground for the extension of the city in 1846. They did in fact put out feelers to all the burghal authorities while sitting in Glasgow, to find out their attitude towards a possible uniting of the city and suburbs in one local government unit. The time was not yet ripe, however, and the smaller burghs would not consider the prospect of losing their new-won independence.³

The municipal reforms of 1833⁴ effectively abolished

1. GBM, Vol. 9, 29 August 1805, 469 for contributions by the Town Council to the new Lying-In Hospital. For the Seal of Cause to the Lunatic Asylum, see GBM, Vol. 10, Appendix, p. 730.
2. GBM, Vol. 10, x.
3. Calton Burgh Minutes, 1 November 1833.
4. 3 & 4 William IV, c. 76 and 77.

the old closed corporation. The abolition of the electoral system and the establishment of the £10 household franchise altered the Corporation beyond recognition. The inclusion of the Dean of Guild and Deacon Convenor as members ex officiiis of the new Town Council was the only concession wrung by the retiring Corporation from the legislators and formed the only link between old and new. The Royal Commission divided the Royalty into five wards, in each of which six councillors were to be elected. These thirty councillors, together with the Dean of Guild and Deacon Convenor, were to form the new Council.

Besides providing Glasgow with a new broom to sweep clean municipal affairs, the Municipal Reform Act had unwittingly undermined the position of the other great local government institution within the city, the Police Commissioners, a body set up originally to satisfy public demand for an elected police establishment in the days of a non-elective Corporation. It was almost inevitable, as the new Town Council settled down to the business of administering the city, that a competitive situation would develop between them, once the councillors became aware of the concentration of responsibilities and functions in the hands of the Commissioners.

The Town Council had itself been responsible for the setting up of the Police Commission in 1800. Towards the end of the eighteenth century, the Town Council had begun to feel severely hampered in its attempts to maintain good order and cleanliness in the city by lack of sufficient

money. The ideal situation from the Council's point of view would have been an extension to it of the power of rating for police purposes, without at the same time creating a separate police authority. However, the Corporation was not prepared to bear the full cost of obtaining the necessary Act of Parliament, and in 1783 requested the Merchants' and Trades' Houses to approve the petitioning of Parliament for the levying of a rate not exceeding $2\frac{1}{2}\%$ on the rent of all shops, houses and warehouses paying £2 and upwards.¹ The Council met with considerable opposition from the Trades' House, which at the time, in spite of its position in regard to municipal and political power in Glasgow, was antagonistic to the operation of local government in the city and to the abuses of government through royal burghs in Scotland in general.² As a result, since the influence of the Trades' House in the city was such that without its co-operation any form of parliamentary action was unlikely to succeed, the Council was forced to abandon the project. The Trades' House was again responsible for a similar project coming to nothing in 1790.

1. GBM, Vol.8, viii.

2. The Trades' House produced a paper entitled 'Heads of a Plan for Reforming the present Abuses in the Government of the Royal Burghs of Scotland' in February 1789, a copy of which was despatched to the Town Council, who regarded the Trades' House as making an unwarrantable and unprecedented attack 'upon their just rights and privileges'. (GBM, Vol.8, 158).

By 1800 the Town Council had become forced to accept the unpalatable fact that a police bill with an elective element was essential if they were to cope at all with the problems brought to the city by rapid urbanisation. By the terms of the first Glasgow Police Act of 1800 there were to be twenty four elected Ward Commissioners, while the number of councillors included on the Police Board ex officiiis were to be only six. Thus, on paper at least, the elective element appears substantial, and the bill passed through Parliament without difficulty.

The early Police Commissioners had a fairly limited range of activities. They were saddled with the onerous duties of sweeping and cleaning the streets, attempting to light the city and deal with the rising crime brought about by the increased population. A year after the Police Act was passed, it was found necessary to raise the number of baillies to man the magisterial bench from three to five, in order to keep pace with the volume of business coming before the baillie courts.¹ The Commissioners also exercised a general oversight of city life, preventing obstructions in the roads and pavements from becoming established, ensuring ruinous houses and holes in the road were not a danger to passers-by, quelling riots, enforcing domestic cleanliness where they could and in general exercising the powers of a constable according to the laws of Scotland. To the Town Council, probably the most important aspect of the Police Commission was the statutory

1. GBM, Vol. 9, xiv.

right to raise a rate and thus relieve the Corporation of the expense of providing a rudimentary lighting, watching and fire-fighting system. In recognition of this, £800 was paid to the Commissioners from the Common Good of the city, in lieu of ladle money formerly spent on policing.¹

The setting up of the Police Commissioners did not substantially alter the dominant position of the Town Council in local government affairs for at least twenty years. The introduction in the first renewal of the Police Act in 1807² of high property qualifications for Police Commissioners, ensured that in all but the poorest wards the commissioners elected would be from the same strata of society as the burgesses who made up the Trades' and Merchants' Houses and formed the Town Council. The six councillors chosen to form the Council's part of the Police Board were the Lord Provost, the Dean of Guild, the Deacon Convenor and three of the five baillies, in effect the most formidable portion of the Council's armoury. All these councillors were highly experienced in the art of local government and could be expected to provide the lead in the direction of police matters, particularly as many of the elected commissioners had no experience in municipal affairs.

This delegation of authority within strictly circumscribed limits eased the workings of local government to

1. GBM, Vol. 9, xi.

2. 47 Geo. III, c.29.

some extent, but it was inevitable that the leadership of the Town Council in police matters would be challenged, once the Commissioners became themselves more confident. Ironically, the Council's monopoly of power within the Police Board was considerable weakened by the very strength of those members of the Council who sat on the Board, probably placed there initially to keep the Commissioners subservient to the wishes of the Council. As the century wore on and the population increased within the Royalty, so did the number of civil and criminal cases brought before the magistrates, and the overworked baillies and members of the Dean of Guild Court were more than fully occupied by their duties as justices and councillors to spare time for police matters. At the same time the police establishment was increasing in size to keep pace with rising crime, so that by the early 1820s the ties which held Police Commissioners and Town Council together had become strained and when the Police Act came up for renewal in 1821, there were hints of antagonism between the erstwhile partners. The Town Council held the sole right of initiating legislation in Parliament, but needed the co-operation of the Police Commissioners for the framing of a bill. Agreement on the material points of the bill was not reached until after 'the adoption of conciliatory measures' by the Town Council towards the Commissioners.¹

This particular bill, passed as the third Glasgow Police Act in 1821,² introduced a new officer, the Resident

1. GBM, Vol.10, 1 February 1821, 601.

2. 1 & 2 Geo. IV, c.48.

Commissioner. Two of these were to be elected for each ward, in addition to the existing Commissioners, but they were not to be entitled to sit on the Police Board. They were to have the powers of a special constable in their ward and their particular function was to use their local knowledge to bring to the attention of the police staff the dunghill concealed behind the back court, the smoking chimney or the manufacturer causing a nuisance by his activities to a depressed population unable to stand up for itself. The Resident Commissioners were in fact not very effective, and there was discussion in 1846, just before the Police Commissioners were to be legislated out of existence, as to whether they should be permitted as observers to attend the quarterly meetings of the Board, so as to bring them into more active contact with headquarters.¹ Nevertheless, they did enlarge the area in which citizens could take part in local government, even if only by forty eight commissionerships of doubtful use.

The 1830s were to see further increases in the power of the Police Commissioners. An Act of 1830 extended police powers over the lands of Blythswood, without at the same time extending the municipal boundary over the same area. An Act of 1837² delegated the statute labour trust to the Commissioners, who now controlled not only the formation and laying of streets but their upkeep and

1. PBM, 18 January 1846, 253-255.

2. 7 Will.IV & 1 Vict. c.48.

cleansing as well, an obvious simplification of procedure. This particular Act brought in a minor advance in the public health legislation for the city. Hitherto clauses dealing with health were largely confined to the removal of dung from public thoroughfares and cleaning of closes, streets and foot pavements. Clause 16 of the 1837 Police Act enacted that, on the production of a certificate signed by any regular medical practitioner and one of the Ward Commissioners to the effect that dung or fulzie had been allowed to accumulate in any part of the city so as to become a nuisance, the inspector of cleansing should notify the proprietor to remove it within forty eight hours. If he should fail to do so, the inspector could then sieze it and dispose of it. The centre courts of the tenements, where a large part of the city manure could be found, were excluded from the list of places within the city to which this clause applied, but although this made the clause virtually a dead letter so far as practical application was concerned, it was a notable advance in attempting to lay down the procedure by which officials might go about the removal of a nuisance. The former practice had been merely to forbid the throwing down of dung or rubbish in public places, leaving the method by which prosecutions should be proceeded with a matter for the police officials and the Procurator Fiscal.

Another point which should be made before leaving the subject of this clause is the naming in it of an inspector of cleansing. In writing on the subject of public health

in Glasgow at the end of the nineteenth century, J.B. Russell stated that the 1843 Glasgow Police Act was the first to appoint such an official, and this error has been copied subsequently by those using his works as a source document.¹ In fact an inspector of cleansing, usually known by the title of superintendent of scavenging, was employed as early as February 1832, when the holder of the office was dismissed for irregular behaviour.² The superintendent of scavenging supervised the operations of the Scavenging Department of the Police Commissioners, described in the chapters on cleansing which follow this section. The 1843 Act therefore, so far from being the first to appoint an inspector of cleansing, was not even the first to name this official.

The 1843 Act was however, as Russell suggests,³ the first major piece of public health legislation so far as the Royalty was concerned. It introduced the regulations for the control of lodging houses and the spread of infection in them already pioneered by Calton burgh in 1840 and tidied up the bye-laws concerning cleansing of the streets and closes of the city. The Act had, however, almost failed to reach the Statute Book, owing to a disagreement on its terms between the Town Council, the initiators of legislation, and the Police Board, which continued almost to a

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1. J.B. Russell, Public Health Administration in Glasgow, (Glasgow, 1905), p.15.
 2. PBM, 2 February, 1832, 135.
 3. J.B. Russell, Public Health Administration, p. 15.

point where police powers under former Acts would lapse, leaving the city totally unpoliced. Agreement was reached in time, fortunately, but the Town Council must have been made uncomfortably aware of how important to the administration of the city the Police Commissioners had become. In fact, the line of thought which the Commissioners were pursuing before the 1843 bill was extremely enlightened so far as public health was concerned, for they appear to have put forward a scheme for the setting up of a Board of Health for the whole urban and suburban area with the provision of hospitals, dispensaries and medical officers.¹ In order to implement this programme they needed to raise a rate from city and suburbs alike, which aroused the opposition of the smaller burghs, which in any case considered medical aid on such a scale to be the province of charity.² Thus a scheme which would have given Glasgow a public health service well in advance of its day was lost, and twenty years were to elapse before the Commissioners' ideas were to be put slowly into practice.

The 1843 Glasgow Police Act³ was to be the last put into operation by the Police Commissioners. By this time they had developed into a formidable organ of local government, but their connections with the Town Council were becoming increasingly tenuous. There was considerable danger that a body, originally formed as an arm of the

1. Calton Burgh Minutes, 18 February 1842.

2. Ibid.

3. 6 & 7 Vict. c. 99.

Town Council to relieve it of certain expensive responsibilities, would become a serious rival and divide the administration of the city functionally, which might then give rise to conflicts over rights and duties. Although the opportunity for the Town Council to take over the Police Commissioners' duties, along with those of the suburban burghs, came from outside the Royalty, it was seized upon with alacrity, and it must have been with considerable relief that the Town Council eventually absorbed the Police Commissioners, so ensuring that in municipal affairs at least the city should speak with one voice.

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As a burgh of Barony, Gorbals had a long history prior to the nineteenth century. The lands of Gorbals had been bought in the mid seventeenth century as an investment by the Town Council of Glasgow, Hutchison's Hospital and the Trades' House and divided equally between them, the Council retaining the rights of Baron Superior over the whole of the barony. Before the feuing out of the land in the late eighteenth century, the barony had consisted of the small village of Briggend and a large landward area, all of which was contained within the parish of Govan. In 1771 a parish of Gorbals was formed from the heartland of the barony, the old village of Briggend, or Gorbals as it was now more frequently called. From 1667 the magistrates and town council of Glasgow regularly appointed baillies of the barony, and from around that date until the beginning

of the nineteenth century, the inhabitants had established a small public fund by a voluntary imposition of a tax known as 'reek money' and another tax on malt, the revenue from which was used for repairing roads, forming wells and common sewers and cleaning and lighting the streets.¹

At the beginning of the nineteenth century the administration of Gorbals followed in outline that of Glasgow itself. The magisterial portion of local government consisted of the Senior Magistrate or Baillie and two Resident Magistrates. The latter were appointed from among citizens of the barony, but the former was a town councillor who might have no other connection with Gorbals than his magisterial position. There was also a Court of Birleymen headed by a preses, or president, which performed similar functions to those of the Dean of Guild Court in Glasgow. Police Commissioners, in 1808, and Statute Labour Trustees, in 1824, followed to complete the quartet of local government bodies common to the four burghs.

The survival of Gorbals as an independent burgh, in spite of the tight control held over its affairs by the Town Council, was remarkable, as it was an obvious target for any extension of the city. Plans for its inclusion in Glasgow had been discussed in 1772² and again in 1807³ when the Glasgow Police Act was due for renewal, but on

1. T.C.F. Brothie, History of Govan, (Govan, 1905), p. 213.

2. GBM. Vol.7, 30 December 1772, 393.

3. GBM, Vol.9, 15 January 1807; 5 February 1807.

this latter occasion the feuars of Gorbals considered there was insufficient time to consult the inhabitants of the barony as to the cost of such a move and the Glasgow Police Commissioners were not anxious for such an increase in their responsibilities, and the matter was allowed to drop. Instead, in imitation of the Glasgow precedent, a Police bill for the barony was drawn up and passed in 1808, the Baron Superior scrutinising the Heads of the Bill from its inception to its successful passage through Parliament.¹ The Act divided the barony, which included old Gorbals and the newly developed districts of Laurison, Tradeston and Hutchisontown, into twelve wards, from each of which a commissioner was to be elected. The senior and resident baillies were to be Police Commissioners ex officiis.

The powers and responsibilities were roughly similar to those of the police authorities in Glasgow, although on a much smaller scale. However, Gorbals differed from the city in one important respect. The old village of Gorbals, the core of the original community, was now surrounded and overshadowed by the four newly developed areas of Laurieston, Hutchisontown, Tradeston and Kingston. Most of the burgh's industries and all the new housing, and consequently a large part of the wealth, were situated in the new districts, while the feuars and heritors of old Gorbals had only their many years of residence in the burgh in their favour. As a result, ill-feeling grew up between

1. 48 Geo. III, c.42.

the old and new communities, which the Town Council of Glasgow was to exploit to its advantage.¹

Nevertheless, the Gorbals police authorities made a brave attempt to break out of the stranglehold over burghal affairs exercised by the city council. When the Gorbals Police Act was due for renewal in 1823, the Commissioners attempted to introduce this themselves without consulting their Baron Superior. The Town Council of Glasgow used its authority to remove the bill from the control of the Gorbals authorities and revised the bill themselves, acting with the chief heritors of the burgh rather than the Police Commission, a further example of the Corporation's policy of 'divide and rule' so far as the local government of Gorbals was concerned.² The bill, as framed by the Gorbals Commissioners, 'was found to have objectionable clauses in it'. These may have been some move to weaken the Council's position and strengthen that of the village, for an important change introduced into the new bill by the Council was a rearrangement of the system of wards 'to prevent the undue influence of the old village over other divisions'.³ Residents of the village were to feel later that the Town Council used its powers of nomination of the two resident baillies in a manner very unfair to themselves, as old Gorbals was frequently passed over in

1. GBM, Vol.10, 10 August 1833.

2. GBM, Vol. 11, xliii.

3. Ibid.

favour of appointees from the other districts.¹ After the passing of the 1823 Act, the co-operation and help of the Town Council was needed before the introduction of such improvements as gas lighting, the erection of a weighing machine for coal and repairs to the Police Office could be undertaken.²

The 1823 Act,³ as a result of the Council's intervention, divided the barony into five districts, four of which were sub-divided into four wards each, the occupiers being represented by one Commissioner per ward. The district which remained undivided and represented by a single commissioner was Kingston, which joined the other new areas of Laurieston, Hutchisontown and Tradeston but was as yet insufficiently developed. The baillies appointed by the Baron Superior were now increased to five, a Senior and five Resident Baillies, who were all Police Commissioners ex officii. The remaining Commissioners were elected by the householders in each ward. Their duties included the levying of an assessment, the money from which was to be used for the lighting and cleaning of the streets, the provision of fire engines and firemen, the digging of wells and other matters connected with the well-being of the burgh. The rights of the Baron Superior to nominate the baillies, clerks, procurator fiscal of the bailiary and justiciary courts and other officials was reaffirmed in the Act.

1. GBM, Vol.10, 10 August 1833.

2. GBM, Vol.11, 19 December 1823, 65.

3. 4 Geo. IV, cap. 71.

In spite of the drawbacks inherent in their position, the Police Commissioners did continue to function as effectively as possible with an eye to freeing themselves eventually from Council control. The important renewal Act of 1843 incorporated the common lodging house regulations from the Calton Act of 1840 and considerably strengthened procedures for the cleansing of streets and removal of dung that was causing a nuisance to inhabitants.¹ The possibility of erecting a burgh slaughter-house was considered by the Police Commissioners, to the extent of advertising for ground,² and every facility was granted to the Gorbals Gravitation Water Company to open up streets and lay pipes, in order that the inhabitants of the burgh might obtain a better water supply.³

The position of state^{ut} labour in Gorbals is an example of how easily jurisdictions inherited from the past could complicate the present. The barony of Gorbals lay within the parish of Govan, except for a portion of old Gorbals, consisting of 28.489 acres, which had succeeded in forming itself into an independent parish quoad sacra. The barony lands upon which most of the development of the burgh was to take place, remained part of Govan, an insignificant fishing village a few miles away, and were assessed by the Govan statute labour authorities for the conversion

1. 6 & 7 Vict. c. 93.

2. Gorbals Police Minute Book, 23 November 1843, 116.

3. Gorbals Police Minute Book, 4 April 1845, 222.
The Police Commissioners were also responsible for providing public wells for those inhabitants who could not afford piped water.

money. As Hutchésontown, Laurieston and Tradeston progressed in population and prosperity, the opportunity afforded to Govan parish to mulct Gorbals of statute labour conversion money and use it in the less prosperous parts of Govan parish was too good to be overlooked. The feuars of the new districts of the Barony reacted by attempting to set up Statute Labour authorities for the burgh alone.

In 1824 an Act was passed through Parliament¹ designed to remedy the situation, but by a curious oversight a clause was inserted stating the Act should have no force or operation 'until said Barony shall be disjoined from said Parish of Govan, quoad civilia et quoad sacra'.²

Unfortunately for the feuars of Gorbals, the disjunction was never effected, and the statute labour trusts set up by the Act found themselves in the intolerable position of trying to raise rates to carry out statute labour duties in opposition to Govan parish, who refused to recognise their authority and carried on rating the inhabitants of Gorbals at a lower rate than the new Trustees.³ Not unnaturally, the inhabitants chose to pay their conversion money to Govan rather than Gorbals, whose only right under the Act was to raise a rate in order to pay off the expenses of obtaining it. For the following ^{seven} ~~twelve~~ years the Act was virtually in abeyance, until in 1831 an amendment Act was passed which repealed the

1. 6 Geo. IV, c. 140.

2. The Act appears to assume that the disjunction of Gorbals from Govan and its erection into a parish quoad civilia was about to take place and clause 37 made the Act contingent on this.

3. Gorbals Statute Labour Minutes, 2 July 1827, 60-61.

offending clause and vested control of conversion money and statute labour duties in the hands of Gorbals Statute Labour Trustees.¹

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The surviving records of the burgh of Calton are contained in a single Minute Book of the provost and magistrates, commencing with the election of the first council in September 1817 and ending with a discussion on proposals for an extension of policing from the Royalty over the police burgh in January 1842. No police records have come down. Nevertheless, the surviving Minute Book is sufficiently detailed to give a clear picture of the working of the burgh and the particular problems it faced, notably those of the rapid expansion of population where that expansion is chiefly among the poorest classes, and the lack of a substantial resident middle-class.²

Calton was very much a working-class burgh, having developed rapidly from the nucleus of a small village within the first twenty years of the nineteenth century. It was so close to the city of Glasgow that it was not necessary for mill-owners and manufacturers with factories in Calton to actually live in the burgh. Apart from a small section fronting the river Clyde, there was no part

1. 1 & 2 William IV, c. 60, clause 1. The same clause empowers the trustees to be indemnified for debts and expenses to the sum of £400.

2. See below, pp. 80-82.

of Calton where good, residential housing might attract the better-off, whereas that part of the Royalty close to the Calton burgh boundary and separated from the worst part of the old town by Glasgow Green had been developed towards the end of the eighteenth and beginning of the nineteenth centuries with some substantial villas and terrace housing. Charlotte Street in particular had fine, Palladian-style housing and the street was fenced off from access by the ordinary passer-by with a wrought-iron railing.¹ Obviously the more congenial social and political climate within the city was a magnet to the prosperous proprietors of Calton. Perhaps to counteract this and ensure that magistrates and councillors should have the interests of Calton foremost in their minds when acting on the burgh's behalf, residential qualifications were put into the Charter of erection into a burgh of barony. These were later to be found a millstone round the neck of the burgh as magistrates able to fulfill the qualifications were difficult to find.²

Prior to the obtaining of the Charter, the feuars of Calton had organised themselves for the raising of a night patrol, in much the same way as Woodside was to do a few decades later.³ The twelve districts into which the

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1. A print in the Mitchell Library, Glasgow, illustrates this.
 2. Calton Burgh Minutes, 23 September 1841.
 3. Ibid, 11 September 1817.

community was then divided were the basis for the wards of the burgh. The original Charter creating Calton a burgh of barony was obtained in 1817, and eighty-one people who could produce receipts showing they had paid a sum of not less than two guineas towards the expense of erecting the villages of Old and New Calton into a burgh of barony, gathered in the chapel of the burgh in September 1817 to elect the first provost, three baillies, the treasurer and eleven councillors who were to form the first Council.¹ A preses and Court of Birleymen was nominated from among them for the lining of buildings and standardisation of weights and measures and the title of Dean of Guild was given to the preses of the Court. Negotiations were begun and successfully concluded the following March for taking over statute labour duties and the raising of the conversion money from the Barony parish statute labour authorities.² It only remained to obtain police powers in order to complete the local government framework for the new burgh.

Before this could be done, the first substantial public health crisis to hit the Glasgow area had to be handled. This was the typhus epidemic of 1817-1818, which is on record as the first epidemic of this disease, although it was probably endemic on a minor scale for several years

1. Calton Burgh Minutes, 2 September 1817.

2. Ibid, 12 March 1818.

previously. The new local authority, in co-operation with the more experienced Town Council of Glasgow, had to frame rudimentary regulations for dealing with control of nuisances and the usual fumigation of houses and bedding where infection had occurred. In October 1817 it was found necessary to raise a public subscription to provide for the expense of this, through the absence of police powers for rating.¹ This was obviously a factor in persuading the burgh Council to obtain a police Act, although not the most important, for the Council had already decided that 'the powers of the magistrates are so much limited in criminal matters that it will be necessary as soon as possible to obtain from Parliament an Act giving power to establish an effective police in the burgh'.² In drawing up their bill, the magistrates obtained copies of the latest Glasgow and Gorbals Acts as models, eventually deciding that the latter was more relevant to their situation. Anderston, Bridgeton and Mile-end were invited to join in the police bill in order to lessen the expense to Calton by sharing it with other communities. Suggestions of this nature were not uncommon, particularly as policing was an expensive affair, and no extension of burghal powers was implied in the offer. However, the invitation was not very practical so far as Anderston was concerned as the two villages were separated from each other by the Royalty,

1. Calton Burgh Minutes, 17 October 1817.

2. Ibid, 30 September 1817.

and only Mile-end was included in the final Act.¹

With the passing of the Calton Police Act in 1819 the local government structure was complete and the village began its brief life as an independent burgh, capable of exercising police powers over its inhabitants.² In public health affairs it was highly successful, seen in the light of other, similar burghs, including some larger than Calton. Before the Police Act had even been passed, the magistrates had appointed two resident medical men as surgeons for the burgh and employed them in reporting on offensive dungpits and other nuisances.³ The lack of Police Commissioner records, in which subsequent public health measures would have been reported, makes it less easy to come to definite conclusions as to the efficiency of these in the intervening years between the first and second Police Acts, but when drawing up the latter the magistrates had learned sufficient on the subject of public health administration to include sensible clauses on controlling the spread of infection through one of its principal routes, the common lodging house.⁴

The clauses, which form a minor landmark in local public health legislation, made the inspection of common lodging houses and the fixing of the maximum number of lodgers each

1. Calton Burgh Minutes, 28 October 1817.

2. 59 Geo. III, c. 3.

3. Calton Burgh Minutes, 10 October 1817.

4. For a discussion of common lodging house legislation, see Chapter 20.

might accomodate compulsory.¹ In the event of fever breaking out, the lodging house keeper had to inform the authorities, who could then order the removal of the victim and the compulsory disinfection of the house and occupants. This last regulation was also worded so that it might apply to tenement dwellings in general and not only common lodging houses, which gave the police an opportunity of entering any of the overcrowded 'lands' where fever was suspected. The 1840 Calton Police Act also ushered in the first municipal slaughter-house, which was certainly in operation, and had been for a period of time, when the burgh became part of Glasgow in 1846.²

Throughout the burgh's brief existence, Calton did not labour under any lack of goodwill on the part of her leading citizens. The inherent weakness in Calton's situation was a lack of balance in the population, which made the poorer, labouring population predominate over the better-off to a far greater extent than the town could reasonably tolerate. There was also an unhealthy dependence on the Barony parish, an enormous parish which contained within its boundaries two complete burghs, Calton and Anderston, together with several smaller villages and settlements. It also included the wealthy lands of Blythwood, the rich householders of which were in effect subsidising the pauper population of the remainder of the

1. 3 & 4 Vict. c.28, Clauses 20-23.

2. PBM, 16 November 1846, 9-10.

parish. Should the inhabitants of Blythswood ever find a way to release themselves from this bondage, the sheer volume of poverty in the two burghs would have been quite intolerable.¹

In 1844 such an event nearly occurred at the instigation of central government. An act of Parliament was proposed which would regulate the appointment of ministers to churches in Scotland which had been erected by voluntary contributions, making them parochial churches. Calton had a chapel which came into this category and which, had the bill become law, would then become a parish church in its own right with all the privileges and duties entailed on that status. The magistrates of Calton in objecting to the bill, pointed out that if Calton was made an independent parish, the legal assessment of poor rates, which stood at $6\frac{1}{2}\%$ under the Barony for all parochial needs, would need to be raised to 25% at least for the care of the poor alone, before providing the minister with a stipend and glebe and the parish with a schoolmaster and school.²

The development of a wealthy, middle-class area would have been one way out of the dilemma in which the burgh found itself in respect of parochial and municipal affairs, but it was beyond the powers of the local authority to bring this about. Most of the ground was built up with low-rental housing by the time of the passing of the second

1. Gorbals parish is an excellent example of what could happen when a parish had only low-rental housing to provide poor rates. See below, pp. 139-141.

2. Calton Burgh Minutes, 11 April 1834.

Police Act in 1840, and the only open space available for building in the east end that was not at the same time 'blighted' by industrial development was beyond the burgh boundaries on the lands of Golfhill.

In fact the burgh was being forced to consider taking over even more working-class property through an extension over the village of Bridgeton. Bridgeton by the mid 1840s was in a position similar to that of Calton at the beginning of the century. It had developed haphazardly until the Feuar Court which exercised some sort of rudimentary control could no longer cope. Parliament itself was pressing for some sort of action to be taken over Bridgeton and Calton felt compelled to extend authority over the village, which would at least have relieved the problem of a limited land area but without much financial advantages. The scheme never reached completion but was overtaken by Glasgow's own extension plans.¹

Another answer to Calton's problems would have been inclusion within Glasgow's boundaries. Local pride apart, this was not a practical proposition while Glasgow was subject to so many ancient trading privileges and taxes which the other burghs did not enjoy. Whereas in Calton the only assessments were for statute labour and police, with a small parochial assessment outwith the control of the burghal authorities,² Glasgow received a revenue from

1. PBM, 15 May 1845, 66.

2. Calton Burgh Minutes, 6 November 1833.

such sources as ladle dues, which in 1832 alone amounted to £1,600. Burgess fees and fines, taxes on ale and beer and other local taxes brought in still further revenue over and above the rating for statute labour and policing the city. To put Calton and Glasgow on equal footing would mean either introducing an insupportable burden of taxation into Calton or abolishing ancient rights enjoyed by the Town Council of Glasgow.¹ Up to 1833 the citizens of Calton who had paid their burgess fee of two guineas could at least exercise the right of voting for their burgh Council, a privilege the Glaswegians by and large did not enjoy. After 1833, with the introduction of a more liberal franchise in the Royalty, it became even more attractive to live in Glasgow and become involved in municipal affairs there rather than in Calton.² As a result, it became very difficult to find councillors who could fulfill the residential qualifications of the Charter and it occasionally happened that, at the annual meeting of burgesses for the election of office-bearers, fewer persons were present than the number requiring to be chosen to fill the offices.³ In spite of the difficulties facing the Council, however, the burgh survived with an active corporate life and resisted inclusion in Glasgow to the bitter end. It is possible that the very drawbacks which the burgh suffered, a small,

1. Calton Burgh Minutes, 6 November 1833.

2. Ibid, 23 September 1841.

3. Ibid.

heavily built-up area and a poor population, forced the Council to tackle imaginatively problems which other, less over-crowded, towns could afford to ignore. The impact of the burgh of Calton on the development of public health legislation was certainly greater than that of either Anderston or Gorbals and can compare favourably with that of Glasgow.

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The existing burgh records of Anderston are Police Commissioner Minutes beginning in 1836, ten years after the passing of the first Police Act for the burgh, and ending with the amalgamation of the burgh with Glasgow in 1846.¹ They are chiefly concerned with routine matters connected with scavenging, removal of nuisances, control of the fire engines and the day-to-day running of the establishment. They are thus less informative than the Calton records.

The burgh was created a free Burgh of Barony by a Charter dated 24 June 1824, by which the £10 householders, or those renting property worth £10 a year annual rental, were free to vote for a magistracy consisting of a provost, three baillies, a treasurer and eleven town councillors.²

The first Police Act for Anderston was passed in 1826³

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1. Anderston Police Commission Minutes. GCA, H-And.1.2-5.
 2. Burgh Charter of Anderston. SRO, Charters Vol. 171,51.
 3. 7 Geo.1V c.119.

and the second and last in 1843.¹ In selecting members of the Police Board, this burgh differed from the others in one important respect. From the start, there were no elected Commissioners other than the already elected burgh Council, Clause 2 of the 1826 Act stating that in order to facilitate the plan of police to be established 'the Provost, Baillies, Treasurer and Councillors of the said burgh for the time being shall always be ex officio commissioners for carrying into effect the whole of this Act'. The Commissioners were empowered to subdivide the burgh into wards, but then should appoint ward Commissioners from among their own number. The 1843 Act, which extended policing over certain areas outside the burgh boundaries, particularly along the banks of the river Kelvin, permitted the election of Commissioners from these areas to be added to the Police Commissioners, but only on the grounds that there were no elected representatives from these areas already among the Commissioners.

There is no evidence for a Court of Birleymen or Dean of Guild for the burgh of Anderston, but this is likely to be due to the lack of surviving material. It is more likely that Anderston followed the example of the other three burghs in this respect, particularly as the Dean of Guild Court carried out specific functions. Statute labour was a duty of the Police Commissioners, who paid the Barony

1. 6 & 7 Vict. c.105.

parish Statute Labour Trustees £20 a year as compensation for loss of revenue in levying and applying statute labour conversion money. It is difficult to imagine what improvements in the roads of the burgh could have been effected by so paltry a sum.¹

So far as public health legislation is concerned, Anderston followed the same pattern as the other burghs, the 1843 Act including the common lodging houses clauses and provision for a municipal slaughter-house. As a burgh, Anderston must have laboured under much the same difficulties as Calton. It had a large working class population and had as its nearest neighbour the wealthy district of Blythswood. However the burgh had advantages not shared by either Calton or Gorbals. The core of the burgh, the villages of Anderston and Finnieston, were of recent origin and probably better built, with fewer old houses of the tenement type. It was certainly to take many years before Anderston was to suffer from the effects of poor sanitation and overcrowding to anything like the same extent as the remainder of the urban area, and even then these were confined to a very small part of the western district around Anderston Cross and along the banks of the Clyde.² Nor was Anderston hemmed in by small, depressed villages

1. 6 & 7 Vict. c. 105, clause 35.

2. The medical officer of health's Reports from 1863 to 1872 show the western district of the city, including Anderston, to be consistently healthier than the other districts. An examination of the records for new house building shows that fewer one and two-roomed houses were built in the western district. (Dean of Guild Court records, 1862-1872, Glasgow City Archives).

such as those surrounding Calton in the east. The housing creeping towards Anderston from the direction of Glasgow was of the expensive, terrace and villa type and thus of a very different nature from the slums and tenements rushed up round Calton. Nevertheless, the burgh suffered the disadvantages of a confined area and the proximity of a large and powerful neighbour. This was perhaps offset to some extent by possessing a ready-made leader in the person of Henry Houldsworth, the mill-owner and most prominent citizen of Anderston, who was provost of Anderston on several occasions and dominated the early days of the burgh.

The councillors of Anderston were prepared to expand their burgh from quite early on in its history. This was in fact essential if the type of problems experienced by Calton were to be avoided. To achieve balance, a burgh needed industrial development, wealth and workers, and to be healthy there had to be local industries, cheap housing nearby for the workforce and a residential area to provide the rate payers in order to keep the burghal system working. Anderston, like Calton, lacked good residential housing, and prepared to expand in order to get the necessary room to manoeuvre. Prior to 1843 the burgh came to an amicable agreement with Glasgow as to its eastern boundary, where some slight adjustments were made between the two authorities.¹ It also took in for police purposes some land adjoining the river Kelvin. Hardly had the council

1. Anderston Police Board Minutes, 29 July 1841.

digested these gains than they began to turn their attention to Woodside. This expanding village on the banks of the Kelvin had originally developed around cotton mills, but the building of the Monkland canal close by had brought saw-mills, shipping and other industries fairly close to Woodside. As a result, the policing needs of the community had become sufficiently complex to justify inclusion in an established burgh. From Anderston's point of view, spreading the net over Woodside would mean taking in a large acreage of good housing land which lay between the burgh and the village, and the result of such an extension, had it been concluded, would have been to turn Anderston into a substantial town, stretching from the river Clyde to the south almost to the village of Maryhill to the north. The announcement by Anderston in 1845 that the Council intended to petition Parliament for a bill extending the burgh's boundaries to include Woodside unleashed attack from an unexpected quarter, the Police Board of Glasgow.¹ This proved in fact to be the first in a chain of events leading up to the extension of Glasgow in 1846 and the extinction of Anderston as an independent burgh.

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By the end of 1843 all four burghs in the Glasgow area had either passed a Police Act within that year or, in the case of Calton, had done so within the last two years, and the number of local bye-laws connected with health

1. Anderston Police Board Minutes, 5 November 1844.

matters was not inconsiderable. In addition to the common lodging house clauses mentioned above, there were extensive powers for compelling proprietors to clean closes and private courts and limiting the length of time manure might be left within them, for preventing the pollution by industrial or domestic waste products of streams and water-courses, for regulating the keeping of swine, slaughtering of cattle, depositing of dung, manure and ashes and controlling of private bone and rag works to prevent offensive smells. Other powers coped with street cleaning, the control of ruinous houses and the fumigation of tenements where disease had broken out. Had they been implemented to the letter in all four burghs, greater Glasgow would have been a cleaner and healthier place. However, much of considerable importance was left out, including the prevention of overcrowding in dwelling houses, regulating new buildings and making adequate provision for the control and treatment of infectious diseases, while procedures for actively seeking out contraventions of the bye-laws and prosecuting offenders were sufficiently ineffective to be easily evaded. As a result, the urban area seemed to be not better but worse off so far as cleanliness, disease-prevention and crime were concerned and much public controversy resulted. This background of ineffectual implementation of such sanitary laws as existed is more important than surface events in creating the climate of opinion necessary for the extension of the city over the whole built-up area in 1846.

From a purely local government point of view, a case can be made out for regarding the Act which extended the city of Glasgow over the suburbs in 1846 as being the single most important act for Glasgow in the nineteenth century.¹ It is difficult to see how the major municipal schemes to be undertaken in the following years could have got off the ground otherwise. From the point of view of public health, the long-term need for an efficient water supply and sewage system and for clearing away the worst houses for re-development meant some sort of civic unity was essential. In the short-term, the Royalty was finding increasing difficulty in keeping physically separate from its suburbs. The build-up of housing between the burghs meant that boundary disputes were arising, particularly so far as Calton was concerned where the city boundary went down the centre of Claythorn Street, one side lying in Calton and the other in Glasgow.² No-where was this felt more than in the criminal policing of the city, for constables in hot pursuit of criminals often had to give up at the city boundary and watch their suspect disappear into the warren of houses in Calton.³ Although attempts were made to permit the operations of one police force within the jurisdiction of its neighbours when in pursuit of

1. 9 & 10 Vict. c. 289.

2. Difficulties arose in particular over the laying of pipes and common sewers. (PBM, 25 October 1839, 291-3).

3. PBM, 5 September 1844, 401.

criminals, these do not seem to have been very effective. From the point of view of public health, outbreaks of typhus or smallpox could spread from one town to another without much likelihood of control, and although during epidemics machinery was devised to cope with the emergency which all the burghs would put into effect through co-operation, once the disease had died down to normal proportions this was dismantled and a return made to divided responsibility. The extension of the city was thus a logical step which would probably have been taken in any case by the mid-nineteenth century, even had the events which provided the excuse for a take-over of the suburbs and the Police Commission by the Town Council never arisen.

The question of extending the burgh boundaries to include the suburbs had been discussed from at least as early as 1772, when an extension to cover Gorbals, Ramshorn and Meadowflats was suggested.¹ The two latter were taken into the city in the first Police Act of 1800, but the subject of Gorbals was put off until this Act was due for renewal in 1807, when it was suggested by the Town Council that Anderston, Finnieston and Gorbals should accept an extension of the police force, but not the municipality, over these districts, provided they contributed towards the cost of the increased police establishments which would be required. The village communities were reluctant on this occasion, as they felt that if the bill was not successful in Parliament, they might be left to bear the burden of

1. GBM, Vol. 7, 30 December 1772, 393.

failure, cost-wise.¹ Nor did the Town Council appear sufficiently interested to pursue the matter further. Policing was costly and from the point of view of expense it was probably to the city's advantage to have suburban authorities to perform this function.

Nevertheless, theoretically the Town Council maintained a favourable attitude with regard to a possible extension of the Royalty. When Campbell of Blythswood and his principal feuars applied to the Barons of the Exchequer in Scotland for permission to erect Blythswood to a free burgh of Barony, the Barons were unwilling to grant a charter until they should be officially informed whether or not the magistrates and Town Council of Glasgow had any objections to the proposal. When the Town Council met to consider the matter, they agreed that it was essential for Blythswood to be properly policed but pointed out that several proprietors whose land was immediately adjacent to the city boundary were anxious to be included in the city. They finally 'resolve and agree to the proposed erection of the lands of Blythswood into a burgh of barony, but upon condition that the consent thus given shall not be held or founded on as any obstacle to any future application for an extension of the royalty of the city of Glasgow over any part of the said lands which may be deemed expedient'.² This answer seems to have deterred the Barons of the Exchequer from granting the Charter, but they not appear

1. GBM, Vol. 9, 30 January 1807, 547-548.

2. GBM, Vol. 10, 5 June 1818, 438.

to have made a similar request for the concurrence of the Town Council before granting charters to Calton and Anders-
ton.

The subject of extension was kept alive in the second quarter of the nineteenth century externally to Glasgow. The Burgh Reform Bill had a proposed clause which would have extended municipal constitutions and jurisdictions over suburban parts of burghs that had no separate magistrates of their own, and this was approved by the Town Council of Glasgow with Blythswood in mind.¹ The clause was however, not included in the Act. Again, the Parliamentary Burgh Commissioners of Enquiry fixing the parliamentary boundaries following on the Reform Act of 1832 sounded out the situation for burgh extension, but were repulsed by the suburban burghs.² Finally in the late 1830s there appears to have been a proposed government measure, to be brought in by the Lord Advocate, for the separation of the criminal police from the civil in Glasgow and extending the former over the whole parliamentary area. This received strenuous opposition, particularly from Calton, where it was rejected as the individual districts to be set up would have little voice in choosing the proposed General Board to be established in an overall supervisory capacity, and Calton would be lumped together with Parkhead and Westmuir, two mining villages, in the District Board proposed for the east end, there being

1. GBM, Vol. 11, xvii.

2. Calton Burgh Minutes, 6 November 1833.

three other district boards to serve the western, southern and central districts of the extended police area.

Glasgow itself on the other hand would be placed with Blythswood, so that the bill appeared to the Calton burgh Council as proceeding on the principle 'that the poor districts should be united with the poor and the rich with the rich'.¹ The proposed bill never got past the initial planning stage, but it left a mistrust of such measures which was to have important consequences a few years later.

The city authorities themselves seem to have taken a back seat in these various moves for burgh extension. There were in fact formidable barriers to be overcome before any extension could become a practical proposition, among them the question of the ancient privileges enjoyed by burgesses of Glasgow. The ramshackle local government structure inherited from the past with its revenues and taxes was a very real hindrance to the easy take-over of poorer districts. As the Calton magistrates pointed out to the Parliamentary Burgh Commissioners,² in order to create one municipal area, either Glasgow's local taxes, fees and fines would have to be imposed on the poorer communities or these ancient privileges would have to be abolished, in either case an injustice. Again, the suburbs enjoyed independent judicial Courts and the inhabitants could obtain redress of their grievances on their doorstep, from magistrates with whom they had a certain identity of

1. Calton Burgh Minutes, 23 September 1841.

2. Calton Burgh Minutes, 6 November 1833.

interests. If the suburban burghs were merged with the city, the citizens might have to walk miles to obtain justice.¹ When finally extension became a reality, the Town Council agreed to the retention of the local police-stations and courts in order to ease the acceptance of the suburbs, while the last remaining trading privileges were abolished probably for the same reason.

Nevertheless there were pressing reasons, quite apart from the purely administrative, why extension should be pursued from the 1830s onwards. The irony of the position in which Glasgow found itself was that, although most of the wealth was locked up in the city, it lacked land; whereas the suburbs, which had considerable problems to face with regard to poverty with a small counterbalancing middle class, had almost unlimited areas of expansion open to them landwise. Calton was well placed to take over Bridgeton and extend even further eastwards towards Westmuir and Parkhead, taking in the intervening countryside. Gorbals, provided the burgh could settle the problem of its unfree status, was in a position to expand considerably in the south, while Anderston could move up the river Kelvin to absorb Woodside and continue towards the open north west where there were no settlements of any size. Glasgow would then be confined in a funnel of land whose only opening was to the north and north west, where Anderston was competing for land. The north of the city was

1. Calton Burgh Minutes, 6 November 1833.

particularly unfavourable for development. Between the Townhead, around Glasgow cathedral, and the village of Springburn two miles away lay the Monkland canal, bisecting the ground and bringing industries which in turn brought low-class housing developments. The establishment of several chemical works, the largest of which was the St. Rollox Chemical Works, on the western side of the road to Springburn and the development of Port Dundas into a small, inland port ensured that these northern districts could have no future except as an industrial area. As the Monkland canal threaded its way towards Woodside, it carried this type of industrial wasteland with it, so that the land to the north of the Cowcaddens and Sauchiehall Road were not suitable for commercial and better-class development. Thus the land beyond Blythswood, in which Anderston was deeply interested, was bound to be a bone of contention between the two burghs.¹ Had Anderston succeeded in forestalling the city and acquiring this area, much of which was already occupied by substantial housing, Glasgow might have been faced with a considerable rival.

It is possible that it was to prevent such an event that the city decided to oppose the extension of Anderston to include Woodside, only two years after the burghs had reached an amicable agreement on boundaries which had been formalised in the 1843 Police Acts.² When this boundary

1. For map in explanation of this paragraph, see Map 1.

2. Anderston Police Board Minutes, 1 and 29 July 1841.

agreement had been negotiated, there had been no mention of a possible extension of the Royalty along the banks of the Kelvin, towards which Anderston was undoubtedly moving, a development of which must have been obvious to the Glasgow authorities. At the time Woodside had been without protection apart from the citizens' Watch and Ward Committee for several years, without Glasgow taking any apparent interest in their plight. However, on Anderston announcing its intention of petitioning Parliament for an act to include Woodside within its boundaries, opposition from the Police Commission of Glasgow was swift, and was framed by the Commission's clerk in such forthright language that it earned a stinging rebuke from Provost Houldsworth of Anderston, who in his reply informed the clerk that 'his language could only be intended to convey his contempt of the Council and Commissioners of Anderson, who are at least as respectable and honourable as the Police Board'.¹

The Anderston authorities decided to disregard the threat and continue with their proposed extension bill. At the same time two bills for the policing of Bridgeton were placed before Parliament, one a Calton measure to extend the burgh over the village, the other a petition from the feuars of Bridgeton themselves, seeking police powers independently of any other local authority.² In the event all these failed to obtain the proving of their preambles at the Committee stage, although the Chairman of

1. Anderston Police Board Minutes, 5 November 1844.

2. PBM, 26 April 1845, 49.

the Committee of the House of Commons considering the bills, Sir George Strickland, expressed the opinion that the case for a general police measure for Glasgow came over strongly, while the needs of Bridgeton in particular could no longer be overlooked.¹ This gave a cue to the Town Council, already hovering in the wings with a petition to counteract Anderston's bill, to enter the arena and press for a bill which would extend the municipal and policing authority of the Royalty over the suburban area.

About this time another, rather mysterious, element was introduced into the extension issue. The Lord Advocate's proposed bill to remove control of criminal policing from the various authorities in the Glasgow area and vest them in a separate body to be set up by central Government had never materialised, but when it was being discussed by the burghs concerned in the proposal in 1841 they were unanimous in condemning it. Now a rumour was passed around the various local authorities in Glasgow that the Lord Advocate intended to raise the issue again in 1845, and the Town Council used the inevitable opposition of the Police Commissioners of Glasgow in particular to persuade them to co-operate with the Corporation in the promotion of a bill to extend the municipality over the whole parliamentary area, and separately to extend the area of the police authorities in a similar way.² The grounds

1. PBM, 15 May 1845, 66.

2. PBM, 9 December 1845, 231-233.

of agreement between the two appear to have been that the police extension would only be effected if a municipal extension was passed concurrently and should the municipal extension not take place, the Police Commissioners would not pursue the extension of their powers either.

However, over the vital question of who controlled police affairs, the two authorities seem to have been at cross purposes. The Police Commissioners stood firm in their resolution that a separately elected body should form the Police Board and 'that the Affairs of Police and Statute Labour should be kept as heretofore entirely separate and distinct from the affairs of the Municipality...'¹ They based their resolution not on any belief in a more efficient service with two separate authorities controlling compartments of municipal life, but in the elective principle 'which had always imparted to the Police Force that moral power which had never experienced defeat, - and had enabled the Force in the most exciting times to preserve that peace and order which otherwise (unguarded by a Force emanating from the Inhabitants themselves) must have been often disturbed'.² This had been the justification for the existence of a Police Board when it was first established, the only elected local government body in the Glasgow area. However, the Commissioners were still waving the same flag twelve years after the reform of municipal corporations had removed most of the force from their arguments by providing the city

1. PBM, 9 December 1845, 232.

2. PBM, 22 January 1846, 263.

with an elected municipal corporation.

The Town Council, on the other hand, were obviously determined that the Police Commissioners as a separate entity must go, but were not alarming them sufficiently to bring about outright hostility. The two Glasgow authorities seem to have then held out inducements to the suburban burghs to join with them in an extension of municipality and policing over the area,¹ although what these were are unfortunately not recorded. Certainly the cement used to bind the project together was fear of the Lord Advocate's proposals. In the autumn of 1845 a Deputation consisting of representatives from all the authorities concerned waited on the Lord Advocate in order to hear from him exactly what were his wishes with regard to the city. They learned to their surprise that '... his Lordship would not introduce a public Bill into Parliament for extending the Municipality and Police of Glasgow...That he had not even contemplated the introduction of a Bill in the ensuing session, for effecting an extension and union of the Criminal Police over the Parliamentary Burgh - which as he has always said, was the only thing he cared about...'²

The Police Commissioners of Glasgow, in view of the agreement already hammered out with the Town Council, now not unnaturally felt that they had nothing more to fear and the extension issue would be allowed to drop, at least for the present session. They were therefore disagreeably

1. Anderston Police Board Minutes, 17 February 1846.

2. PBM, 22 January 1846, 264.

surprised to find that the Town Council had decided to press on with the bill, in spite of the fact that, in the Police Commissioners' view, there was insufficient time to undertake the necessary negotiations with turnpike and statute labour trusts and the other interests involved in such a measure, which would inevitably mean later amendment, all costly and unnecessary if time was taken to prepare the measure. The Police Board was smarting under the fact that 'it had been held out to your Board as an inducement to concur with Committee of (Town) Council that if some measure of Police extension was not agreed to here, some highly objectionable measure would be forced on the Inhabitants by the Lord Advocate...' and they now appeared to have been duped.¹ The smaller burghs joined them in strenuous opposition to the bill. A representative of Anderston to the Joint Committee to Consider the Bill, on recommending opposition to his burgh council, spoke of how when the subject of extension first came up they were led to believe it would bring great benefit to Anderston, but on reading the heads of the bill they found they had been misled, for they could not see any advantage to the citizens by the change 'but in fact they would suffer because police assessments and all local rates would be increased'.²

To the Police Commissioners, the worst feature of the bill was the obvious intention of the Town Council to eliminate the independent police authority and make police and statute labour duties a department of the Corporation.

1. PBM, 22 January 1846, 264.

2. Anderston Police Board Minutes, 17 February 1846.

However, a decision to use their funds to fight the bill brought immediate reaction from the Town Council in the form of an interim interdict to prevent them from doing so.¹ They also circulated the copies of their bill too late to give sufficient time for the Heads to be examined by the local authorities before it went before Committee.²

To these activities the Commissioners, the strongest opponent the Town Council had to fear, could only respond with desperate attempts to nullify the interim interdict and to hold public meetings to raise support for a petition for presentation to Parliament in opposition to the bill.³ None of these activities could have much effect against a Town Council determined to push its measure through Parliament while the climate was favourable towards an extension, and the bill became law the same year - 1846 - the assets and duties of the Police Commissioners being handed over to the enlarged municipal corporation together with those of the suburban burghs. The permanent establishments were retained pending the re-organisation of the new departments, and the first meeting of the new Police and Statute Labour Committee of the Corporation was held on 12 November 1846.

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1. PBM, 19 March 1846; 15 June 1846.
 2. PBM, 12 March 1846. It appears that the Town Council delayed sending the Police Commissioners their copy, presumably to reduce still further the time available to them to muster their forces for combat.
 3. The petition, when presented to the House of Commons, was recorded as containing over twenty-two thousand signatures. (PBM, 30 April 1846).

Although the activities of the Town Council do not appear to have been entirely above suspicion in the complicated series of manoeuvres leading up to the extension of the municipal boundaries, the undue haste with which the councillors pursued their aims was justified in the event, for they had succeeded in bringing about a major administrative reform at a time when local government was undergoing changes over which they had no control. The passing of the Poor Law Amendment (Scotland) Act¹ the year before must have provided them with a very strong incentive to replace the patchwork of burghal authorities with one single local government unit, for this Act introduced four parochial authorities, which the municipality could not hope to dominate owing to the presence of the Board of Supervision in Edinburgh. Had the unification of burghal administration not been effected almost immediately after the passing of the Poor Law Amendment Act, it is difficult to see how local government could have continued efficiently or progressively for very long. For example, the Barony parochial authorities would have had to deal with a municipal authority in Glasgow itself, in Calton, Anderston and possibly an independent Bridgeton, not to mention a variety of police authorities.

The 1846 extension relieved the city of this prospect and gave the new authorities a year to become accustomed to their responsibilities and to each other before the series of epidemics, one of typhus and two of cholera, which hit the city between 1847 and 1854, tested them to

1. 8 & 9 Vict. c. 57.

the limit. After this baptism of fire, public health administration entered a phase of development in which important new laws were passed, both local and national, which provided the framework for practical reforms to be introduced and implemented in the most effective way possible, under conditions prevailing in their day.

Chapter 5. Municipal Administration and
Public Health - 1846 to 1872.

With the passing of the Extension Act, municipal government in Glasgow was to enter into a new era which would last until 1895. The Town Council was now the controlling body behind all aspects of municipal administration, but did not exercise this control directly, as it was to do in the twentieth century through departments of the Corporation, but in many important cases indirectly through Boards, Trusts and Commissions which were distinct from each other in function, finance and permanent staff.

To a certain extent, this arrangement was a legacy from the departing Police Commissioners. The councillors had rid themselves of the Commissioners as a separate body but in most other respects they honoured the agreement reached with them when extension was first discussed, by which police matters so far as rating and organisation was concerned should be separate from the Town Council.¹ As a result, the Police and Statute Labour Committee which was the successor to the old Police Board engaged a separate staff, rated independently of the Town Council and organised its own Committees. The link between the two bodies lay in the membership of the Police Committee,² which consisted of the Lord Provost of Glasgow, eight baillies, the Dean of Guild and Deacon Convenor, sixteen ward members, one from each ward, and two other members chosen from the

1. PBM, 9 December 1845, 232-233.

2. For brevity, the Police and Statute Labour Committee will be referred to as the Police Committee.

Council generally.

This division of authority seems to have worked well enough for the system to be extended, the Police Committee becoming the model for other projects undertaken by the Town Council in the following years. The most important of these were the Water Commissioners and the Improvement Trust. The Water Commissioners were constituted in 1855 by Act of Parliament which provided that the magistrates and council as a whole should be appointed Commissioners, and appoint out of their number an administrative Water Committee with accounts separate from the city accounts and to be called the Water Account.¹ Again, a separate clerk and staff were to be appointed. The Glasgow Improvement Trust, responsible for the clearing of large areas of old property, was again appointed by Act of Parliament in 1866 and by the terms of this Act the trustees were to be the Lord Provost, magistrates and council with no particular directions as to division into committees.²

These three bodies, the Police Committee, the Water Commission and the Improvement Trust, were to become the principal vehicles for public health improvement during the remainder of the century to 1895, when a further Act abolished the system of committees and trusts and made them departments of the Corporation of Glasgow. The Police Committee was responsible for all scavenging, cleansing and nuisance removal, the laying of sewers and drains through

1. 18 & 19 Vict. c. 118, clause 10.

2. 29 & 30 Vict. c. 85.

its statute labour functions and for the control of markets, slaughter-houses, stables and piggeries within the city and the sale of food. Later, through its Sanitary and Fever Hospital Committees, it operated a disease prevention service which included the removal of cases of infectious disease from among centres of population, the disinfection of houses, the provision of a fever hospital and of ancillary services such as an ambulance for infectious cases and a municipal washing house for the treatment of their personal clothing and bedding. The Water Commission provided a pure and continuous supply of water to the city and suburban area. The Improvement Trust was responsible for the clearing of old and insanitary housing from the city centre on a massive scale and later for the rebuilding of workmen's dwellings. There was therefore hardly an area in public health improvement that the activities of these three bodies did not touch, and although the Town Council was more than fully occupied in the same period with running a municipal gas-works, a system of transport, the provision of parks, public libraries and art galleries, the Council's part in the story of public health administration is limited to the initiation of new legislation and the provision of the membership to all three bodies.

There are several clues as to why this system of public health administration should have developed after 1846. In the first instance, it was probably simpler to continue the structure of the old Police Commissioners, including their staff and buildings, with as little change as possible

Another reason may have been to deflect public odium for an unpopular scheme away from the Town Council onto a body of trustees or commissioners, even though these were composed of the self-same people. Before the establishment of the Water Commission the Lord Provost stated 'that it was not intended that it (the water supply) should be mixed up with the Corporation at all...The Committee merely proposed that the Corporation should manage the Trust and that the debentures should be secured upon the rates and have a preferential claim upon the rates'.¹ By such fiscal niceties, the Corporation hoped to persuade the citizens that improvements could be brought in without necessarily costing the ratepayers more than they bargained for.

Another reason why administration through Committees was adopted may have been quite simply that it worked. Had the work of these bodies not been delegated in the way it was but remained with the Town Council so much of the councillors' time would have been consumed by police and statute labour matters that little else would have got done. The system allowed town councillors with particular interests a good deal of scope to pursue them, and give a preponderance of their time spent on municipal affairs to some chosen field. So far as public health reform was concerned, this proved important as so many improvements depended on the drive and dedication of individuals to whom certain aspects of public health appealed. Lord

1. Glasgow Herald, 15 November 1852.

Provost Stewart was largely responsible for obtaining the Water Works Act, steering the project skilfully through the shoals of local criticism and parliamentary procedure.¹ Lord Provost Blackie dedicated years of his public and private life to the improvement of common lodging houses and housing conditions in general, although as a result of his obtaining the Improvement Act by which so many of the worst houses were demolished, he lost his seat on the Council through a revolt of the ratepayers.² The whole Sanitary Department of the 1860s was a monument to the single-minded dedication of the great lay sanitarian, John Ure, who from 1857 onwards worked to improve public health in its least dramatic aspect, that of cleaning up the dirtier parts of the city. He also played a large part in the founding of the first municipal fever hospital in 1865 and in formulating public health law in general through the 1862 and 1866 Glasgow Police Acts. Without these men, public health improvement would have been a slower and more haphazard affair.

So far as the staffs of the various bodies were concerned, their strict separation one from another and from the Town Council gave them a loyalty to their particular Committee which might not have been so strong had they all been employees of departments of the Corporation. With so much new ground to be explored in the field of public health, the dedication of the clerks to their particular aspect of administration was of great importance. Men

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1. His services were later recognised in a commemorative fountain erected in Kelvingrove Park in 1871.
 2. Senex, Glasgow, Past and Present, p. xxx.

like Lang, clerk to the Police Committee and later to the Police Board after 1862, and Burnett, clerk to the Water Commissioners, gave years of service and experience to public health administration and their roles should not be minimised.

If the members of the Committees formed the brains and their employees the muscle for public health reform, the skeleton upon which so much depended was provided by legislation. The development of statute law, both through local Acts and public general Acts, had to precede any practical reforms if these were to put into operation and enforced through the Courts. Experience was to show over and over again that the average citizen, whether proprietor or tenant, ratepayer or pauper, was not going voluntarily to obey the sanitary regulations, either in spirit or letter, unless compelled to do so. Loopholes in the law might be shamelessly exploited¹ regardless of the suffering this brought to innocent individuals.

Most of the legislative innovations introduced after 1846 were a response to local conditions, such as the 'ticketing' clauses of the 1862 Police Act, the first of their kind in Britain and designed to control the occupancy of small houses. Nevertheless, many important advances were the result of government measures, among them the precise definition of a 'nuisance' brought in with the

1. This applied particularly to the supply of water to the poorer districts. Until the passing of the Water Works Amendment Act in 1865, there was no way of compelling proprietors to supply tenements with water and in consequence many failed to do so. (Water Commission Minutes, 5 June 1865).

Nuisance Removal Act of 1856 and the controls on the establishment of offensive industries brought in with the Public Health Act of 1867.

When they first began operations in 1846, the members of the Police Committee were putting into force the laws contained in the 1843 Glasgow Police Act. There was no further local Act until the 1862 Glasgow Police Act was passed, a gap of nineteen years. As ideas in public health and civic administration were changing fairly rapidly over the same period, it might seem an unusually long time for the city to wait before bringing the legislation with regard to policing and sanitation up-to-date. In point of fact, the gap was filled by a considerable amount of legislative activity, not all of it successful, which forms a bridge between 1846 and 1862.

For the first five years, the new Police Committee attempted to make the 1843 Act work more efficiently and the Town Council's next attempt to obtain a police measure was as a result of their discovery through practical experience of severe limitations on their powers to control new low-class building. The whole question of overcrowding and delapidation in the old town, discussed in Section IV, was receiving adverse publicity in the late 1840s, partly as a result of the typhus and cholera epidemics of 1847 and 1848-9 and the influx of Irish immigrants.¹ The matter came

1. The Irish were the butt of continuous criticism, particularly from the parochial boards, who tended to blame them rightly or wrongly for the additional medical expenses entailed in the 1847 typhus epidemic, but also from the native Glaswegians. See Senex, Glasgow, Past and Present for frequent adverse comments on the Irish.

to a head in September 1851, when the City Parochial Board reported to the police authorities the case of a building in the Drygate, only recently erected but reproducing many of the worst features of the tenement it replaced.¹ Neither the Town Council nor the Police Committee, had powers to prevent the building of potentially insanitary housing for the lower income groups, and it was to plug this very considerable gap in public health legislation that the Council began almost immediately to draw up a bill for presentation to Parliament in the 1853 session.

A certain amount of mystery surrounds this bill, whose existence has only recently come to light through research undertaken for this thesis. In addition to giving the municipal authorities considerable powers to control new building and enforce minimum standards of construction and sanitation, other clauses were also included to prevent the establishment of offensive trades without Corporation approval, to close down cellar dwellings and regulate intramural graveyards.² Had it successfully passed through Parliament and become law, it would obviously have been a considerable advance in public health legislation, for the particular clauses mentioned above were unusually far-sighted and were not in fact introduced for several decades, in the case of building regulations not until 1892.³

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1. City PBM, 19 September 1851, 247.
 2. There does not seem to be a copy of this bill printed in the Parliamentary Papers for 1853, but it was printed and circulated in Glasgow and the only known copy is now in the Glasgow City Archives, Miscellaneous Prints Vol. 2, p. 512.
 3. 25 & 26 Vict. c. 204.

Unfortunately the bill was poorly received by the Committee of the House of Lords considering it, for no clauses were incorporated which dealt with the growing problem of the disposal of the city's sewage. As a result the bill was withdrawn for investigations on this subject to be undertaken, and was subsequently never redrafted and presented to Parliament.¹ The Council's involvement over the same period, 1851 to 1853, with the question of the city's water supply may have been responsible for the failure to pursue the police bill. Certainly Bateman, the engineer engaged to investigate the sewage question, was also working concurrently on plans for the preparation of the water bill, successfully passed through Parliament as the Glasgow Water Works Act in 1855.

Failure over the police bill and success over the water supply occupied Corporation time to the middle of the 1850s. However, the necessity of once again petitioning Parliament for increased sanitary powers was temporarily forestalled through the passing by central government of the Nuisance Removal (Scotland) Act in 1856.² This measure, although not apparently a significant advance in public health reform, was to prove a milestone in public health administration in Glasgow.

To understand why this should have been so, it is necessary to go back in time and examine the motives and

1. Town Council Special Minutes, 19 August 1853.

2. 19 & 20 Vict. c. 103.

traditions which lay behind questions of public health. From the early years of the nineteenth century, if not earlier, public health administration had been divided up into two distinct compartments. One, all matters connected with cleansing and nuisance removal, drainage and the provision of sewers, was the responsibility of the police authorities. The other, the care of the sick and the provision of hospital accomodation during times of exceptional disease, was the responsibility of the parishes and of private charity. As subsequent chapters will show, the lines marking out the responsibilities of the Police authorities on the one hand and the Parochial Boards on the other were very rarely crossed, and even during times of epidemic when Boards of Health might be formed consisting of members of all authorities, including the Town Council, the provision of extra hospital accomodation and the care of the sick was still given over to the parishes as their portion of the emergency measures, while fumigation and extra cleansing duties were allotted to the police.

The various Police Acts throughout the first half of the nineteenth century carefully maintained this division of responsibility. There ^{were} never any clauses included which provided for dispensaries or medical aid to those suffering from infectious diseases, and although those suffering from communicable disease in common lodging houses under those clauses in the 1843 Act had to be summarily removed from these establishments, a discreet veil is drawn over their subsequent destination, although this was probably the Fever Hospital of the Royal Infirmary

to whose funds all the various local authorities subscribed.

The early efforts to clean the city were environmental as much as for the improvement of public health, and it was not until the 1837 Glasgow Police Act that it was stated that neglecting to clean the streets might be 'contrary to public health'.¹ However, the new theories on the generation of disease from dirt were gaining currency and this led the much-maligned Police Commissioners in 1841, in another police bill which never went further than the initial planning stage, to suggest a rationalisation of public health procedure. This would have provided for the erection of a Board of Health with control over the whole parliamentary area, with powers to assess for the provision of hospitals and dispensaries and the appointment of medical officers. The whole concept foundered on the rock of prejudice that considered 'such functions do not fall within the limits of police matters but belong more properly to the regulations for the support of the poor and to charity'.² As a result, the old system continued throughout the public health crisis of 1847 when the worst typhus epidemic occurred and two further visits of cholera in 1848-9 and 1853-4, thereby proving its inadequacy.

This was the situation when the Nuisance Removal Act was passed. The Act gave control of nuisances, inspection of lodging houses and of dwellings unfit for human habitation

1. 7 William IV & 1 Vict. cap.48, clause 16.

2. Calton Burgh Minutes, 23 September 1841.

and other powers to a new local authority which should be either the Town Council where there was no Police Board, or Police Commissioners where they were established, or finally Parochial Boards in those parishes where the jurisdiction of town councils or police boards were non-existent or only partly extended. On the passing of the Act, the Police Committee delegated a sub-committee to examine it in detail and report. This it did in February 1857 when, after remarking that many of the powers being given to the new local authorities were already operable in Glasgow through the police Acts, the sub-committee goes on to say:

'It may be remarked that the duties imposed on the Local Authority are of a very heterogenous description; and that a discriminating apportionment of these duties between the Police and Parochial Boards would have been preferable to the arrangement contemplated by the Act - because whilst one set of duties are strictly Police duties, those of another description, such for example as executing the orders issued by the Board of Supervision for the speedy interment of the Dead - for House to House visitation; for the dispensing of medicines, and for affording medical aid and necessary accomodation to persons afflicted or threatened with any formidable epidemic, endemic or contagious disease, and which are consequent on the appearance of any such disease, fall naturally under the control and management of the Parochial Board and have hither-

to been performed exclusively by the Parochial Authorities, who possess a staff of qualified officials and other requisites and appliances for the purpose, and are properly parochial duties. But as the statute rules that only one local Authority shall be possessed of jurisdiction or empowered to Act in one and the same district, any division of labour will in future be incompetent unless it may be under some special arrangement whereby the servants of one Board shall act under authority of the other'.¹

This is a clear statement of the principle that certain duties belong to the Police and others to the Parish. However, the Act forced the municipal authorities to decide either to extend their powers and responsibilities to cover strictly medical matters, previously the province of the Parochial Boards, or to accept a diminution of that power to the parishes. If the former, then it was no longer possible to regard important public health duties connected directly with epidemic disease as 'properly parochial duties' but as primarily the responsibility of the Police Committee or any body it might set up as local authority under the Act. If the latter, the municipal authorities would have to be prepared to see a whole range of duties belonging to the police performed by the parishes, leaving the municipal branch of local government consequently truncated. In fact, this only applied to a situation where

1. PCM, 16 February 1857, 486-488.

a parish was partly within and partly beyond the boundary of a municipality, the Act laying down quite clearly that in the case of a parish completely contained within a burghal boundary, the Town Council or Police Board should be local authority. However, in Glasgow's case both the huge Barony parish and Govan parish were partly within and partly without the city's limits, and were they to become local authority in terms of the Act, the police authorities would be in the position of enforcing the Act for the area covered by the City and Gorbals parishes, while losing many of their nuisance removal powers to the parochial authorities in the large parts of the city lying within Govan and Barony parishes. Obviously the Police Committee had no choice but to make representations to the Board of Supervision in Edinburgh that they should be regarded as sole local authority for the whole parliamentary area. The move was a necessary one, for both Barony and Govan parochial boards made similar representations for their particular parochial districts within the city, which would have constituted these parishes local authority for those parts of the urban area within their parochial boundaries.¹

Following on the passing of the Nuisance Removal Act, a Committee on Nuisances was set up as the effective body operating the new law, and also as the vehicle by which the existing local laws in regard to public health were

1. NRCM, June-July, 1857, 93, 109-112.

operated. The police authorities were to find that the Nuisance Removal Act had considerably widened their scope for dealing with such matters as offensive industries, where prosecution was now before the Sheriff Court rather than the local Baillie Courts.¹ However, the Committee on Nuisances lacked its own departmental staff, and although medical functions were now part of the Committee's duties, inadequate facilities meant that the Royal Infirmary and parochial boards still provided most of the medical care of the sick poor.

The passing of the 1862 Glasgow Police Act was the first practical advance in municipal public health administration from a medical point of view, as the Nuisance Removal Act had been the first theoretical advance. As a result, a Sanitary Department was set up with a medical officer of health at its head and a small staff. Much of the drive behind the obtaining of this Police Act and of its important sanitary clauses came from John Ure, chairman of the Committee on Nuisances and first chairman of the Sanitary Committee. The Act brought in considerable reforms, including clauses to control the occupancy of very small houses, the famous 'ticketing' clauses, and the appointment of a medical officer of health who would inevitably provide the brains behind future public health administration. However, the Act was still timid in its approach to the control of epidemic disease. A district had first to be declared one in which contagious disease

1. PCM, 16 February 1857, 486.

had reached epidemic proportions before measures containing the outbreak could be put into effect, and for this purpose it was necessary to apply first of all to the Magistrates' Committee of the Police Board. This limitation owed its origin to the experimental nature of much of the sanitary law included in the Act, for the very existence of a Sanitary Department and a medical officer of health was a new experience to Glasgow.

The 1866 Glasgow Police Act made the temporary reforms worked out in 1862, permanent, including the setting up of a municipal fever hospital, and finally laid the duty of cleansing the entire city, including the courts, on the local authority rather than proprietors and manufacturers.¹ The passing of the Public Health (Scotland) Act in 1867 widened the scope of public health legislation even further and brought in controls over the setting up of offensive trades and over houses let in lodgings as distinct from common lodging houses.² In 1868 the cleansing duties of the Police Board were given to a separate Cleansing Department headed by an inspector of cleansing and operating to the direction of a Cleansing Committee. In a final rationalisation of public health procedures, in January 1870 the Police Board amalgamated the Sanitary, Cleansing and Fever Hospital Committees into a Committee on Health. This committee, which at last succeeded in unifying under one

1. 30 & 31 Vict. c. 101.

2. The 1862 Police Act had vested all dung and refuse in the Police Board but had not at the same time bound the Board to cleanse private property. The 1866 Act gave the Board power to cleanse private streets and courts, with an assessment on owners of 1d. per £1 rental to defray costs.

authority all the varied public health duties performed by the police authorities, became the superintending body for health matters for the remainder of the century.

Public health administration had therefore seen fundamental changes in the years between 1846 and 1872 ranging from a change-over in function from purely cleansing to a comprehensive range of duties including the provision of hospital accommodation, to a considerable accretion of statute law by which these duties might be made effective. In addition to the legislation already mentioned, Acts of Parliament dealt with registration of births, marriages and death, vaccination, purer foods and a range of other matters on the fringe of public health such as factory and bakehouse regulations. Armed with these powers, public health administration could, with determination, effect a very considerable change in the health of the city. Reforms still remained to be brought in, most notably the control of buildings, the implementation of a major sewage scheme and better infant and child welfare. Nevertheless, by 1872 the battle for municipal public health had largely been won.

The Committee on Health was, although an important body in its own right, still part of the Police Board. The old Police and Statute Labour Committee had been renamed in 1862 without any apparent change in constitution. In 1877 the Police Board was abolished and the Town Council as a whole became Police Commissioners, instead of certain elected members performing that function. The separate

department was maintained however, and remained until the major local government measure of 1895,¹ when all the various trusts and boards disappeared as separate entities and were merged with the Corporation of the City of Glasgow as departments of that body. The final disappearance of the Police Board ended a career begun in 1800 with the passing of the first Police Act, and covering the most formative and dynamic period in the public health administration of the city.

1. 58 & 59 Vict. c. 143.

The 1845 Poor Law Amendment (Scotland) Act introduced a new concept into local government, that of an authority elected locally by the ratepayers but responsible to a centralised supervisory body, the Board of Supervision in Edinburgh. Direct control over the care of paupers was now taken out of the hands of the Town Council and the individual parishes and placed with parochial boards. Other parochial affairs were left in the hands of the General Session as before.

The Act, having regard for Scotland as a whole, established two basic types of parish, the burghal and the country parish. Arrangements for the administration of burghal parishes laid down that a parochial board should be elected from among the qualified ratepayers to a maximum of thirty members. Included ex officiis on the parochial board of every parish contained within a royal burgh such as Glasgow, were members of the Town Council and from the kirk session of the parish church. Presumably because the number of heritors in a burghal parish would have been very large, there was no special provision for them as electors other than those possessed by the ratepayers. For country parishes the situation was totally different. The ratepayers could vote for up to thirty ward members of the parochial board, but all heritors possessing land to the yearly value of £20 upwards were entitled to be members of the board by virtue of their property. This distinction

between burghal and country parishes was reasonable for the larger part of Scotland, but broke down completely when applied to Glasgow, for reasons outlined below when the various parishes within the municipal area are described.

Parishes covered the whole of Scotland and the setting up of parochial boards therefore provided a uniform system of local authorities on at least one level. It provided a useful vehicle for various Acts of Parliament touching on the population as a whole, such as the Vaccination Act of 1864 and the Nuisance Removal Act of 1856. The long established connection between parish relief and the sick poor was given legal status through clauses 66 to 69 of the Poor Law Amendment Act, under which parishes were bound to supply medicines to the sick poor, to give medical attendance to sick inmates of poor houses and were permitted to subscribe to established hospitals. The provision of a rudimentary medical service, the operation of the vaccination laws and the control of nuisances in those areas without other municipal authorities turned the parochial boards into major public health authorities, particularly in those areas where they were the sole authority.

So far as Glasgow was concerned, the parishes to the north of the river Clyde, the City parish, already divided into ten parishes, and the Barony parish, already operated a system of medical aid through district surgeons before the Act was passed. In addition to this the City parish possessed a poorhouse and lunatic asylum in the Town's

Hospital. The southern parishes, Gorbals and Govan, each appear to have employed a parochial doctor. All the parishes made use of the Royal Infirmary and other charity establishments in the town, to which they paid subscriptions entitling them to a certain number of beds. Where the patients sent to hospital exceeded their entitlement, a fee was paid. The two hospitals used most frequently were the Royal Infirmary and the Lock Hospital for venereal diseases. The Royal Infirmary, being the only general medical and surgical establishment and a much-loved city institution, provided the backbone of in-patient care, and however much it raised its fees the parishes, although grumbling, paid up.¹ The Lock Hospital on the other hand found making ends meet a continuous battle, and although the parishes made good use of its services, they drew upon its resources to well beyond the entitlement of their subscriptions and do not seem to have made up the difference until the hospital was threatened with closure.²

Strictly speaking, only the destitute sick who had acquired residential qualifications needed to be treated by the parishes, but as disease and destitution went hand in hand among the very poor, most natives of Glasgow falling ill of fever came under the care of the parishes, should they be fortunate enough to come to the notice of the district doctor. Before the passing of the Act, medical aid was entirely charitable and might therefore be ad-

1. Gorbals PBM, 16 November 1863.

2. City PBM, 6 October 1856, 487-488.

ministered in a haphazard manner. After 1845 there was the force of law behind the care of pauper patients, and in consequence the amount of money spent on the medical side of parochial administration rose, or was expected to rise, considerably. In Glasgow this rise was unavoidable, if only for the fact that soon after the first parochial boards had been elected, the city was hit by typhus and cholera.

Not only were the parochial boards new to local government in 1847 when the typhus epidemic broke out, but the Police Committee had been in existence hardly a year. The parochial boards were further bewildered by the stream of instructions and officials that assailed them from the direction of the Board of Supervision. As a result for a time relationships between the Glasgow parishes and the Board were strained. The parochial boards believed the Act to have destroyed the spirit of thrift and self-help which had existed previously among the poor and considered the replacement of Elders, with their personal contact with pauper individuals, by a staff of paid inspectors of the poor was a retrograde step.¹ More particularly they resented centralised control which might not be exercised reasonably. Certain officers, such as the chief inspector and medical superintendent of a poorhouse, could only be removed from their posts by the Board of Supervision, although appointed by the parochial boards. Barony was to find great difficulty in dismissing an unsatisfactory

1. City PBM, 5 November 1849, 541.

medical superintendent in 1857 when it was discovered that he was paying more attention to his private practice than to his parochial duties.¹ A Report of the City Parochial Board of 1849 complains 'that parliament should either compell the Board of Supervision to take the management of the parish through their functionaries into its own hand and relieve local Boards of all responsibility and trouble in this matter, or give to the local Boards entire control over the servants appointed by them, making them the sole judges of who they should suspend or dismiss'.²

The capacity of parochial boards to provide an expansive and imaginative service was severely hampered by the nature of that service. Pauperism might not be a crime, but it was a reward for personal failure in some capacity, and thus the pauper was not worthy of the charity given to him by the unwilling ratepayers. The municipal authorities were spurred on by the knowledge that they were catering for the most worthwhile and productive members of society, both rich and poor. The parochial authorities were always walking a tightrope between over-lavish an expenditure, in which case they would stir up a hornet's nest of ratepayers about their ears, and too frugal a provision for the paupers in their charge, in which case they would have to explain their activities to the Board of Supervision. In the early period, immediately after 1845, the boards were distinctly austere in their attitude to

1. Barony PBM, 22 May 1857, 2-4.

2. City PBM, 5 November 1849, 54.

their paupers, and this was particularly pronounced in the case of able-bodied paupers and their families. The 1845 Act denied relief to the able-bodied pauper but had omitted to mention his family. This loop-hole was used in a case brought before the Sheriff of Lanarkshire against Gorbals Parochial Board in 1848, when a decision was made in favour of the family.¹ The case was fought bitterly and the issue remained in doubt until a decision of the High Court judges in Edinburgh against Dundee Parochial Board in 1865 finally settled the dispute in all future cases by making the families of the able-bodied unemployed proper objects of parochial relief.² This increased the numbers of paupers but by less than the parishes had feared. Attitudes towards pauperism were softening by the mid-1860s in any case, and the parochial boards of the Glasgow area were moving towards a period of enlightened medical aid to paupers which generated such schemes as the great asylum at Woodilee, built by Barony parish in the early 1870s as a mental hospital where farming was used as a therapeutic aid to mental disease.³

The most important administrative change in the period 1845 to 1872 was not brought in through deliberate legislation as was the case with so many reforms in the municipal side of administration, but developed slowly out of the practical experience of operating a rudimentary city

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1. City PBM, 25 January 1848, 259.
 2. Barony PBM, 26 January 1865.
 3. Barony PBM, 31 January 1871, 178.

medical service in co-operation with the Police Committee. As both authorities became more deeply involved in public health matters, responsibility for control of communicable diseases including the provision of hospital accomodation for infectious cases and overall planning for epidemic control became the sole responsibility of the municipal authorities, leaving the parochial boards to concentrate on the improvement of their general medical and surgical service to sick paupers. As a result, from commencing in the mid-century as the main vehicle for medical aid in the city, including infectious disease control at times of epidemics, the parishes were to withdraw from public health to a very great extent by the end of the century and play an important role in the development and management of general hospitals and schools of nursing, leaving the municipal authorities as sole commanders in the field of public health administration.

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As a parish contained completely within a royal burgh, the City parish was classified as burghal and therefore had a relatively simple constitution. The right to vote under clause 17 of the Act was based on the books of collectors of assessment for management of the poor. Those ratepayers qualified elected twenty-five members, with four members of the Town Council and four members of the Kirk Session making a final membership of the Parochial Board of thirty three.

After an initial period in which the kirk elders continued to grant orders for medical relief, a Committee of Management was set up with five other Committees dealing with Relief, Finance and Appeals, House Inmates, Education and Lunatics, Building and Property and finally Law. An inspector was appointed at £200 a year, with an assistant inspector for every district at a salary of £100. The five main districts were in turn sub-divided to form a total of seventeen medical districts with a district surgeon appointed for each at twenty five guineas a year. Monthly allowances for the outdoor poor were recommended to be fixed at 'the lowest point by which existence can be supported'.¹ At this point there was no separate Committee with responsibility for medical matters, the Committee of Management having the principal responsibility for the direction of the district surgeons, while the in-patients were dealt with by the House Inmates Committee. Later, in the panic brought about by the 1848 cholera epidemic, a Sanitary Committee was formed² which from January 1849 onwards dealt with such public health duties as the Board performed. These were fewer than either Barony or Govan parishes owing to the fact that City was contained within the Royalty of Glasgow and was thus relieved from operating the Nuisance Removal and Public Health Acts as local authority.

1. City PBM, 29 December 1846, 40.

2. Prior to the formation of the Sanitary Committee, cases of cholera appear to have been dealt with by a House and Buildings Committee. (City PBM, 17 November 1848).

The City Parochial Board was also more fortunately placed than the other parishes within the Glasgow area in possessing an already established poorhouse. This was the old Town's Hospital in Parliamentary Road, a building bought from the Glasgow Lunatic Asylum Board when the asylum moved to more spacious premises at Gartnavel in 1843. The old Town's Hospital facing the river Clyde in Great Clyde Street was sold in March, 1847, to the Caledonian Railway Company for a price of £17,275.¹ The sale proved premature for within months the building was rented back again to be used first as a cholera hospital and then a test house.² Eventually it was abandoned once new accommodation in the grounds of the Parliamentary Road poorhouse was completed, and the historic old Town's Hospital building demolished. The new premises, together with the former Lunatic Asylum buildings, remained the nucleus of the City parish's establishment throughout the independent existence of the parish, although by the 1870s the building complex was no longer in the country but surrounded by houses and factories which prevented further expansion.

In 1850 the parochial authorities appointed Ebenezer Adamson as Inspector of the Poor, a post he was to hold until his death in 1876. Adamson was a man of great dedication and integrity and his impact on parochial administration and on Glasgow life in general was considerable. Prior to his engagement, the City parish had

1. City PBM, 5 March 1847, 36.

2. City PBM, 25 June 1847, 124; 9 October 1848, 341.

experienced considerable financial difficulties and during the 1847 typhus epidemic had faced revolt from a number of the district surgeons over the administration of the Clyde Street fever hospital, resulting in the dismissal of four doctors.¹ Under Adamson's superb administration the parochial finances were put in good order, and the whole establishment continued to operate with only minor difficulties until his death in 1876. Under his direction the Board's medical facilities were expanded to include wards for medical and surgical cases in the Town's Hospital at Parliamentary Road and the setting up of two dispensaries for outdoor sick.² The Vaccination Act was administered by the appointment of a parochial vaccinator, who undertook this responsibility for the whole parish.

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The Barony parish was less fortunate in its constitution than the City. The Poor Law Amendment Act had laid down, in clause 22, that non-burghal parochial boards 'shall consist of the owners of lands and heritages of the yearly value of £20 upwards and of the provost and baillies of any royal burgh, if any...and of the kirk session of such Parish, and of such number of elected members as shall

1. City PBM, 24 August 1847, 166.

2. These were in Trongate and Parliamentary Road. (Report of Medical Officer of Health on Uncertified Deaths, 1875. Pamphlet in GCA, D-TC.14.1.24. p. 36).
(Glasgow Board of Police pamphlet).

be fixed by the Board of Supervision...and it shall be competent for any Heritor, being a member of the parochial board to appoint as heretofore by a Writing under his hand any other person to be his Agent or Mandatory and Act and vote for him at such Board...'. Although this clause was designed for country parishes without large centres of population, the Barony parish was so situated that it fell within the category of non-burghal parish. In the past it had fitted the description fairly accurately, for most of its area still lay in agricultural country. However, those parts of the parish adjacent to the old Royalty of Glasgow had been subject to intense industrial and urban development. They included the former burghs of Calton and Anderston, the villages of Bridgeton, Camlachie, Woodside, Maryhill, Springburn and the whole northern sector of the city up to and beyond the municipal boundaries, comprising Port Dundas and Keppochhill.¹

From the commencement of the parochial board system, Barony was the most densely populated parish in Scotland, with a population of 136,283 in 1851, which had increased ten years later to 177,527.² The category of 'country parish' was therefore entirely inappropriate, and resulted immediately in such a protracted procedure for appointing a Parochial Board that not until 5 November 1846 was the first Barony Parochial Board actually elected.

1. For a map of the Barony parish, see Map 2.

2. Barony PBM, 28 February 1867, 521-2.

The number of elected board members, fixed at thirty by the Board of Supervision, were of course additional to the heritors, who were members by virtue of their property. Under the terms of the Act, every heritor in a non-burghal parish possessing land to the value of £20 a year upwards was a member of the parochial board. In the Barony, these amounted to something like four thousand persons. Although at no time did all four thousand heritors turn up to take their place at full meetings of the Board, a sufficient number could do so to seriously jeopardise the orderly conduct of meetings, and absent heritors made use of their privileges of mandate to increase the number of votes cast at meetings by up to one thousand at a time.¹

In order to manage the parish under such a system, a Committee of Management, composed of thirty members, was formed and became for all intents and purposes the administrative power in the parish. Although this made day-to-day administration manageable, the annual election of the Committee of Management and of office holders by the whole membership of the Board cause 'a great difficulty and inconvenience'.² This inconvenience could bring the whole administration to a standstill, as happened in October 1860 when a new Collector of Poor Rates was due to be elected. Unfortunately there were two candidates for the office, each supported at a general meeting of the Board by about thirty heritors present in person, but backed up by about one thousand additional heritors voting by proxy. A scrutiny

1. Barony PBM, 7 February 1861, 454.

2. Ibid, 455.

of their mandates was ordered, which cost the parish nearly £200 and took more than two months, during which time there was no properly appointed Collector of Poor Rates.

In order to avoid a repetition of this fiasco, a bill was deposited in February 1861, which became law in July 1862, reconstituting the Barony Parochial Board as a burghal parish.¹ The thirty elected members were joined by four members nominated by the kirk session, while the four members normally provided in a burghal parish by the Town Council were appointed from among the Commissioners of Supply, the Town Council of Glasgow being expressly excluded under clause 3 of the Act as they already sat ex officiis as members of the City parochial board.

This successful outcome of their constitutional difficulties was not reached until the Parochial Board had been in operation for about sixteen years. For the larger part of that period, Barony had a problem of pauperism greater than almost anywhere in the British Isles. The inspector of the parish in 1859 issued a Report comparing the percentage of paupers in Barony with those in the City parish and other parts of Great Britain. Reckoning on one dependent to each pauper, he calculated from published figures that pauperism was one in fifteen of the population in the City parish, and one in fourteen in Barony, calculated on the same basis. However, the Barony authorities possessed the actual figures for their

1. Glasgow Barony Parochial Board Act, 25 & 26 Vic.Cap.57.

parish and from this they could accurately reckon on there being one pauper to every ten people, of which one in six was Irish.¹

In 1859 when the Report was made, the population of Barony parish was 136,283 and paupers of all types 13,687. Liverpool at the same time, with a population of 258,276, had a pauper population of 14,492, but this included able-bodied poor which were not then counted in Scotland.²

The vast majority of Barony's population lived in the city of Glasgow, either in the east end around the old burgh of Calton, Bridgeton and the scattered villages of Camlachie, Parkhead and Westmuir, now rapidly becoming part of the main urban area, or in the western district in the former burgh of Anderston. A good proportion, however, lived very far from the parochial offices in the centre of Glasgow, the village of Shettleston lying several miles east of Calton and that of Maryhill some distance to the north of Anderston. Apart from these two extremities of the parish, the district surgeons covered most of the urban and landward area and attended pauper patients in their homes. However, although district surgeons were in existence for some time prior to the passing of the 1845 Act, the Barony had no poorhouse, the 'aged, friendless or impotent poor' being boarded in lodging houses in various parts of the city which the Parochial Board admitted were frequently bad, ill-ventilated and overcrowded.³

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1. Barony PBM, 28 February 1867, 520-522; 12 May 1859, 213-223.
 2. Barony PBM, 12 May 1859, 219.
 3. Barony PBM, 2 February 1847.

In order to provide a temporary remedy, the Barony authorities memorialised the Board of Supervision in Edinburgh in January 1847, requesting permission to rent a vacant tenement in Dalmarnock, which could then be converted to give temporary accommodation for one hundred to one hundred and thirty persons. The Board of Supervision turned down the suggestion on the grounds that no sanction for a temporary accommodation could be given until a resolution to build permanent buildings had been passed.¹ The Parochial Board procrastinated for a further seven months in spite of a severe typhus epidemic which made some sort of permanent establishment an immediate necessity, finally passing the required resolution in August 1847.² The poorhouse at Barnhill, to the north of the city, was not opened for the reception of paupers until May 1850.³ However, the Board was to enlarge the accommodation continually over the next twenty years, providing sick wards and eventually a fever hospital, which was still in operation up to the epidemic of relapsing fever in 1871, although subsequently the municipal fever hospitals dealt with most cases of infectious disease. In the early 1870s, the Barony commenced the building of Woodilee mental hospital as a parochial lunatic asylum, which included a farm for the treatment and rehabilitation of the mentally sick. The enormous cost caused some

1. Barony PBM, 2 February 1847.

2. Barony PBM, 3 August 1847.

3. The poorhouse, renamed Foresthall Hospital, is still in use as a hospital for geriatric patients.

opposition, particularly as the site chosen was beyond the parish boundary near Kirkintilloch, but the Board pressed ahead with the scheme which was well on the way to completion by the end of 1872.¹

In addition to the Barony poorhouse, the Parochial Board operated three district medical dispensaries for the dispensing of medicines to the outdoor sick. These were situated in the parts of the parish too far away from Barnhill for reasonable access, in the east, north and western districts. A further sub-dispensary had to be opened at Maryhill, owing to the distance of this village from the Cowcaddens dispensary.² The parish was divided for medical relief into five districts, which were in turn sub-divided to give an establishment of ten district surgeons, the number varying from time to time as districts were rearranged. All the district surgeons were vaccinators under the terms of the Vaccination Act.

A basic difference between the Barony and City parishes was in their roles as operators of public health legislation. Whereas the City Parochial Board performed few duties as a local authority under the Nuisance Removal Act and other similar legislation, the Barony was responsible as local authority for the landward part of the parish. A Medical and Sanitary Committee was formed in January 1854 under the emergency regulations during the cholera epidemic of that year and had stayed in existence once

1. Barony PBM, 31 January 1871, 166-167.

2. Barony PBM, 10 October 1855.

the epidemic was over and became the statutory authority for carrying out public health regulations. Inspectors of nuisances had to be appointed from among the existing inspectorate to try and make the control of nuisances effective in those parts of the parish under their charge, most of which were open countryside not easily reached by omnibus or train. In spite of the rural nature of so much of the parish beyond the city boundaries, the existence of an industrial city close by brought special problems to the rural areas. As clauses in the 1862 Glasgow Police Act had restricted the keeping of pigs within the municipal boundaries, the owners of small piggeries had been driven to look for land beyond the city but sufficiently near at hand to enable them to keep their precious livestock. A number of small and insanitary piggeries grew up upon vacant ground around Keppochhill, which lay just north of Port Dundas, to which much of the soured kitchen refuse of the city made its way in the form of pigswill. Hard on the heels of the piggeries came small factories such as boilers for the preparation of swine meat and offal or liquid manure manufacturers.¹ This is perhaps an extreme example of the effects of Glasgow on its neighbouring countryside, but the Barony nuisance removal inspectors were kept constantly alert for industrial and other nuisances, increasingly so as the built-up area of Glasgow crept further into the rural.

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1. Barony PBM, 5 November 1863, 229-230.

As a parish quoad civilia, Gorbals was the most recent of the four parishes within the Glasgow boundaries. It was formed in 1771 with the intention of creating an independent parish to serve the community of Old Gorbals, already the headquarters of a burgh of barony and considerably more important, both in respect of population and industry, than the village of Govan which up to then was the administrative centre for parochial affairs south of the Clyde. With great lack of foresight, which may have been deliberate for old Gorbals as a community was frequently at cross-purposes with the other districts in the barony, only the village of Gorbals itself was included in the parish, extending to some 28.489 acres, a decision future heritors and ratepayers were to regret bitterly.¹ The remainder of the Barony, although annexed to the parish by the Presbytry of Glasgow quoad sacra, were legally part of Govan parish, and although administered jointly by Govan and Gorbals up to 1845, with the passing of the Poor Law Amendment Act they were incorporated solely in Govan parish.

Gorbals is unique in the administrative history of Glasgow parishes, and almost in Scottish parochial history of the post-1845 period, only the Cannongate parish in Edinburgh being similarly placed in size and poverty. The heritors of 1771 who had won the battle for independence from Govan had also ensured, by limiting the parochial boundaries to old Gorbals only, that the parish could only

1. T.C.F. Brotchie, The History of Govan (Govan 1905). pp. 211, 215-218.

have a precarious existence at best economically. By the time the Poor Law Amendment Act was passed in 1845, the outlying districts of the barony were the growth points of the burgh and contained the most prosperous portion of the population. None of this prosperity flowed in the direction of Gorbals Parochial Board, however, for the Act had limited the parochial boundaries to those existing quoad civilia and Tradeston, Laurieston and Hutchisontown, known as the 'annexation district' by both Govan and Gorbals parishes, became incorporated in Govan parish. Gorbals Parochial Board was left to manage an extremely small parish where property values were, if not actually declining, almost static and the population very poor.¹ Because property values were so low, the assessed rental of the parish was extremely low, being put at around £19,000 in August 1869, and in order to raise enough money for the performance of parochial responsibilities, the poor rates had to be correspondingly high. A rate of 16% fixed in August 1869 could only raise a sum of £2,442.² Most of this money had to be collected from a population hardly above the poverty line themselves. When an investigator of the North British Daily Mail visited Gorbals in the autumn of 1869 as part of an investigation into slum areas of Glasgow, he found people living in desperately poor circumstances who had had their cooking utensils and few articles of furniture removed by the bailliff for non-

1. Gorbals PBM, 11 January 1869; 3 August 1869.

2. Gorbals PBM, 3 August 1869.

payment of poor rates.¹ About 1,700 of the 2,600 dwelling houses in the parish were let at or under £5 a year, according to a report of a sub-committee of the Parochial Board in 1869, so that 'we have the fact of the poor burdened with the support of their still poorer brethren, while the comparatively wealthy inhabitants of Govan escape from their just liability for an equal share of the burden'.²

As a result of these formidable disadvantages, the Gorbals Parochial Board stumbled on just one step ahead of financial disaster. The paid staff engaged by the Board were the minimum possible, an inspector and clerk with a temporary assistant inspector on occasions, and the parochial collector and his assistant. The single parochial surgeon was paid £35 a year, although he was given an additional grant of between £15 and £20 for medicines infrequently.³ This small establishment had considerable difficulty in coping with pressures of work, particularly when epidemics swept the parish. Gorbals had no poorhouse of its own, being far too restricted financially to provide one, and lodged its poor in Govan Poorhouse on payment for their upkeep.⁴ The sick poor were sent to the Royal Infirmary and the insane poor chiefly to asylums in Greenock and Bothwell. Although so dependent on Govan for the provision of pauper accommodation, Gorbals Parochial Board was frequently involved in resettlement

1. North British Daily Mail, 13 December 1869, pp. 4-5.

2. Gorbals PBM, 7 April 1869.

3. Gorbals PBM, 17 February 1857.

4. Gorbals PBM, 2 March 1854.

disputes with the other parish, when carelessness or frugality prompted the Gorbals authorities to dispatch to Govan as their responsibility, paupers who a few weeks previously they had been paying for themselves in Govan poorhouse.¹ Settlement disputes also arose owing to the parochial boundaries which took no account of urban development and cut streets and even tenement blocks in half, so that one side lay in Govan parish and the other in Gorbals.²

The parochial authorities of Gorbals made a virtue out of parsimony to a greater extent than any of the neighbouring parishes. This was most pronounced in ^{their}its attitudes to the able-bodied poor, the Board being involved in one of the first cases to dispute the right of the family to relief.³ In later years, when other parishes were taking a more tolerant and humane attitude towards the unemployed, Gorbals was unmoving in its determination not to assist the able-bodied and their families. For example, in 1858 unemployment in Glasgow stood at over six thousand, with consequent distress among the operatives and their families. The Lord Provost of Glasgow requested the parishes to treat the unemployed as casual poor for relief purposes, and although the three larger parishes complied, the Gorbals Parochial Board, which had not been represented at the meeting at which the request was made, refused to co-operate in spite of the fact that the inspector of the poor in the parish was receiving requests for relief on the basis of

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1. Gorbals PBM, 9 June 1854.
 2. Gorbals PBM, 7 April 1869.
 3. City PBM, 25 January 1848, 259.

the Lord Provost's action.¹

The administrative policy of Gorbals Parochial Board fell into two main categories. Most of the Board's time was taken up with the day-to-day administration of pauper relief, of raising rates and carrying out parochial duties. As a parish completely contained within a royal burgh, Gorbals was not burdened with any responsibilities as a local authority under the nuisance laws, and the single parochial doctor carried out vaccinations under the 1863 Vaccination Act. For administrative purposes, the Board had created certain committees, the principal ones being a Committee on Relief for general administration of poor relief and a Committee on Finance, Law and Assessment for fiscal matters. For a short time during the 1864 typhus epidemic a Sanitary and Medical Committee appeared, but at the time the parish was under considerable pressure from Dr. Gairdner, the new medical officer of health for Glasgow, to improve its medical facilities for the control of infectious disease.² There was also from time to time an Amalgamation Committee, dealing solely with the other line of policy pursued by the Parochial Board with persistence in the face of immense difficulties throughout the life of the parish. This was the amalgamation of Gorbals with one of the other parishes in Glasgow, preferably Govan but failing this, with either City or Barony.

1. Gorbals PBM, 11 June 1858. Ironically, the Lord Provost at the time was Sir Andrew Orr, a member of Gorbals Parochial Board.

2. SCM, 13 October 1863, 8.

The first recorded attempt by Gorbals to amalgamate with Govan came as early as September 1847 when it was rejected by the Govan Parochial Board on the grounds that such a combination would be unjust to the ratepayers of Govan, where pauperism was not such a problem as in Gorbals.¹ The pattern was to be repeated constantly over the next twenty six years, Gorbals applying for amalgamation on the grounds that 'our parish is separated by no natural boundary from that of Govan. On every side the streets of the respective parishes run into each other, even tenement houses stand partly in one parish and partly in the other, indeed it is indisputable that the inhabitants of both parishes form part of the same community and have in all respects identical interests...'², and appealing on moral and benevolent grounds as being quite unable to continue an independent existence, Govan taking the attitude that 'an amalgamation would have the effect of imposing an unjust additional charge on the Heritors and Ratepayers of Govan, while, at their expense, it would relieve the Heritors and Ratepayers of Gorbals of a heavy burden, or in other words it would add one or two per cent to the Rates of Govan and thereby depreciate Property by so much, while the rates of Gorbals Parish would be reduced six or seven per cent and property within the latter be enhanced in value in the like ratio'.³ This attitude, rooted as it was in the rights of

1. Govan PBM, 30 September 1847.

2. Gorbals PBM, 7 April 1869.

3. Govan PBM, 17 June 1857, 59-60.

property, took no account of the fact that 2% on the rates of Govan would add mere pennies to the ratepayers' burden, while a reduction of 6% or 7% to Gorbals would be a considerable saving to the overtaxed poor of Gorbals who were themselves scarcely better off than the paupers their rates supported.¹ Nothing illustrates this point more than a comparison of rateable values in the respective parishes. The rateable value of property in Govan went up from around £350,000 in August 1863² to £620,000 in August 1872,³ or almost double in under ten years. A rate of 4% imposed in this year raised £24,080, which was about £4,000 in excess of the entire assessable value of property in Gorbals parish. These huge sums could be raised by rates of 3-4% in Govan, while Gorbals had to impose assessments of up to 17½% in order to raise the comparatively paltry sum of £3,000.⁴ As the greater part of the money raised by Govan was from the annexation district, in other words from those parts of Gorbals lying within Govan parish, the bitterness of Gorbals Parochial Board is understandable. Govan Parochial Board was in fact in the fortunate position of having its principal potential slum district removed from its charge and made into a self-supporting unit.

A severe financial crisis in 1868, when large debts were discovered which had been concealed by the overworked inspector in order to make the financial position appear

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1. Gorbals PBM, 7 April 1869.
 2. Govan PBM, 4 August 1863, 229.
 3. Ibid, 6 August, 1872.
 4. Gorbals PBM, 3 August 1869.

more favourable, forced the Gorbals board to try amalgamation with either City or Barony parishes, but these moves failed also.¹ However, the plight of Gorbals and other parishes similarly placed with no pool of wealthy ratepayers to counterbalance a very poor population, in particular the Cannongate parish in Edinburgh, was beginning to attract the attention of Parliament.² Possibly for this reason Govan eventually overcame its opposition to amalgamation, and in January 1873 passed a resolution agreeing to form a combination parish of Govan and Gorbals.³

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The village of Govan lay on the southern bank of the river Clyde, to the west of Gorbals. It gave its name to a large parish of about 6,940 acres which in medieval times had formed the seat of a prebend of Glasgow cathedral.⁴ For this reason the parish was larger than the size and population of the village would warrant. The parish fell into four distinct areas by the mid nineteenth century. The village of Govan itself was a fishing and weaving settlement and was surrounded by a large landward area that was chiefly agricultural. The eastern portion of the

1. Gorbals PBM, 17 November 1868.

2. Gorbals PBM, 7 April 1969.

3. Govan PBM, 9 January 1873.

4. T.C.F. Brotchie, History of Govan, p. 18.

parish known as the 'annexation district', which included the Tradeston, Hutchesontown, Laurieston and Kingston districts of Gorbals, was urban and industrial. Finally the parish included Partick, a police burgh on the north bank of the river Clyde opposite Govan and separated from the Anderston district of Glasgow by the river Kelvin.

Although most of the parish lay outside the Glasgow municipal boundary, Govan could never escape the influence of the city while so many of the principal heritors were prominent in Glasgow's affairs. The inclusion of large parts of Gorbals made this inevitable, for the chief landowners in Gorbals were the Town Council, the Trades' House and Hutcheson's Hospital, a major charitable foundation. Although technically the village of Govan was the heart of the parish, for the first twenty years or so after the passing of the 1845 Act the annexation district was the growth point from which most of the money and much of the leadership came, while Govan itself was the more backward part of the parish. The position of Govan is reflected in the population statistics for 1841. In this year the total population of the parish was 48,225. Of these, 39,510 lived in the annexation districts, 3,628 lived in Partick and only 2,556 in the village of Govan itself. The remaining 2,531 were scattered through the rural areas.¹ These statistics show a concentration of population in a relatively small area, the annexation districts, balanced against a small population spread over a large area, the

1. T.C.F. Brotchie, History of Govan, p. 225.

remainder of the parish, and parochial administration had to take these circumstances into account.

Govan Parochial Board, in name at least, had existed from as early as 1826 when a Board was formed in order to raise a rate for poor relief, the remaining parish affairs being managed by the kirk session as before.¹ The practice does not appear to be unique among Glasgow parishes, as the heritors of Govan were following a precedent set by the Barony parish, which had formed a parochial board and raised a rate half from owners of property and half from tenants and occupiers in the same period.

Between 1826 and 1845 the parish was run in two parts, the annexation districts being managed by a joint committee of Gorbals and Govan parishes, while the landward area was run by Govan alone. Two district surgeons were appointed, one for the annexation and the other for the landward areas. As the surgeon for the landward district was also responsible for Partick, which was separated by the river Clyde from Govan, it is difficult to imagine that the pauper sick of Partick derived any benefit from their parish doctor at all and in later years Partick was to have a surgeon and registrar of its own.

After the passing of the 1845 Poor Law Act, the Govan Parochial Board was reconstituted in accordance with the new legislation and was now responsible for paupers in all parts of the parish, including the annexation districts.

1. Govan PBM, 26 October 1826, 4.

Like Barony, the parish was classed as non-burghal, and had a similar constitution. Heritors with property worth £20 per annum or more had the right to be members of the Parochial Board, while the elected members fixed by the Board of Supervision in Edinburgh numbered twenty eight, eighteen of which were to be elected from the annexation district, five from Govan and five from Partick.¹ At first an attempt was made to run the parish in two distinct halves, with a Committee of Management consisting of twenty members administering the annexation districts and similar Committee of twelve members the landward.² This was abandoned in 1850 for a single Committee of Management of forty-five members, who then delegated certain of their number to form sub-committees as necessary.³ A chief inspector of the poor was appointed for the whole parish, with one or more assistants as the work grew in complexity.

Govan was without a suitable poorhouse in 1845 when the Board was reformed and as a temporary measure an old silk mill was leased and fitted up until more suitable accommodation could be obtained.⁴ The Board at first intended to build a poorhouse and purchased land for this purpose, but on finding the estimates far in excess of what they were prepared to pay, they completed the purchase of the former cavalry barracks and moved into these, after hasty adaptation for their new purpose, in the spring of 1853.

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1. Govan PBM, 17 June 1847, 178.
 2. Govan PBM, 3 August 1847, 180-181.
 3. Govan PBM, 27 June 1850, 314-316.
 4. Govan PBM, 23 September 1851, 390-393.

The move to the Eglinton Street poorhouse, as the Barracks were now renamed, was not to prove permanent. Isolation of the inmates from their relatives outside proved impossible and clandestine contacts between husbands and wives when the latter were supposedly deserted were common.¹ In an effort to provide an efficient testhouse for the safeguarding of ratepayers' money, it was finally decided to build a poorhouse. Ground was acquired at Merryflats in 1867 and subsequently a poorhouse, hospital and lunatic asylum built at a total cost of around £100,000.² The Merryflats poorhouse hospital, later the Southern General Hospital, was to become and remain one of the principal medical establishments in Glasgow.

Until the opening of wards at Merryflats, the Govan parochial authorities did not have a satisfactory record from the point of view of public health administration. The establishment of two district surgeons had been increased to five by 1855, although there was a proposal in that year to reduce this number once again to two though this does not appear to have been put into effect.³ The expenditure on medical services was pitifully small, only £815 out of a total expenditure of £23,765 in 1869.⁴ The provision of hospital beds for fever cases was correspondingly small when compared with the other parishes, Govan providing only fifty-four beds during the typhus epidemic

1. Govan PBM, 6 February 1866, 256-262.

2. T.C.F. Brotchie, History of Govan, p. 226.

3. Govan PBM, 6 February 1855.

4. Govan PBM, 3 August 1869, 403-404.

of 1865, compared with one hundred provided by the City parish and one hundred and twenty by the Barony.¹

As a local authority under the Nuisance Removal Act and Public Health Act, Govan parish found itself responsible for a diminishing area. The annexation district was of course controlled by the Glasgow municipal authorities. Partick was under its own Police Board from 1852 and Govan from 1864. This left only the rural area to be supervised by Govan Parochial Board. In addition to these sanitary responsibilities in the country area, the Board had responsibility for vaccination throughout the parish and for the care of pauper sick and of lunatics. The parish itself grew rapidly in the years between 1846 and combination with Gorbals in 1873. The population in 1872 was around 151,400, to be compared with the 1841 population of 48,225.² In the same year, the assessable rental of the parish was estimated at £620,000. By the time the combination with Gorbals was put into effect, Govan parish had overtaken Barony in population and was second only to the City parish, whose population by 1872 stood at 227,470.

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This brief survey of the four Glasgow parishes will, it is hoped, give perspective to parochial administration in the period 1842 to 1872. This was to be the period

1. J. Russell, Public Health Administration, p. 68.

2. T.C.F. Brochie, History of Govan, p. 225

in which parishes were to make their greatest contribution to public health, the years after 1872 seeing more interest being paid to the development of hospitals and nursing facilities, to the ultimate benefit of medicine in general, and the individual patient in particular. The transition was gradual, however, and for many years after the 1845 Act had first established them, parochial boards did important work in the cause of urban public health in co-operation with the municipal authorities. Although much of that work depended on the progress of ideas and techniques in public health throughout the British Isles and on the leadership of individual reformers in Glasgow itself, a large part was due to legislation and sound administration. How the administrative bodies described in the previous chapters, both municipal and parochial, coped with the various responsibilities and crises in public health with which they came in contact, is the subject of the remaining sections of this thesis.

The cleansing of the nineteenth century industrial city in all its aspects - nuisance removal, sewage disposal, smoke control and the general cleaning up of the city streets - is probably the most neglected aspect of public health improvement in the nineteenth century. Considerable publicity was usually given to schemes to improve the water supply, clear away delapidated buildings or erect workmen's dwellings and certainly the story of a city's successful attempts to bring in piped water or to improve its hospital facilities is more attractive reading than the details of its efforts to rid itself of open sewers or to clean up its dirtier streets and lanes. Nevertheless, cleansing was the cornerstone of public health improvement in many cities and this certainly applies to Glasgow. Cleansing, along with lighting and watching, was the responsibility of the Town Council centuries before the passing of the first Police Act and remained one of the main functions of the police authorities after 1800. Acceptance of this responsibility was to have the effect over the course of the first half-century of saddling the Police Committee and its successors with other similar public health functions, which they accepted with few objections.

Even had the original police authorities had sufficient prescience to look ahead to the middle years of the century and see the strong connection which the leading medical minds of the day were going to forge between dirt and disease, they might have been bewildered at the variety of

duties that this would lead their successors to perform. As it was, the first Police Commissioners' attempts at cleaning the city streets were less for the improvement of the public health than for the improvement of the urban environment, particularly for the better-off Glaswegian who made use of the main thoroughfares. Glasgow was fortunate in having wide streets where the shops, offices and main business houses were situated and the small staff of scavengers probably concentrated their attentions on keeping these clean and free from dust and manure, while the condition of the small wynds and lanes leading off towards the poorer quarters of the town could be ignored with relative impunity, for there were few people living in these areas who were likely to complain about the absence of scavenging, since the fewer officials that made an appearance the better.

By 1843, when the miasmatic theories of dirt-generated disease were being fiercely argued, local legislation had widened considerably the police authorities' duties from merely cleaning up the city streets. They now included the suppression of vagrancy, control of common lodging houses, removal of nuisances, inspection of private slaughter-houses and the prevention of pollution, whether of the atmosphere through smoke or of the natural water-courses through industrial and domestic effluent. In future years these were to be widened by the inclusion of others such as the control of dairies and piggeries, the inspection of food for human consumption, the provision of

urinals and public conveniences, the fumigation and white-washing of houses from which patients suffering from epidemic disease had been removed, the closure of intramural burial grounds and the inspection of houses suspected of being overcrowded. The common denominator in all these duties was improved cleanliness. Had this not been the case, many would have fallen to the lot of the parochial authorities who were almost solely responsible for the control and treatment of infectious diseases for much of the period between 1842 and 1872. The police authorities were thus finding themselves drawn more and more deeply into questions of public health as a result of their accepted responsibility for cleansing, even though the links with cleansing were increasingly tenuous as those with public health became stronger.

The task facing the nineteenth century cleansing authorities was no easy one. Large quantities of manure, both human and animal, were kept in the city, either in the courtyards of domestic housing or in commercial dungsteads scattered throughout the built-up area. There were in addition innumerable small dairies, piggeries and stables where dung was kept to await removal. Few of the streets were properly paved, and the turnpike roads coming into the city, over which the police authorities had no jurisdiction, were often in a deplorable state of dirt and disrepair. In many instances the police authorities would have welcomed the opportunity to use some means of compulsion on turnpike trusts and statute labour authorities in outlying districts

in order to force them to repair their roads.¹ The inhabitants of the city themselves did not ease the burden of the cleansing officials. In spite of bye-laws to the contrary, they found it difficult to break the habit of centuries and still tipped their 'slops' and domestic rubbish out of their windows onto the streets.² Shopkeepers and industrialists permitted their chimneys to pour black smoke into the atmosphere and their industrial effluent to pollute the streams and sewers. The system of underground drainage was hopelessly inadequate and was not extended to districts where the technical problems involved in drainage threatened to prove difficult or expensive. Until shortly after the mid-century, the water supply was only adequate to middle-class housing not built at an unsuitably high elevation, and even then was very imperfectly filtered.

At the beginning of the nineteenth century these problems were still small enough either to be disregarded by the citizens, who accepted certain inconveniences as part of city life, or, if some sort of action was unavoidable, was well within the capabilities of the handful of scavengers employed by the Police Commission. The spread of the city, both in size and population, put an unbearable strain on its resources and ended any possibility that the

1. Parts of Dobbie's Loan, to the north of the city and under the supervision of the Barony Parish Statute Labour Trust, were covered with accumulations of animal and vegetable matter in 1846 to such an extent that the road was regarded as a health hazard to the inhabitants by the Police Board. (PBM, 22 January 1846, 260).

2. Senex, Glasgow, Past and Present, p. 125.

increasing dirt and disease could be contained by the existing legal and administrative means at the disposal of the Police Commission. Each successive Police Act added some new duty designed to keep the city in a state of cleanliness and good order but rarely specified by whom or by what means these were to be carried out. In addition, the whole progress of urban sanitation during the middle years of the nineteenth century was subject to sudden changes of policy owing to the succession of local authorities, five in all between 1842 and 1872, who were responsible for cleansing and nuisance removal at different times during this period. The earliest of these, the Police Commission, created a Committee on Health and Vagrancy during the 1832 cholera epidemic and then kept it in being to deal with the type of problem related to cleansing but requiring a different approach. This Committee dealt with complaints of nuisances, undertook investigations into private slaughterhouses¹ and into conditions in the common lodging houses of the city, such as that described previously in connection with Jeffrey's Close,² and also coped with vagrancy and prostitution when complaints against these social evils had reached a sufficient pitch to be no longer ignored.³ Matters more directly connected with cleansing were naturally the province of the scavenging department. By these rather improvised means, general sanitation became separated into two distinct divisions,

1. PBM, 4 July, 1844.

2. See above, pp. 15-16.

3. PBM, 12 May 1842: 16 June 1842.

one, under scavenging, concerned chiefly with the cleansing and drainage of the city and the other, under nuisance removal, coping with any other quasi-public health problem the Police Commissioners found themselves faced with.

As an instrument for the improvement of the city, the Committee on Health and Vagrancy had little effect, but the idea of such a body to deal with specific public health problems was a notable advance. If it had no other effect, it did serve to turn the minds of the Committee members away from the narrow confines of cleansing and towards a broader attitude towards urban public health. There is evidence that the old Police Commissioners were moving towards an integrated public health service linking cleansing and medical services under one Health Board.¹ Their methods of dealing with the cleansing problem presented by the private courts and closes of the city was administratively sound even if in practice it proved impossible to implement, and showed a more rational approach even if this should turn out to be expensive. Their idea was to take over from the proprietors the responsibility for cleansing the private courts, a move which would have ensured that dung was removed from those courtyards where private scavengers appeared infrequently and that closes and private lanes were swept and cleaned fairly regularly. The concept of municipal responsibility for private property was one that did not survive the disappearance of the Police Commission. The Police Committee that took over in 1846 adopted a new line of policy. The Committee firmly

1. Calton Burgh Minutes, 24 November 1841.

believed that the privileges of ownership brought certain responsibilities, among these being the cleaning up of tenements and their surrounding courtyards and access ways. The existing bye-laws put the Committee in a strong position to enforce this on recalcitrant proprietors, at least on paper, at very little expense to the ratepayers.

The draw-back of this policy lay in the nature of so much of the housing in the city, where a single building might contain a large number of dwelling-houses owned by several different proprietors. The Police Committee were to find it almost impossible to track down the owners of tenement blocks in order to prosecute them for failing to remove dung from courtyard middensteads, while the proprietors for their part were to find it equally difficult to compel their tenants to adopt more cleanly habits. In some cases the agents of proprietors no longer visited their tenants to collect the rent, let alone enforce simple sanitary improvements.¹ Neither Police Committee no the proprietors were anxious to spend any more money than was strictly necessary in cleaning up working class housing, the ultimate remedy when a building had progressed beyond the stage of repair being its demolition by order of the Dean of Guild Court, the proprietors viewing their property from the angle that much of it was too far gone to be worth the expense and effort of cleaning operations, however desparately these were needed by the existing tenants, and the Police Committee keeping a tight hold on the public purse-strings on the grounds that it was good politics to be seen to be frugal with public money.

1. Senex, Glasgow, Past and Present p. 122.

However, the publication of Chadwick's Report was to change the urban public health scene throughout Britain, even if only by bringing into public prominence arguments as to the causes of disease through dirt and decaying matter. Chadwick placed great emphasis on drainage and an efficient water supply as a means of improving the public health of cities, and although in many respects he minimised the role of medicine in urban improvement and placed too great an emphasis on the sanitary engineer, at least many eminent medical men were in agreement as to the causes of epidemic diseases. Municipal authorities such as the Police Committee in Glasgow were now faced with a situation where courtyard dungsteads and polluted water supplies were unacceptable, if not positively harmful, on medical grounds, as they had been in middle class areas on aesthetic grounds for some time already. Rights of ownership and of individual freedom of choice were so highly respected that it was difficult to accept the new concept that a man might not be as dirty as he pleased within his own four walls, whether rented or owned. However, when these same four walls enclosed a dungheap in a centre court, a pile of filth on a common stair or an underground stable whose odours rose into the houses piled above it, then the public good clashed with private uncleanliness. In a society where individualism was still a vital force in national and municipal politics, it was not easy for a local authority to interfere in a proprietor's management of his property, more particularly where those people most likely to be prosecuted by the authorities were of the

ratepaying class, thus making the local authority appear to be acting on behalf of the tenants, a class with no political or social power worth speaking of, yet as the century wore on this is what the local authority, either willingly or reluctantly, was forced to do.

The rigid attitudes held by most citizens above the level of the workers towards personal privacy and property were certainly being eroded from the 1840s onwards by fear of the outcome of neglecting the increasingly bad living conditions of the poor. Cholera, typhus and smallpox could appear outside their traditional breeding grounds in the heart of the wynds and closes, and if dirt and smell were indeed responsible for these visitations of epidemic disease, then it was essential for dungsteads and other possible sources of infection to be removed before they could shed their disease in the direction of the west-end suburbs. This undoubtedly gave leverage to local authorities in introducing better cleansing methods. The Police Commission experiment in taking over the cleansing of private courts had been started soon after the 1843 epidemic of relapsing fever. The Police Committee were to find themselves compelled to bring in a regular system of cleansing and fumigation which was to outlast the typhus and cholera epidemics it had originally been designed to cope with.

Informed public opinion, normally apathetic towards conditions in the poorer quarters of the city, could be roused over the question of inefficient cleansing once the public eye had been opened to the penalties in store for the unclean city in terms of infectious disease. The

Police Commissioners had had to cope with their share of public scandals connected with unclean streets and adulterated foods¹ and their successors were also to have their efforts to keep abreast of their cleaning problems criticised in the local press. The North British Daily Mail ran a series of articles in September 1848 on the condition of the closes in Old Wynd and nearby streets, in which the Police Committee's scavengers were severely taken to task. The reporter 'observed some faint traces of scavenging in the Wynd itself, the main street of this municipal division, but our scavengers are the greatest hypocrites on earth. The Wynd had been swept within a month, but the courts, surely, not for the last six or eight'.² The writer was correct in criticising the scavenging of the Old Wynd itself but wrong in blaming the cleansing authorities over the state of the courts, for at the time they were not the responsibility of the Police Committee but of the proprietors.

The same newspaper ran a much larger series of articles on the same theme, after a six-month investigation, over twenty years later. These painted a picture of a city where dirt was so much a part of life that rooms and bedding infested with lice and a single privy shared by as many as thirty or forty families were accepted without complaint by the inhabitants of the poorer quarters. So unhealthy and miserable were the conditions described by the reporter

1. PBM, 25 April 1845, 158. This scandal concerned the sale of diseased meat.
2. The Sanatory State of the Old Wynd and its Tributaries. Reprinted from the North British Daily Mail, 2, 4 and 5 September 1848.

that it is difficult to imagine that any scavenging and nuisance removal operations had been going on at all, let alone for a period of over half a century.

Much of the fault lay with the type of housing in which the majority of the poor lived and with the habits of the poor themselves. The inhabitants of the tenements had adapted their behaviour to life in small, overcrowded houses often many flights of stairs from street level, with few bits of furniture and even fewer amenities, over a period of many years and were not going to change them by Act of Parliament or through the operations of Corporation officials. They had their own standards of what was and what was not decent. Privies were in general only used by men, the women and children preferring the privacy of their own homes where the sink, or 'jawbox', could be used as a means of disposal of domestic 'slops', so saving them a walk downstairs.¹ When sinks became choked, they reverted to old habits and tipped their refuse out of the windows. Where formerly there was a good chance it would land in the courtyard middenstead, with the advent of the flagged court and removal of the central dungstead the rubbish landed on what should have been clean causewaying and lay there to collect in quantities until the scavengers should remove it. If the range of privies provided for this particular block of tenements was one of the new improved type, whereby the contents were deftly removed by

1. For an account of attitudes towards ashpit and privy accommodation provided to miners' housing at Tollcross see Dr. Christie's report to the Barony parochial authorities in Report to the Board of Supervision as to the Sanitary Condition of the District of the local authority of Barony, 6 September 1885.

the simple expedient of lifting one pail and replacing it with a clean one once or twice a day, then the scavengers might neglect to clean up the courtyard which in consequence might not be dealt with for some time.

Most of the blame for the unhealthy condition of the city, however, must lie with the cleansing officials. In spite of the adverse reports in the North British Daily Mail, by 1869 a great deal had been done under the surface to improve the cleansing of the city even though the effect was not to show up until the 1870s or later. The Police Committee, which had tended to make nuisance removal merely a part of cleansing, had been shorn of this duty in 1857 with the creation of the Committee on Nuisances, or Nuisance Removal Committee as it was commonly called. The formation of this committee, a reform forced upon the Police Committee through the 1856 Nuisance Removal (Scotland) Act, and thus not of its own choosing, once more separated nuisance removal and other allied public health functions performed by the police authorities from cleansing and statute labour. As a local authority the Nuisance Removal Committee was to have a life of only seven years and was not in itself a very progressive body, suffering from a similar drawback to that of its predecessor, the Committee on Health and Vagrancy in having no staff working directly to its instructions but having to draw upon the services of the master of works, the police constables and the inspector of cleansing as the occasion demanded. However, it gave a chance for Glasgow's greatest lay sanitarian, John Ure, to become acquainted with the problems of nuisance removal and the cleansing of the

city. This remarkable but little-known hero of public health reform in Glasgow took the rather unadventurous Nuisance Removal Committee, which operated as a branch of cleansing although for the improvement of public health, and transformed it into an important agent for public health and disease control through improved cleanliness. He was helped in this by the stress laid on the medical functions of the Committee in the 1856 Nuisance Removal Act which, although not put into effect by the Committee, gave legal force to the arguments that only by a thorough control of nuisances could public health be improved.

Ure's methods, both as chairman of the Nuisance Removal Committee and later of the Sanitary Committee, was investigation, the presentation to the police authorities of a well-reasoned Report and finally a good deal of persuasion and argument in the Council chamber. His first such Report was presented in 1859 after a journey round several major British cities to collect facts upon which to base his arguments. This report became the basis for the sanitary clauses of the important 1862 Glasgow Police Act, an Act which finally created a Sanitary Committee directing its own small department, a step far more important than the number of staff would appear to indicate. The establishment of a sanitary office where cleansing and nuisance removal became a branch of epidemic control was the first move in the creation of the modern public health department. It was then only a matter of time before all branches of public health - cleansing, general sanitation and the treatment of epidemic disease - would be brought

together and operated through one controlling Committee directing an integrated department.

Many difficulties still lay in the path of the authorities in their attempts to make the city healthier by being cleaner. As with any municipal undertaking, cleansing and nuisance removal involved the spending of public money and any sudden increase in the size or duties of a department might mean criticism from the very people who on other occasions criticised the poor standards of cleanliness set by the Cleansing Department - the ratepayers. Owners and factors were not always willing to accept without question the advice of the Sanitary Department with regard to such matters as paving and draining of courts or the best methods of improving the ventilation and sanitation of tenements, particularly where it involved spending money.² The sanitary authorities were always subject to this double-edged criticism, on the one hand because of the expense of their activities and on the other because of the inefficient performance of their work.

In the last quarter of the nineteenth century, the sanitary authorities were faced with a major problem for which they themselves were largely responsible. In the 1840s and 50s they had been in advance of the general public in Glasgow with regard to sanitation by their advocacy of the removal of middensteads and courtyard dungheaps and their replacement with privies and dry ashpits. Having instituted this reform so successfully that few middensteads

1. CHM, 24 January 1870, 1.

2. CHM, 24 July 1871, 230-235.

remained among private houses by the late 1860s, they then became a prisoner of their own success and created an elaborate and expensive Cleansing Department around the existence of the privy and ashpit system. This required men, horses and equipment for the frequent removal of the contents of the privies, huge manure stations on the edge of the city into which the dung was placed awaiting sale, a fleet of barges and railway waggons for removal of the accumulated dung to the country once sold, and depots and other buildings.

This total, expensive involvement in the manual removal of domestic refuse in fact did not take account of what was taking place in the city so far as sewage disposal was concerned. From the 1850s onwards the private houses, both for middle and working classes, were being built with water closets installed either within the building or, less commonly, in a range of outbuildings in the back court. From the time records for new house building begin in 1862, the number of tenements being erected for working class occupancy which relied on the dry ashpit and privy system for the removal of refuse dwindled rapidly, until by the post-1875 period privies were only occasionally installed in new housing and water closets, usually one to a landing, became standard.¹

This extremely important development in the sanitation of the city should have been reflected in the service provided by the Sanitary Department by the mid 1870s at

1. For a fuller discussion of this subject, see below pp. 306-308.

the very latest. In this instance, the authorities were lagging behind private developers in initiating reform, in contrast to their earlier record, and were so heavily committed to a system becoming rapidly outdated that they were not prepared to change gear until forced to. There were still sufficient houses from the past using the dry ashpit system to justify their continuing scavenging operations without seriously attempting to come to terms with the effects of the water closet for some considerable time after privies had almost ceased to be installed in new housing. However, the operations of the Improvement Commissioners in pulling down large areas of the Old Town and Gorbals did away with many of the older houses still relying solely on privies and ashpits and the new housing built in their place still further increased the number of water closets whose contents ultimately flowed down the sewers of the city and into the river Clyde. These two factors, the decrease in the number of privies and the increase in the problem of sewage pollution of the Clyde, eventually forced the Town Council to come to terms with the question of supplying an efficient system of sewage disposal for the city. This, the last major public health reform initiated by the Council in the nineteenth century, was not to become operational until 1894.¹

There is, of course, much more to the story of cleansing than scavenging and nuisance removal. Smoke pollution, which darkened the day-time sky and turned many autumn and

1. Sir J.D. Marwick, Glasgow. The Water Supply of the City (Glasgow, 1901), pp. 219-220.

winter evenings into a nightmare for those suffering from lung conditions, was a particularly difficult aspect of the cleansing problem for the authorities to deal with, but one the citizens felt strongly about. Glasgow had begun the nineteenth century a city of golden sandstone buildings and was to end it a city of blackened edifices as a result of the almost constant pall of smoke that hung over the city for much of the year. The fact that the authorities were never in the nineteenth century successfully to get rid of the smoke problem should not lessen the importance of this side of public health improvement. The control of offensive industries as a whole, from the point of view of smoke, smell and industrial effluent, fell within the orbit of the health authorities by the last quarter of the century, after a long period in which the municipal administrators had to stand up to determined opposition from manufacturers, who resented any sort of interference or controls on their running of their businesses. In a city as well supplied with streams as Glasgow water pollution, from whatever cause, was another problem with which the overworked police officials had to cope.

Water supply in another direction caused the most important innovation in public health to be instituted during the period from 1842 to 1872. Obviously there is far more to a good water supply than the provision of improved facilities for cleansing the city, important though these are. It has a direct medical bearing on public health through assisting in the elimination of water-borne diseases. It is an important aid to improved personal

and domestic hygiene. It provides an alternative beverage from alcohol for the thirsty. There are few commodities with a higher amenity value, particularly to the harrassed housewife, than a good supply of water on tap. All these factors make the completion of the Loch Katrine scheme for the provision of a constant, pure supply of water one of the major public health landmarks of the period. However, the city's water supply is dealt with here largely from the point of view of its value as a cleansing agent. The justification for treating so important a public health development in this manner without undertaking a more detailed study of the topic lies in the large number of works which already deal with Glasgow's water supply.¹ As a result, it is difficult to find new avenues to explore. It was the cleansing role of a water supply that seems to have impressed the city fathers most deeply when they found water conspicuous by its absence during the attempts to clean up the city under the threat of epidemic disease. Possibly greater emphasis should be placed on this as a factor in prompting the Town Council to stop prevaricating and pass a firm resolution to take over the water supply to the city from the commercial water companies.

This section thus deals with the development of the cleansing and nuisance removal functions of the police authorities, from Police Commission to Committee on Health. The immensely successful implementation of the daring and expensive water works scheme, and the rather less successful attempts to tackle the problems of smoke pollution and

1. The major works are given in Chapter 14 below.

sewage disposal, are also examined.

There is one final aspect of local authority involvement in cleansing which should not be passed over without mention - the contribution of municipal authorities to sanitary science. The need to find better, more effective means of cleansing and sewage disposal forced town councils and police boards to become involved in sanitary experiments, many of them of doubtful use and with little scientific basis behind them, but some of genuine scientific importance and all adding something to the sum total of knowledge in the field of sanitary science. Local authorities provided money and the practical means of testing theories which otherwise might have remained locked away in their originator's mind or at best an elaborate theory on paper. No doubt a considerable amount of money was wasted in testing fanciful schemes which were totally unpracticable, but there is something to be gained, even in the rejection of false schemes. The Town Council of Glasgow contributed at one time or another to a variety of projects, setting up tanks for the experimental collection of sewage, testing charcoal as a deodorising agent in dry privies, collecting urine from public urinals in order that one experimenter might discover whether any useful by-products could be extracted and generally lending a willing ear to any proposals which might resolve the city's cleansing problems. As a result, the municipal authorities provided a useful school in which experiments could be carried out, justified or discarded, and so slowly push forward the frontiers of public health knowledge in this important field.

Chapter 8. The Police Commissioners,
1842 - 1846.

From the point of view of refuse collection and nuisance control, Glasgow and the suburban burghs in 1842 presented the scavenging authorities with an enormous problem in the form of overflowing middensteads, smoking chimneys, stagnant and polluted pools of water and piles of decaying refuse. Of these, the dungsteads and the chimneys with their constant pall of black smoke probably had the most impact on the average citizen.

In nearly every case where a nuisance existed, investment and the rights of private property were somewhere in the background and had to be reckoned with. Manure was a commodity from which revenue could be obtained, which made it difficult for any direct attack on the existence of dungsteads to take place. Rights of thirlage on the local dungheap could be purchased and sold like any other piece of property, although the legal fees expended in compelling tenants to deposit their manure in the common dungstead in order to realise the value of thirlage rights might come to considerably more than the value of the manure when sold.¹ Smoking chimneys represented the manufacture upon which the prosperity of the town depended. Businesses and trades which produced smell, smoke or industrial effluent were difficult to control without legal safeguards to prevent their establishment in densely populated districts or, where already in production, to prevent them becoming nuisances, and these were not introduced until 1867.

1. Senex, Glasgow, Past and Present (Glasgow, 1881) p. 36

The four independent burghs in the Glasgow area each operated cleansing and nuisance removal functions according to their individual Acts of Parliament. In the three smaller burghs the superintendent of police in each case appears to have had overall supervision of the cleansing processes, with the actual performance of scavenging put out to contract.¹ However, lack of adequate records makes it difficult to map out the operation of cleansing and nuisance removal in Calton, Anderston and Gorbals and this chapter is mostly concerned with the Police Commissioners of Glasgow, by far the largest and also the best documented of the nuisance authorities in the area.

By 1842 the Police Commissioners of Glasgow had created two separate committees to carry out the bye-laws on nuisance control and cleansing. These were the Committee on Scavenging for the direct cleansing operations and the Committee on Health and Vagrancy for nuisance removal and any other matter connected with public health. As a result, nuisance removal and cleansing were not tackled as a single function but as two different aspects of municipal administration. The effect of this was blunted to some extent as the Committee on Health and Vagrancy employed no staff, headed no department and was forced to 'borrow' the services of the officials of the other departments to put decisions into effect. The Committee on Scavenging was responsible for the direction of a staff of municipal scavengers under the supervision of a Superintendent of Scavenging, who was himself responsible to the

1. Gorbals Burgh Minutes, 5 March 1846.

master of works. This official was the one most frequently 'borrowed' by the Committee on Health and Vagrancy for the carrying out of investigations into nuisances and as a result the two Committees worked closely together, giving the appearance of one function rather than two. An increasingly important factor linking the two departments was the recognition, particularly after 1842, that cleansing and nuisance removal had public health as well as environmental aspects and for this reason they were never entirely separated, although for practical purposes administrative policy was not always co-ordinated.

The nuisance removal side of the Police Commissioners' duties was a small affair compared with cleansing. Although the only parts of the city invariably the responsibility of the Police Commissioners for cleansing purposes were the public streets and thoroughfares, there were sufficient of these to ensure that the Scavenging Department was always a prominent part of municipal administration. Turnpike roads were the responsibility of their trustees and pavements of the householders whose residences lay immediately behind them, although the Commissioners had it in their power to take over the cleansing of these foot-paths if they should think fit.¹

In the previous century the work of cleansing had usually been put out to contract, but with the increase of population and industry in the early nineteenth century this system of street cleaning had proved so unsatisfactory

1. Provision for the Police Commissioners to take over the cleaning of pavements was written into the various Acts, commencing with the second Police Act of 1807.

that new methods for scavenging and cleansing had to be found. The alternatives considered were for the Department of Statute Labour and Cleansing to perform the whole of the cleansing operation down to the disposal of the manure collected through agents, or for the work to be put out to contract. After a period of discussion and vacillation, the Police Commissioners finally adopted and instituted in 1841 a system whereby they kept the scavenging side of refuse collection in their own hands and put the collection and carting of the rubbish, once the scavengers had heaped it into piles in the streets, and the watering of the streets out to contract.¹ The city was divided into two main districts for scavenging purposes and a large municipal manure depot was set up at Moore Street, where a machine was installed for the weighing of the dung brought in by the contractors' carts.² This system, by which the Commissioners provided scavengers who collected the refuse together and the contractors provided sweepers and carters who cleared it away, was to be continued with only minor alterations until the establishment of the Cleansing Department of the Police Board in 1868.³

The Superintendent of Scavenging, or Inspector of Cleansing as he was more commonly called after 1843, when he was officially given this name in the Police Act of that year, was the Commissioners' overseer of the cleansing operations. In his official capacity he represented the

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1. PBM, 17 December 1840, 436; 9 April 1841, 20.
 2. PBM, 15 April 1841, 21.
 3. PBM, 17 March 1842, 158.

functions of inspector of cleansing, nuisance removal officer, epidemic control officer and inspector of lodging houses, all of which by 1872 were to be positions in their own right. He was therefore a more important official at least potentially than either his contemporaries or later commentators on the public health of Glasgow have given him credit for.

Soon after the passing of the 1843 Glasgow Police Act, the Committee on Scavenging of the Police Commissioners initiated a new venture, a rationalisation of the cleaning of the city which, had it continued and been extended, might have brought considerable improvement to the state of the closes in the old town. The courts and closes which represented the greatest challenge to cleanliness were within the very heart of private property and no bye-law touched them unless they could be proved to be part of a common access-way, which was rare. The actual inner court where the main middenstead was usually to be found was more or less inviolable as containing a valuable commodity, domestic manure. Even where the local Acts of Parliament came to the aid of the local authority by enacting provisions for the prevention of throwing down dirt, ashes and manure on public streets and thoroughfares and compelling the cleaning of pavements and closes, this still left the private court untouched, and thus a source of disease and discomfort to the inhabitants. Their existence made nonsense of the efforts of the municipal authorities to cleanse the city for health reasons, for even had the scavengers performed

their work in the public streets of the city in an exemplary fashion and had the nuisance removal laws succeeded in clearing much of the 'fulzie' from waste ground and passage ways, a vast amount of manure would still be left untouched in the private courtyards.

The various bye-laws laid the responsibility for cleaning the courts and tenements on proprietors and occupiers, but in practice this proved impossible to enforce. The most sensible way of tackling the problem was for the Police Commissioners to persuade proprietors to hand over the scavenging of private property to the cleansing authorities. This would allow the cleansing staff to perform essential cleansing duties, which otherwise would have to be done by the landowners through the more rigid enforcement of public health laws. The loss of revenue to the proprietors was to be offset by a gain in cleanliness and an improvement in the amenities of their property.

The scheme was first initiated in the summer of 1843, when a rise in fever to epidemic proportions induced the Committee on Scavenging to recommend to the Commissioners that arrangements should be made with proprietors of dungsteads among domestic housing to give up their claim to the manure in return for the Board of Police arranging for the cleaning out of closes.¹ Those proprietors not willing to take part in this voluntary scheme were to have the existing nuisance laws more stringently enforced with regard to their properties.² Initially more than fourteen hundred owners

1. PBM, 7 September 1843.

2. PBM, 9 November 1843.

were circularised, but the scheme was given a poor reception and only just over five hundred replies were received, of which three hundred and three were acceptances of the proposals.¹ Although at first it was decided to abandon the project, the Committee changed its mind and agreed to act upon the assents received.²

In spite of its inauspicious beginnings, the scheme worked so successfully that more and more proprietors began to take advantage of it and voluntarily hand over their closes and dungsteads for cleaning by the Commissioners. From the original three hundred in November 1843 the number had reached eight hundred and seventy-two by November 1845³ and over one thousand by January 1846.⁴ The result was a large increase in the employees of the Scavenging Department and also of the manure collected⁵. The Moore Street depot was found to be inadequate and the Police Commission was faced with the embarrassing problem of housing large deposits of dung, so creating a nuisance themselves while attempting to prevent others from doing so. Whenever the Commission investigated suitable sites for manure depots, they found themselves faced with a local population who were not at all anxious to live next door to a manure heap to which they had no access and therefore from which they gained no obvious benefit, and at least one attempt to purchase a piece of

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1. PBM 9 November 1843.
 2. PBM 27 November 1843.
 3. PBM 20 November 1845, 207.
 4. PBM 22 January 1846.
 5. Six additional men were employed in November 1845 and a further eight in January 1846 to perform the extra work. (PBM 20 November 1845; 22 January 1846).

ground had to be abandoned owing to the opposition of the inhabitants of nearby houses.¹ The Commissioners even considered the possibility of sending the manure down the Clyde in ships for storage beyond the city, a suggestion rejected at the time although it foreshadowed the day when barges and railway trucks were used to dispatch Glasgow's refuse away from the built-up area as quickly as possible.² Eventually manure depots were established beyond the town where they would cause the least possible offence while remaining reasonably accessible to the contractor's carts. These municipal dung depots were to remain for many years, regarded by successive police authorities as a necessary evil which they even defended to the extent that a clause in the 1867 Public Health (Scotland) Act, forbidding the storage of manure within built-up areas, expressly excluded the city of Glasgow from its operation.³

The Police Commissioners thus solved the problem of cleansing the city firstly by employing scavengers to collect the city's dung and refuse and sweep the streets while contractors carted the results of their labours away to the municipal dung depots, and secondly by attempting to persuade the proprietors of private courts and dungsteads to allow the cleansing authorities to perform the necessary work of cleaning and sweeping for them. With a small staff and inadequate financial backing, there was very little prospect of making much impression on the state of cleanliness

1. PBM, 14 and 28 March 1844.
2. PBM, 2 May 1844.
3. 30 & 31 Vict. c. 101, clause 16 (d).

or lack of it within the city, and at the most the inspector of cleansing can have had scarcely one thousand courts within his charge for cleaning. Nor was the service entirely free to the proprietors, for the Police Commission seem to have bargained a price for the work done with owners of buildings,¹ and once the bargain was struck and the work of cleansing commenced, the Commissioners were unwilling to allow the proprietor to change his mind and perform the work himself or through his own agents.² Nevertheless, it was an attempt to make cleansing a municipal rather than an individual responsibility so far as domestic housing was concerned and its abandonment by the Police Committee soon after taking over responsibilities for cleansing was to put this side of urban sanitation back for several years.

The other aspect of the Police Commissioners' work with regard to public health was that of nuisance removal. Here the Committee on Health and Vagrancy was the supervisory body, although as no staff were engaged to work to its direction, any supervision that took place had to be through the medium of police constables or scavenging officials. However, successful nuisance removal depended to a very great extent on detection, and here the resident commissioners and beat policemen were useful in keeping an eye open for possible sources of disease through neglected dungsteads or accumulations of foul water.³ In a city

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1. PBM, 8 August 1844.
 2. PBM, 15 January 1846, 256.
 3. PBM, 6 November 1843.

such as Glasgow these were not difficult to find, but successful prosecution of offenders might prove costly and protracted, and far too often no action under existing laws was possible.¹

In order to make their operations more effective, the Police Commissioners evolved a system for dealing with nuisances which they incorporated into the 1837 Police Act and further revised in 1843.² The system allowed for complaints to be made by the public directly to the police authorities. The procedure laid down was for the complainer to fill in a Form of Certificate from the Police Office, which then required the signature of a medical practitioner or ward commissioner that a nuisance existed within the limits of the Act which "ought to be removed as injurious to health or noxious to the neighbourhood..."³ The master of works or inspector of cleansing would then investigate the reports and, if the existence of a nuisance was confirmed, would obtain the requisite signatures as required by the Act. The proprietor was usually notified of this procedure, if he had not already been warned by the unusual attentions of the complainer and inspector of cleansing, and time was allowed for the matter to be put right voluntarily. If this should fail, the inspector could seize and dispose of any manure within forty eight hours of receiving back the signed Certificate, paying the money into police funds. In practice, and always where no

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1. PBM, 27 July, 1843; 7 March, 1844.
 2. 7 Wil. IV & 1 Vict. c. 48, clause 16.
 3. 6 & 7 Vict. c. 99, clause 153.

saleable commodity such as dung was concerned, considerable leeway had to be given to proprietors through ineffective machinery for enforcement.

From September 1842 the Committee on Health and Vagrancy revised their procedures so that anyone applying to the Police Office for Forms of Certificate who appeared to have reasonable grounds for complaint were supplied with them by the inspector of cleansing or clerk of police and then could themselves get the forms signed. The inspector of cleansing would proceed to investigate the nuisance once the forms had been returned and report back to the convenor of the Committee. A meeting would then be convened to decide whether the Act applied and whether the preliminary procedures, such as the forty-eight hours notice for removal of the nuisance, had been complied with so as to warrant it being enforced. The Committee would then give orders to the inspector to proceed as it directed.¹ These arrangements led to a number of prosecutions, but a nuisance had to be particularly offensive before the Committee could interfere. A manure depot at Tureen Street reported as 'not nearly so offensive as at former times, but a nuisance which ought to be removed' was not bad enough to warrant more than a warning to the overseer to abate the nuisance by daily sweepings of an open drain which was liable to become choked, the officers of the Commission remaining on the alert to see that this was punctually performed.²

The 1843 Glasgow Police Act went some way to remedying

1. PBM, 29 September 1842.
2. PBM, 25 August 1842, 253.

the difficulties in nuisance control. Clause 150 gave the magistrates powers to limit the time within which all dungsteads, ashpits and common necessaries were to be cleaned out on the report and inspection of the inspector of cleansing and other officials. This meant some sort of regular cleansing could be enforced before a nuisance became established. Clause 154 provided for the cleaning of closes and private streets under the supervision of the inspector of cleansing, so opening up the way for the taking over of private dungsteads discussed previously. Clause 152 was designed to prevent the accumulation of ashes, manure and rubbish near domestic housing or of stagnant water in cellars or vacant ground.¹

Although a very moderate piece of legislation when compared with the 1862 and later Police Acts; it did go further in public health clauses with regard to nuisances than any previous legislation. The practical effect must have been small, however, for there were no regular nuisance inspectors or sanitary officials to visit possible 'nuisance areas' and much of the Act was a dead letter through lack of means of enforcement. It was also drawn up with the idea that dung was the principal nuisance to be encountered. This took no account of the many small workshops set up among domestic housing practising offensive trades such as blood works for the extraction of prussian blue, tripe boiling, malt roasting and the tanning of hides, which once established could only be removed with great difficulty, and then only after the existence of a nuisance

1. 6 and 7 Vict. cap. 99.

dangerous to the health of the inhabitants in the vicinity could be proved to the satisfaction of a justice more naturally inclined to favour the industrious manufacturer.¹ The many natural water-courses of the city were becoming heavily polluted while the police authorities did little or nothing to prevent industrial and domestic effluent from being channelled into them.

Another potential nuisance in desperate need of proper control was the slaughtering of animals and the retail food trade in general. An investigation into private slaughter-houses in the city undertaken in July 1844 revealed that few of those investigated were satisfactory in all respects while many were so insanitary as to be a danger to health. The best had an open space to the front and piped water, whereas the worst, an establishment in Castle Street near the Royal Infirmary, was in a back court with a sunken dungstead beside and partly underneath, entirely encircled by domestic housing.² Under Clause 159 of the 1843 Police Act the Commissioners could bring owners of slaughter-houses before the magistrates, but it was always necessary for a member of the Health and Vagrancy Committee to attend the Court when the case came up for adjudication in order to explain the nature of the nuisance to the presiding magistrate.³ So far as the retail food trade was concerned the Police Commissioners attempted to detect the sale of unwholesome food or the use of deficient measures through

1. See above, pp. 21-23.

2. PBM, 4 July 1844.

3. Ibid.

instructing their inspector of markets to wear plain clothes when going about his work.¹ The prescribed penalties for selling such goods were confiscation and a fine, but the discovery of adulterated foodstuffs could prove an embarrassment to the police authorities through lack of any sort of storage facilities for goods awaiting the prosecution of their owners.²

The Police Commissioners were to some extent treading on new ground when dealing with nuisances. The law was being evolved by them as a result of their experiences and there was little precedent to guide them. They had not a fund of existing practice and experience upon which to draw for aid, as those authorities coming after them had, since sanitary science was in its infancy throughout the United Kingdom and advances made elsewhere might take some time to filter through to Glasgow. The most prominent theoretician on sanitation in Glasgow was Charles Baird, a lawyer with an interest in statistics and the management of poverty, who had been selected by Chadwick to undertake the investigations in Glasgow for the Report. Baird's ideas for the sanitary improvement of Glasgow, incorporated into his report in a pamphlet entitled 'Report on the Legal Provisions available in Glasgow for the Removal of Nuisances' included the setting up of a Board of Health with representatives on it from all the four burghs, with powers to be given to this Board to deal with slaughter-houses, pollution from factories and to prevent interment in crowded burial

1. PBM, 27 June 1844.

2. PBM, 11 July, 1844.

grounds. He also suggested that the position of dunghills and privies should be regulated and the time in which they were emptied laid down, and finally that a good water supply should be provided. His ideas on what constituted a nuisance also included delapidated houses, and he advocated the purchase of property in overcrowded areas so that properly constructed houses for the poorer classes could be built and ruinous tenements demolished.¹

Had Baird's ideas been systematically adopted and applied within the next few years, many of the troubles which later beset the city would have been greatly lessened in their impact. However, Baird was not, as far as we know, a member of the Police Commissioners and any influence he had in the city had to be exercised from the outside. This may not have been inconsiderable, for certainly many of his ideas occur in the proposals of the Commissioners, for example that of the creation of a Board of Health in 1842 when his reports were published along with the main Report, and he must have discussed his findings and conclusions with prominent colleagues and friends in Glasgow, some of whom probably sat on the Police Commission and may have been members of the Committee on Health and Vagrancy. The various clauses of the 1843 Act discussed previously² which regulated the emptying of dungsteads and placed private slaughterhouses at least under the reach of the magistrates may owe~~r~~ their inspiration to his ideas.

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1. Charles Baird, 'Report on the Legal Provisions available in Glasgow for the Removal of Nuisances'. Reports on the Sanitary Condition of the Labouring Population of Scotland, No. 5 (1842)
 2. See above, pp. 183-184.

However, the example of John Ure fifteen years later was to show that in effecting public health reform there could be no substitute for active participation in the day-to-day work of committees and other municipal bodies designed for the administration of public health measures, and that theory which was not backed up by argument and persuasion around the committee table lost much of its force. The Police Commissioners numbered many devoted men of considerable ability and foresight but none of the calibre of John Ure on the public health front, and from 1843 onwards much of the Commission's time was spent in preventing its involuntary demise. Few of the Commission's members were in fact to make the transition to the Police Committee of the Town Council after 1846 so that the experience they had managed to gather was lost for the time being to the cause of urban sanitation, and much ground was also lost in consequence. While in office, too much of their time had been taken up with the petty day-to-day problems of nuisance control and cleansing - the considering of numerous complaints against a variety of nuisances, the difficulties of finding manure depots and suitable means for the disposal of the city's refuse with increasing pressure being put upon them to improve their service - for the reforms outlined by them in theory to be put into practice effectively.

Nevertheless, although their performance in general sanitation fell far short of their good intentions, the Police Commissioners were in many respects in advance of their successors. The Committee on Health and Vagrancy

had ensured that nuisance removal would be regarded more in the light of a public health problem and less as a secondary branch of cleansing. There had been plans for 'an integrated health service for the urban area even if these had foundered on local prejudices,¹ and some attempt had been made to make cleansing a responsibility of the municipal authorities throughout the city. After the Police Commission had disappeared into past history, it was to be some time before their ideas were once more to be given a place of importance in the general sanitation of Glasgow.

1. See above, p. 66.

Chapter 9. The Police and Statute Labour Committee.
1846 - 1857.

After the passing of the 1846 Extension Act, the Police and Statute Labour Committee of the enlarged Town Council of Glasgow became the new local authority in charge of cleansing and nuisance removal. Four main sub-committees were convened to operate general police duties, these being Finance, Statute Labour and Paving, Watching and Fire Engines and finally Lighting and Cleansing. This latter took over the work formerly done by the Cleansing Committee and Committee on Health and Vagrancy, with responsibility for the lighting of the city added for good measure. Nuisance removal as such now became merely an aspect of the cleansing problem facing the Police Committee. The Cleansing Department itself, with all its staff, was kept in being and even enlarged by the addition of extra street sweepers and ashpit men, with the services of a clerk to keep the inspector of cleansing's accounts and write his books.¹

This increase in staff did not, however, indicate a corresponding increase in the work to be performed by the Cleansing Department, as might have been expected. Almost immediately upon taking office, the Police Committee began an investigation into the whole subject of the cleaning of the city, convening a sub-committee for this purpose whose job was to see what changes, both from a financial and operational standpoint, could be effected in order to improve the service provided while lowering the costs.

1. PCM, 28 December 1846, 56.

Experience had taught the Police Commissioners that these aims were not compatible, given the conditions existing in Glasgow so far as cleansing was concerned in the mid-1840s.

The system which the Police Committee had inherited from its predecessors had been moving in the direction of greater municipal involvement in the cleansing of private property within the city. The Committee now questioned the wisdom of this trend. It had no quarrel with the existing procedures for cleaning the public streets and courts, the work being shared between municipal scavengers and contractors, for this had proved to be the cheapest and most efficient scheme so far devised. However, the Committee was anxious to narrow municipal responsibilities for cleansing down to the lowest that could be reasonably expected from the point of view of direct cleansing activities. Attention was obviously directed towards the use of municipal scavengers in cleaning out private courts. Here was one area where a cut-back in time and money could be made without any appreciable deterioration in the state of the closes. As a result, the sub-committee reported back to the members of the Police Committee in the spring of 1847 that the practice of cleaning out private ashpits at public expense should cease at the end of the current financial year. In their opinion, the provisions of the 1843 Glasgow Police Act, under which the Police Committee operated, were ample to enforce the cleansing of private property without the expense of having public scavengers perform the work. The members also pointed out that to extend the same facilities over the enlarged city would cost

in the region of £10,000 per annum, whereas by merely compelling proprietors or occupiers to do what the law required them to do in any case, the Committee would save a considerable amount of the cost of cleansing operations.¹

The sub-committee did, however, see a small stumbling block in the way of an immediate return to the old system of trying to force proprietors to clean up their property. Many had relied on the Police Commissioners' scavengers for two or three years and were going to resist having to do the work for themselves. The sub-committee recommended that the proprietors should receive adequate warning of the change and be given every help by the Cleansing Department to find contractors to perform the work for them, these possibly being engaged on a district basis. The magistrates in this event should lay down the time and manner of removing the contents of dungsteads in particular localities. They finally recommended that the sale of street sweepings, which had been undertaken by the Police Commissioners, should be abandoned and the whole sold or let to contractors, who would then have the trouble and risk now suffered by the Committee of disposing of large quantities of refuse.² This last recommendation was adopted by the Committee but there is no evidence that the owners of tenement property were assisted in taking over once again the responsibility for cleaning up their courts. In formally adopting the sub-committee's recommendations, the Committee added a further resolution empowering the

1. PCM, 5 April 1847, 156-157.

2. Ibid, 152.

cleansing authorities to 'take all measures necessary for cleansing out ashpits and closes in particular localities when it is found that this cannot be adequately accomplished at the time by enforcing the powers of the Act'.¹ The Committee were possibly uneasy about the prospects of enforcing their reform when previous attempts had failed, particularly as typhus was reaching epidemic proportions. This resolution covered the police authorities against any occasion when a proprietor might prove elusive to track down or when it might be felt necessary for the Cleansing Department to perform the work in a hurry and look for the owner later.

In spite of the ominous increase in infectious disease, from the point of view of the Police Committee the system of cleansing now instituted was a considerable advance on that of the Police Commissioners. The latter had tried to work a dual system of cleansing, enforcing the bye-laws on those proprietors not willing to give up their properties for cleansing purposes to the authorities on the one hand, and taking over the cleansing duties for those unwilling to attend to these on their own behalf on the other. However, the number of closes cleaned out by the municipal scavengers had never been sufficiently large to justify entirely the expense and took no account of the many covered dungpits in the residential west end of the city. Nor had the work been performed to such a high standard that the ending of the system would mean an appreciable increase in

1. PCM, 26 April 1847, 172.

the amount of manure left in the city. The sanitary clauses of the Police Acts were so worded that it was logical to assume their implementation would result in a cleaner city at less cost to the local authority and ultimately to the ratepayers. The thinking of the Police Committee was in tune with that of the ratepayers in stressing individual responsibility for cleansing rather than collective, although as a local authority they were being urged by the sanitary reformers to undertake more duties rather than less in the cause of public health, if only because they were in the best position to prevent powerful individuals injuring their less powerful neighbours through the despoilation of their environment. Although not apparent at the time, the Police Committee was swimming against the tide in stressing the rights and responsibilities of the individual as against society in general. Their successors were to realise that progress in public health must be made through local authorities pursuing the public benefit at the expense of individual freedom.

So far as nuisance removal was concerned, the Police Committee carried on the system operated by the Police Commissioners over a number of years and authorised in the Police Acts. The larger part of their nuisance operations was directed against accumulations of dung.¹ The Police Committee continued the policy of trying to persuade proprietors to remove middensteads and replace them with

1. Of the seventy complaints against nuisances received by the Committee between 1846 and 1857, 24.3% were in connection with dungsteads and privies and 17.1% with offensive trades. (See Table I, p. 282 and Appendix D).

well-built ashpits and privies in back courts. They found their task easier by the loss in value of domestic manure which made rights of thirlage less profitable than ever before.¹ Unless a very good reason could be given, the authorities were now moving against commercial deposits of manure and ordering their removal and not even farmers were allowed to heap up manure in dungsteads and depots for later removal to the country, a practice they had maintained for many years.² Those dung depots which were obviously necessary, such as those at dairies and livery stables, were no longer permitted to remain without clearing out and cleansing for long periods at a time, and an offensive heap of rubbish would call out the inspector of cleansing, who might require extensive repairs and drainage to the structure of the dungstead before the owner was left once again in peaceful possession.

The Police Committee was also active against the pollution of the city's smaller streams and rivers,³ many of which were by now receiving the products of the large number of water closets being introduced into domestic housing, having suffered the effluent from industrial processes from the beginning of the nineteenth century. The whole question of smoke control was also tackled with some vigour, a Committee on the Smoke Nuisance being created to try and give bite to the existing laws in regard to smoke pollution in 1850. This aspect of nuisance

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1. PCM, 3 July 1848, 104.
 2. PCM, 19 June 1848, 92.
 3. See below, Chapter 13.

control is discussed in Chapter 13.

The Police Committee did experience one public health triumph where the former Commissioners had not managed to make headway in the face of public hostility. This was in the establishment of urinals and public necessities. The 1843 Police Act had introduced a clause authorising the erection of these within the city.¹ The whole subject was a delicate one and the Commissioners, well-intentioned though they were, came up against a wall of polite but firm hostility whenever a landowner, who had a handy plot of ground, was approached for the erection of a public convenience on it. A plan to erect three cast iron urinals at Glasgow Cross, where they were most needed, foundered as two were to be sited within six feet of the statue of King William III, which gave an opportunity to the Town Council to lead the attack against the scheme, understandable as at the time the Council was involved in the struggle to take over the police duties for themselves. The Cleansing Committee of the Police Commissioners pointed out that several prominent members of the Council were also members of the Commission ex officiis and had therefore had an opportunity to object before the project had come so near to fruition. The urinals had the appearance of lamp standards, a continuous jet of water would remove all smell and the Commissioners aims were the improvement of public decency and cleanliness, which all men having the good of the city at heart should advocate rather than obstruct.²

1. 6 and 7 Vict. cap. 99, clause 155.

2. PBM, 31 August 1846.

As a result of magisterial opposition, the Police Commissioners went no further in supplying the city with public conveniences before they ended their independent existence, and it was left to the Police Committee to try and overcome the scruples of the citizens. At first the new authority was as unsuccessful as its predecessor in office,¹ and although the Committee recognised the necessity for conveniences, it was four years before they were able to see a way round the determined opposition of the general public to having such an amenity on their doorstep. The answer was deceptively simple. If proprietors obstructed the local authority from using private land, then they must use public property instead. The Town Council owned the public streets, and in the summer of 1852 urinals began to appear, discreetly placed, throughout the densely-populated portions of the city. A rush of protests followed, to which the Police Committee replied that ever since 1843 attempts had been made to put this part of the Act into effect without success. Although everyone agreed urinals were necessary, no-one wanted to see one near their dwellings, 'but whenever a proposal was made to erect them on a site to which any sort of claim could be made as being to any extent private property, this has been urged in opposition to them; the party admitting...the conveniences were very necessary and much required, but contending that they must not be put down near them. The unsuccessful attempts thus made to erect urinals on private property reduced the Committee to

1. PCM, 1 May 1848, 44.

the necessity of erecting them in public streets'.¹

The innocuous appearance of the urinals and their superiority to what was previously provided, which was often nothing more than a nearby close or passage, soon took the heat out of the dispute. The Committee were co-operative in removing urinals which were badly placed or conspicuous to a more suitable site, but firmly resisted those requests for removal they considered to be obstructive or frivolous.² Ultimately the citizens came to accept and even demand public conveniences when these were not near at hand.³

As a local authority, therefore, the Police Committee continued the work of nuisance removal in the manner devised by the Police Commissioners with the important difference that the work was now performed as a function of the Cleansing Department and not a separate function of municipal administration. The practice of putting the cleansing of the city out to contract, with municipal scavengers performing the sweeping up of manure for the contractors to collect, was also continued, again with the important difference that public streets and thoroughfares only were attended to and all private property was made the responsibility of the owners. In addition, the Police Committee no longer had the work of sale and disposal of the city refuse, this being undertaken by the contractor.

1. PCM, 23 August 1852, 48-49.
2. PCM, 15 November 1852, 109.
3. PCM, 10 January 1853, 144.

A study of the Police Committee is particularly important as it provides an example of the workings of a cleansing and nuisance removal authority during a period of acute epidemic disease. Between the years 1847 and 1854 Glasgow suffered one serious typhus epidemic and two of cholera. The typhus epidemic of 1847 caused the gravest public health crisis of the century, for the city had only recently undergone an administrative reorganisation of considerable complexity with the creation of the new Parochial Boards and the replacing of the old Police Commissioners by the Police Committee of the Town Council. These two new and untried local authorities had had little time to co-ordinate their various public health functions before the typhus epidemic, which came in the wake of a trade recession and a large influx of Irish immigrants, tested their resources to the utmost. The reforms in general sanitation of the 1850s and 60s have to be seen in the light of the experiences gained by the local authorities in the period between 1847 and 1854.

The first obvious signs of trouble came through reports of increased vagrancy, chronic overcrowding in lodging houses and a rise in deaths from fever, including several constables.¹ At the time the Police Committee were engaged in giving up such control over private ashpits as they possessed which sufficiently alarmed the master of works to induce him to present the Committee with a report he had prepared as a result of a survey he had undertaken,

1. PCM, 17 May 1847, 181-182.

which was basically to acquaint himself with the problems facing the Cleansing Department through a more efficient application of the 1843 Glasgow Police Act.¹ The old Police Commissioners had recognised the unwillingness of proprietors to trouble themselves over the state of their tenements provided the rents were paid and their remedy, to do the work in the owner's place, was based on sound empirical observations. The Act was almost impossible to enforce since quite a small property might have several owners,² all of whom had to be traced before buildings could be repaired and essential sanitary reforms such as whitewashing of closes and common stairs and repairs to dungsteads and courtyard drains could be undertaken. The master of works, who had been employed by the Police Commissioners previously, could appreciate these difficulties better than the less experienced members of the Police Committee. He pointed out to his employers that, although the cleansing of closes was admirable and desirable, it was even more important as a first priority to ensure that the closes throughout the poorer districts all had a good water supply and efficient drainage to carry off the water once used. He pointed out that it was more important to enforce obligations on proprietors to drain and pave closes and put ashpits in proper order, to take down or repair delapidated buildings and undertake other essential structural operations rather than press for effectual cleansing of closes, which the Police Committee members were pursuing as a first priority.

1. PCM, 21 June 1847, 207-214.

2. Senex, Glasgow, Past and Present, p. 68.

This must have appeared a formidable programme for the sanitary improvement of the city to the members of the Committee who were faced with the immediate problem of coping with a threatened typhus epidemic. On the credit side they had as their aids the clauses of the Act which undoubtedly could force the unwilling proprietors to effect most of the reforms listed by the master of works, and the Police Courts to force their compliance; a staff of police constables under their superintendent, to whom were now added those in the former suburban burghs, all of whom could be enlisted in some way or other in the fight against dirt and disease; the inspector of cleansing and his small band of scavengers, whose weapons were little more than a birch broom, a shovel and handcart per man;¹ and as allies the four parochial boards and the directors of the Royal Infirmary, the latter institution being the only one with practical experience of dealing with typhus. On the debit side there was the increasing unemployment, vagrancy and destitution; the influx of large numbers of ill-clad and hungry Irish which every steam-boat from Ireland was depositing in the city;² the daily rise in the numbers of poor suffering from typhus; and the mass of overcrowded, dirty, delapidated and insanitary houses in which they lived, increased by the addition of the burghs, with all their attendant evils of dungsteads, piggeries, stagnant pools of water and every conceivable nuisance urban life could bring.

1. Sir J.D.Marwick, Glasgow, The Water Supply of the City, Appendix pp. 84-85.

2. City PBM, 10 November 1847, 204.

The three bodies responsible for coping with the emergency were the parochial boards, the Royal Infirmary and the Police Committee. The first two limited their activities to the medical aspects of disease control, the parishes locating the sick, providing medicines and arranging for removal to hospital where necessary, and the Royal Infirmary providing in-patient treatment for fever sufferers in the fever wards. The task of fumigating and whitewashing the houses of patients and generally removing all possible sources of infection in the shape of dung and refuse lay with the Police Committee. This had proved an impossible task to perform at the best of times but was now rendered urgent by the spread of a disease which many medical men considered was caused by those very piles of dirt left behind by inefficient cleansing on the part of proprietors and the local authority. From the point of view of the parochial boards, the fever victims thrown upon their mercies probably caught their disease in the first place as a result of ineffective cleansing, and as the parochial doctors were usually the first to be made aware of cases of infectious disease as they moved around their districts, they were not backward at criticising the Police Committee for the inadequate way in which cleansing duties were carried out.¹

To such criticisms the cleansing authorities had little to reply. The contention of the master of works that

1. The surgeon of the High Street district reported that Close 275 had 65 cases of fever out of a population of 105, the responsibility in his opinion lying with the pig-styes, lack of sewerage and general uncleanness. (City PBM, 26 March 1847, 82).

lack of water was fundamental to the uncleanness of the closes was soon borne out by experience. The best intentioned scavengers and contractors were finding it difficult to cope with the washing down of closes from which manure and refuse had been removed without water on tap. Every bit of manure had to be shovelled up manually and carted through narrow closes by barrow to waiting dung carts, where it once more had to be transferred manually and trundled through the streets of the city to the weighing machines and dung depots. Each of these operations had to be carefully performed if dung was not to be allowed to fall out of the barrows or get left behind in the original dungstead. A good wash-down with a hose was essential if the work was to be properly completed.

The police authorities therefore directed their attention very quickly to the problems of obtaining a good water supply. The difficulty lay in the means of enforcing obligations on proprietors to pipe water into closes. These were not compulsory but permissive.¹ Proprietors frequently installed a stand pipe in tenement courtyards as the property was then in greater demand, but there were still large numbers of tenements where there was no regular supply at all. Negotiations with the two water companies operating in Glasgow were begun but were protracted, owing to the reluctance of the companies to restore water to wells and stand pipes for which no rates had been paid. The only avenue open to the Police

1. The 1843 Police Act allowed for water to be taken into closes by permission of the Dean of Guild Court and the water companies, but included no compulsion.

Committee was the usual one of attempting to force the proprietors of tenement property to pay their water rent or open up wells, and in the meantime the fire engines were pressed into service for their hose-pipes to be used to scour down the closes.¹ It was not until October 1848, by which time typhus was giving way to cholera, that the Glasgow Water Company agreed to restore water to many of the wells deprived of it through non-payment of water rent,² and the great difficulties experienced by the Cleansing Department in obtaining a sufficient supply of water to carry out their operations efficiently during the epidemics of 1847 and 1848-49 were probably one of the most important factors in bringing about the decision by the Town Council to take over the supplying of water to the city.

Some time after the epidemic had been recognised as such, a joint committee consisting of the Town Council, the Police Committee and the parochial boards had been set up in order to co-ordinate the efforts to combat the disease. The Town Council's participation was limited to advice, administration of the committee and the raising of funds for the distribution of medicines and clothing to the destitute sick. Help was also arriving for the Police Committee from a less predictable quarter. District Sanitary Societies were being formed among the ratepayers, who were probably alarmed by the spread of disease in the poorer houses of their particular localities, and in July 1847 when typhus was at its height one of these, the

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1. PCM, 19 July, 1847, 247.
 2. PCM, 16 October 1848, 173.

Anderston Sanitary Society, offered help in cleaning up local closes and the Committee gratefully offered them the use of two men and water butts to assist them to clean out the tenements where disease had occurred or was likely to do so, the same facilities to be extended to other districts if they were requested.¹ The Police Committee also seem to have examined the system in Calton for improving the paving and drainage of closes and construction of dungsteads, and recommended that this should be followed in the western district.²

In addition to stepping up their cleansing and nuisance removal operations, or forcing proprietors to perform these, the Police Committee had more direct duties in regard to infectious diseases that had to be carried out. The precautions adopted at least since the epidemic of 1817 in Glasgow had been disinfection, fumigation and cleansing of infected dwelling-houses, the latter including a good coat of whitewash which gave the appearance of cleanliness if it had little practical use. As the parochial doctors were the officials most informed about the whereabouts of infected houses, a good liaison with the parochial boards had to be established in order to carry out this part of epidemic control. A book was kept at the district police offices in which reported cases of fever were noted and, on receiving notification of cases of typhus and later cholera, men would be dispatched to undertake the necessary

1. PCM, 5 July 1847, 229.
2. PCM, 22 November 1847, 374.

sanitary work.¹ This involved the employment of a staff of fumigators, who were additional to the scavengers and wheelers on the cleansing staff and do not appear to have been employed previously to perform this work.² Although this was probably intended as a temporary measure for the duration of the epidemic, the staff of fumigators was to become a permanent part of the police establishment.

In addition, the inspector of cleansing and the police constables carried out a thorough investigation of the common lodging houses of the city as part of the epidemic control measures and the Police Committee co-operated with the City Parochial Board in a vain attempt to limit the numbers of Irish arriving into the city, the inevitable scapegoats for the disaster.³ Although the sum total of their efforts probably achieved little in the way of halting the progress of infection, the procedures adopted were to prove invaluable when, after typhus waned a little, cholera arrived on the scene. Fortunately the local authorities had not had much time to discontinue their disease control apparatus, such as it was, before cholera was confirmed although already the Police Committee was showing signs of impatience over continuing fumigation of infected houses.⁴ The chief stumbling block as usual lay in who should pay for the expensive fumigating operations, the Police Committee or the parochial boards. Neither

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1. PCM, 19 July 1847, 247.
 2. Ibid.
 3. PCM, 22 February 1847, 113.
 4. PCM, 7 February 1848, 472.

wanted to accept this burden, although the ultimate responsibility rested with proprietors, from whom the expense could have been recovered technically. When the advent of cholera forced both the parochial boards and the Police Committee to the conclusion that the disinfection and fumigation of houses would be with them for some time to come, they combined to pass a resolution agreeing to co-operate in compelling proprietors to cleanse and fumigate the wynds, closes and houses belonging to them, a totally unrealistic gesture which was a dead letter from the start.¹ By December 1848, a mere two months after the resolution, the Police Committee was entering reluctantly into agreements with proprietors to cleanse their courts and dungsteads for them over a limited period,² while the City Parochial Board appears to have been so dissatisfied with the way the police authorities were performing the fumigation of infected houses that they appointed an inspector of cleansing for themselves from among their inspectorate to oversee the fumigation of the inside of cholera houses, leaving the external area of infected dwellings to be cleaned up by the municipal Cleansing Department.³

As a cleansing authority, the City Parochial Board was even less successful than its municipal counterpart. The parsimony of the Board was responsible for its failure, for it had been unwilling to pay a contractor the sum of

1. PCM, 16 October 1848, 173.

2. PCM, 11 December 1848, 16-17.

3. City PB Sanitary Committee Minutes, 15 January 1849, 7.

one shilling per apartment cleansed and fumigated and considered the same job could be undertaken by the Board's own staff for a sum of fourpence per apartment. A Sanitary Committee was appointed for the supervision of this novel function, a committee which remained in being long after the crisis was over and became the controlling body for the parish's medical service, and the sanitary inspector was instructed to cleanse and fumigate only those houses from which actual cholera victims had been removed to the parish hospital, as reported by the district surgeons.¹ Unfortunately the inspector found it impossible to square efficient performance of his allotted task with the instructions of the Parochial Board, and the numbers of houses fumigated were always in excess of those on the list maintained by the parish authorities.² As a result he was dismissed and the governor of the cholera hospital and city poorhouse in Parliamentary Road was given the task of overseeing the work, an unenviable job if he was to reconcile his new with his existing duties and perform both with the efficiency the occasion demanded.³

The lapse of time between the 1849 and 1853 cholera outbreaks was again too brief to allow the Police Committee to dismantle the methods of procedure which had been adopted, although for practical purposes these had been run down considerably. However a staff of fumigators had been maintained and under the direct instructions of the Town

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1. City PB Sanitary Committee Minutes, 12 February 1859, 20.
 2. Ibid, 19 February 1849, 26.
 3. Ibid.

Council the police authorities continued to cleanse the closes and external parts of houses where infection had appeared, while the Council at the same time let it be known that they expected the parochial boards to discharge their duty and attend to the cleansing and fumigation of the interior of fever houses.¹ The parochial boards instructed their inspectors and surgeons to report fever cases immediately so that measures could be taken to check disease before it increased to epidemic proportions, and also to report to the police authorities' inspector of cleansing any unwholesome dwellings and nuisances they might come across so that cases could be brought before the police courts.² This measure of co-operation ensured that when cholera reappeared late in 1853 the various authorities could once more take up their allotted duties without delay. From the point of view of the cleansing authorities, a large-scale effort was made to repair dungsteads, scavengers were employed in scouring closes and ashpits where necessary, the bill being then presented to the appropriate proprietor, and the river banks were cleaned up as far as possible.³ Fumigation and white-washing operations were intensified, the parochial boards looking after the interiors of houses and the police authorities the exteriors.

These operations were largely concentrated on the old town which everyone regarded as being the greatest danger

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1. City PB Sanitary Committee, 14 May 1850, 175.
 2. City PB Sanitary Committee, 22 August 1853, 304.
 3. PCM, 19 September 1853,

to the remainder of Glasgow as a source of infection, with the addition of the older parts of the suburban burghs now incorporated into the city. However the approach of cholera in 1853 caused publicity to fall on that area of the town usually immune from public health debate, the west end terraces and crescents. The stable area of almost every house possessed a dungpit, which varied in length from ten to eighteen feet and might be as much as ten foot deep, into which the dung, ashes and rubbish of the household and stable courtyard were shovelled and left to lie for periods of up to a year. An exposure of this practice by Professor Buchanan of the Medico-Chirurgical Society of Glasgow brought the issue of the causation of disease into debate at a time when cholera was upwards in every thoughtful citizen's mind. If, as Buchanan asserted, disease was caused by vegetable and animal substances undergoing decomposition, then the existence of dungpits was a major hazard to health on the very doorsteps of the wealthier citizens.¹ Medical opinion in Glasgow came round to the side of Buchanan and the police authorities were memorialised with a plan by which domestic refuse and stable manure should be removed from houses daily at dusk by municipal scavengers, a suggestion which would require a great deal of organisation and expenditure which the Police Committee was in no position to carry out at short notice.² However, the debate had brought out the important

1. R. Buchanan, 'On the Stable Nuisance in Glasgow', Glasgow Medical Journal, I (1853), 359.

2. Ibid.

point that dirt was not confined to the poorer parts of the city, although the less wealthy had fewer opportunities for disposing of their refuse at a sufficient distance from their homes to be unaware of its continued presence.

By the time the final epidemic of cholera of any major size broke out in Glasgow in the autumn of 1853, procedures for dealing with epidemic emergencies were fairly well established. Soon after the first confirmed case was reported in December 1853,¹ a joint co-ordinating committee consisting of the Town Council, the four parochial boards, the Police Committee and representatives from the Royal Infirmary was set up. The Police Committee, responsible for all the cleansing, fumigating and nuisance removal operations required during the epidemic, stepped up the staff of street sweepers, pressed the fire engines into service for the hosing down of back courts and began the customary fumigation and disinfection of the outsides of the houses from which cholera cases had been removed. Successful negotiations with the water companies were completed before the end of October 1853,² but by May of the following year, when cholera cases were still being reported sporadically, the water companies once more removed their taps from the streets and courts.³ The joint committee was disbanded soon after and the various municipal authorities returned to their accustomed roles in regard to public health.

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1. Barony Sanitary Committee Minutes, 22 December 1853.
 2. PCM, 17 October 1853,
 3. PCM, 29 May 1854, 433.

Epidemics, even when they followed each other in fairly rapid succession, were treated on every occasion as a visitation over which the city had no control, which was correct, and once gone might never appear again, although experience over a number of years taught the contrary. As a result, although procedures were adopted before and during an epidemic to cope with the sudden emergency and the same methods were brought out and used again to some extent the next time an epidemic arrived, there was no concerted policy of disease prevention. The Police Committee had no overall plan of campaign between epidemics for preventing another, apart from maintaining the rudimentary fumigation processes they performed. Cleansing and nuisance removal were carried out only once a street was in a state which required immediate attention or a nuisance had been neglected to a point which compelled action without delay. There was no policy laid down for nuisance prevention, nor a clear picture of what in fact constituted a nuisance in law. Before much progress could be made over nuisances and their prevention and removal, the whole subject had to be given a much greater importance.

As a preliminary, it was necessary to divorce nuisance removal from cleansing and tighten up the law with regard to the whole subject of general sanitation. The Police Committee and Cleansing Department had no men capable of formulating a forward-looking policy on the subject that went much beyond the routine requirements of day-to-day administration. Fortunately the period after the cholera epidemic of 1853 was relatively free from disease which

allowed the atmosphere of crisis to subside and enabled the Police Committee to take stock of the sanitary situation with relative calm. When a major piece of government legislation, the Nuisance Removal (Scotland) Act, forced a change of direction in cleansing and nuisance removal the Committee was in a position to rise to the occasion and set up a separate Committee of Nuisances,¹ distinct from the Cleansing and Statute Labour Committee which up to that time had administered the nuisance laws, an action which was to pave the way for the major advances in sanitation of the following decades.

1. PCM, 2 March 1857, 13.

The passing of the Nuisance Removal (Scotland) Act¹ in 1856 added a new dimension to nuisance removal in Glasgow. Up to the passing of the Act, the various cleansing and general sanitary operations performed under the heading of 'nuisance removal' had been carried out as a result of legislation contained in local Acts and general Acts were rarely used, even when applicable. However, the Nuisance Removal Act was too important to be side-stepped in favour of local legislation even by the municipal authorities of Glasgow, and a Nuisance Removal Committee was appointed soon after the Act became law to administer its requirements, thereby halting the process by which nuisance removal was tending to become a mere branch of the cleansing processes of the city.

The particular impact of the Nuisance Removal Act has already been discussed in Chapter 5.² It was not passed through Parliament without some opposition from both the municipal and parochial authorities in Glasgow, the latter of whom expressed the opinion that 'the greater part of the machinery necessary for carrying out sanitary improvement already exists in the staff of the Parochial Boards in all large towns, whereas were the duty devolved on Town Councils a new, an expensive and often a conflicting staff

1. 19 & 20 Vict. c. 103.

2. Chapter 5, pp. 112-117.

would require to be organized by the Town Councils'.¹

The Town Council concurred with the parishes in the belief that certain duties connected with sanitary matters were the duty of the Parochial Boards and not the municipal authorities, but in fact the stand taken by parishes and council alike was not based on a reasonable examination of the facts. So far as Glasgow was concerned, the Town Council through the Police Committee had already taken over many of the functions which in country districts were now to be performed by the parish authority, most notably nuisance removal, leaving to the parochial boards only the hard core of duties which were peculiarly theirs, such as the care of the destitute and sick poor and the relief of poverty. The existence of a large police establishment which included, in addition to the constables, a Cleansing Department with an inspector of cleansing and staff of scavengers meant that a new staff would not require to be organised as the parishes feared. The various officials of the Police Committee, in particular the chief constable, the master of works and the inspector of cleansing, could easily be designated inspectors of lodging houses or nuisances without creating new appointments and the staff of constables and scavengers could be employed in implementing instructions on the practical side of nuisance removal. The Act filled in large gaps

1. Gorbals PBM, 28 April 1856. It is ironical that the objection should have come from the Gorbals Parochial Board, a body noted for parsimony and the only parish authority in the Glasgow area with no indoor facilities for the sick poor and only a single parochial doctor.

in the public health legislation of the city which had remained unaltered since the Police Act of 1843.

The most important practical innovation brought in through the Act was the definition for the first time of what constituted a 'nuisance'. The five categories defined in the Act¹ provided a yardstick by which the local authority could seek out nuisances, knowing that there was an infinitely better chance of a successful prosecution as a result. The categories included foul watercourses, ditches, cesspools and privies; animals kept so as to be a danger to health; deposits of rubbish or dung within fifty yards of dwelling houses or offensive and injurious to health; defective structures with regard to buildings which might render them unfit for human habitation; and any work, trade or business offensive or injurious to the neighbourhood. The procedures for dealing with nuisances were similar to those already in operation, these being detection, the providing of a certificate by the parochial doctor, the sending of a notice to the proprietor informing him of the existence of a nuisance and suggesting ways in which this could be abated, and prosecution as a final resort if he chose to ignore these warnings. The difference with previous practice lay in the more precise manner in which the laws were framed, which allowed less chance of escape to the defendant. Even so, penalties were light and months of investigation leading to prosecution might result in no

1. 19 & 20 Vict. c. 103, clause 8 (a) to (e).

more than a £2 fine.¹ The weakness of the Act lay in failing to prevent the establishment of nuisances in the first place, the procedures prescribed being only operable once a nuisance cognizable as such actually existed.

The passing of the Act meant an immediate reappraisal of the nuisance removal services performed in Glasgow. By the terms discussed previously,² the Police Committee found it necessary to become the local authority provided for in clause 4 in order to forestall the parochial boards. This was not done without some opposition from Barony and Govan parishes.³ These two found themselves in the curious position of being themselves local authority under the Act for the landward portions of their parishes and having to set up a committee and staff to operate the Act for these areas, while the districts of the parishes within the municipal boundaries were out of their control, although their medical officers had to provide the medical certificates necessary to implement prosecutions under the Act. Reliance on the parochial doctors for the abatement of nuisances was lessened after the passing of the 1862 Glasgow Police Act,⁴ which went beyond the Nuisance Removal Act in its public health provisions and assembled a medical staff controlled by the Police Board to provide medical evidence for nuisances.

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1. Clause 249 (1) of the 1866 Glasgow Police Act, ten years after the Nuisance Removal Act, still only provided for a fine of 40/- for the initial offence.
 2. See above, pp. 114-116.
 3. Barony PBM, 14 May 1857.
 4. 25 & 26 Vic. c. 204. This Act renamed the Police Committee the Police Board of Glasgow.

The practical application of the Act by the Nuisance Removal Committee was at first a process of trial and error until the workings of this unfamiliar piece of legislation should be mastered by the Committee members. The ideas of what constituted a nuisance brought in through the medium of Clause 8, were probably of greater theoretical impact in moulding public opinion as to what should, or should not, be tolerated in the way of unwholesome living conditions than practical impact in cleaning up the city. There were severe limitations on the Nuisance Removal Committee's prospects of success, particularly with regard to offensive industries. As the Committee members themselves recognised,¹ the recognition of certain trades and industries and of buildings unfit for human habitation as nuisances resulted 'in an interference with private business and with heritable property, and requiring in many instances extensive and expensive structural and other operations'.² These were to be dealt with through the Sheriff Court and not the Police Courts which added more authority to the prosecution's case and lessened the possibility of a prominent manufacturer with considerable financial standing in the city using his position to influence any case against him. Prosecutions for causing a nuisance through an offensive trade were not new but there had been little effort in the past to control the activities of workshops and factories with regard to the wellbeing of the neighbouring inhabitants. As the Table

1. PCM, 16 February 1857, 486-488.

2. Ibid, p. 486.

on page 282 indicates, there were only eighteen complaints against offensive industries investigated by the two previous local authorities, the Police Commissioners and Police Committee, over a period of fifteen years from 1842 to the establishment of the Nuisance Removal Committee in 1857. Smoke-abatement had been the only nuisance pursued with anything like determination, through the Smoke Abatement Committee. The Nuisance Removal Committee was responsible for a sharp increase in the number of offensive industries investigated, a total of thirty-four complaints being recorded as a result of investigations by the police constables and inspector of cleansing or other officials in the six years during which the Committee was local authority.

However, under the terms of the Nuisance Removal Act the local authority had to wait until an industry became positively classified as a nuisance cognizable under the Act before a move could be made towards abating it. The essential step of preventing offensive industries from becoming established among centres of population in the first place had to wait until the passing of the 1867 Public Health (Scotland) Act.¹ Over-hasty prosecutions might, and occasionally did, fail, leaving the Nuisance Removal Committee to pay the bill.² In spite of the definitions contained in the Act, there was still a degree

1. 30 & 31 Vic. Cap. 101.

2. This happened in February 1861, when a case against an unwholesome dwelling at 128, North John Street was found not proven and dismissed with costs of £14.0s.5d. against the local authority. (NRCM, 19 February 1861).

of doubt in practical terms as to what constituted a nuisance. Too much depended on judgements made by individual officials who might be swayed by considerations beyond those immediately relevant to the particular case. On considering a complaint against an asphalt works in Port Dundas, the medical officer of the Barony parish who was required to give a medical certificate, reported after his examination that 'although unpleasant effluvia are emitted in the processes carried on, they are not worse than those from the other chemical works in the neighbourhood and that he could not certify the works to be a nuisance'.¹ The Nuisance Removal Committee sharply requested him to visit the works again and judge them on their own merits without regard to the surrounding works, considering carefully whether or not they constituted a danger or injury to the health of the local residents.²

The granting of medical certificates was in fact a weak link in the chain of events leading up to successful prosecutions. The parochial doctors had not sufficient stature to stand up to determined manufacturers in their areas and were not necessarily qualified to judge whether a particular smell or vapour was a positive danger to health. The introduction of a Sanitary Department headed by a medical officer of health with a formidable reputation as a man of science was first necessary before offensive industries or private property could be attacked where these were recognisably nuisances.

1. NRCM, 19 February 1861.

2. Ibid.

Even where prosecutions might be successful, there was little to stop a recurrence of the same nuisance a few months later. The Smoke Abatement Committee had already discovered how little attention was paid to their efforts to prevent smoke nuisance in Glasgow. The Nuisance Removal Committee was to find the same circumstances with regard to nuisances. Fines were so insignificant and prosecutions so protracted that it was not difficult to ignore an order to abate a nuisance. There were several instances of persistent complaints against the same industrial premises, Wilson's Chemical Works in Tradeston¹ and Hugh Baird's Malt Works at Port Dundas being frequently the subject of prosecution to name only two.² Offenders of importance had to have their cases brought before the Sheriff Court which inevitably meant delays, whereas cases brought before the Police Courts were dealt with in a summary manner. As a result, the Nuisance Removal Committee found it considerably easier to deal with minor nuisances, such as overfilled privies or badly constructed dungsteads, which could be dealt with through the Police Courts and did not involve a confrontation with an important industrialist.

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1. In 1860 chemical waste from Wilson's works was discharged into the public sewers, mixed there with effluent from an oil and grease works, the mixture then being heated by water from other industries discharging into the same sewers and the evil-smelling black substance resulting discharging into the Clyde, causing a smell to rise into the houses connected to the sewer. The tracing of this pollution forms an interesting example of sanitary detection work. (NRCM, 20 April; 10 September 1860).
 2. Baird ultimately threatened to remove his works to Leith where industrialists received more favourable treatment than in Glasgow. (CHM, 1 May 1871, 202).

In dealing with lesser offenders under the nuisance laws the Committee generally made use of the Police Acts rather than the Nuisance Removal Act. The Committee could operate through either Act as seemed most suitable for the particular occasion so that where industrial or commercial premises were concerned it became general to use the 1856 Act while the 1843 local Act was sufficient for dirty stairs and choked drains. Here a visit by the master of works or inspector of cleansing might be sufficient to put matters right without recourse to the courts.¹

The clauses in the 1856 Act² dealing with houses unfit for human habitation permitted easier and quicker action against delapidated dwelling houses than had been the case previously when a case had first to be proved before the Dean of Guild Court before the house could be shut up and demolished. Much of the worst property in the old city had been demolished in 1848 and 1849 by the Town Council, but by the late 1850s the remaining properties in old Glasgow and large areas of Calton, Anderston and Gorbals were beginning to reach a point of neglect which rendered them beyond repair. There was plenty of scope for using the housing clauses of the 1856 Act but individual nuisance inspectors might find a property they considered contravened the regulations to be beyond the remit of the Committee if some effort, however mean or haphazard, was being made to keep it 'fit for human habitation'.³

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1. NRCM, 20 March; 20 April; 24 August 1860.
 2. 19 & 20 Vict. c. 103, clause 8 (a) to (e).
 3. NRCM, 16 and 17 December 1860.

The Committee pressed ahead with the whitewashing and cleaning up of domestic housing, using the Cleansing Department and police in order to perform the work, and by a mixture of persuasion and direct action large numbers of houses were cleaned in this manner. The houses chosen were usually those where fever cases had been reported or where the extreme dirtiness of the tenements made them objects of special attention by the parochial or police officials. The rise of fever cases in 1860 and 1861 led to a survey in the City parish of infected and dirty houses and this unwanted visitation by the parochial officials apparently 'stirred up the inhabitants to increased cleanliness' to the extent that only forty or fifty houses in the area needed to be cleaned at the public expense, this being 5% to 8% of the total visited.¹ A report in May 1862 on the numbers of houses cleaned and whitewashed by the police since the beginning of the year showed that of 4,628 cleansing operations performed or ordered to be performed, only 50 had been done by the police, 1,061 houses and 2,799 passages, closes or stairs having been cleaned by their occupiers. There remained 511 houses and 207 closes still awaiting the scrubbing brush.²

Another major theatre of operation by the Nuisance Removal Committee was the attempt to replace all open middensteads among domestic housing with privies. The practice of a few years previously, when the courtyard dungstead was a natural accompaniment to a tenement of

1. NRCM, 17 December 1860.

2. NRCM, 9 May 1862.

dwelling-houses, was beginning to give way to a system of ashpits for ashes and general domestic rubbish and privies for excremental refuse, attached to each tenement or court. At the same time, the police authorities were attempting to persuade proprietors to causeway courtyards to make them easier to keep clean, although this was to be criticised later when paving or ashphalting of courts was shown to be more hygienic.¹ The privies frequently contained several seats and occasionally separate privies for males and females were provided. In addition to privies, cast-iron urinals were sometimes introduced among dense housing.²

The introduction of these conveniences was undoubtedly an improvement on open middensteads, but the number of conveniences bore little relation to the number of people they were meant to serve and as late as 1869 there were areas of the old town around Gallowgate where a single privy served a large population. A reporter of the North British Daily Mail in the autumn of 1869 found forty-seven houses in the Blackboys Close area of Gallowgate with no privy accommodation at all.³ The establishment of privies, ashpits and urinals as the principal means of excremental and refuse disposal necessarily presupposed an efficient removal service and a constant supply of water. The former could not really be said to exist and the latter, though considerably improved since 1859, depended to a great extent on satisfactory means of distribution to be effective and

1. North British Daily Mail, 23 December 1869, p. 4.

2. Ibid.

3. Ibid.

all too often appliances were faulty and taps and pipes broken, interrupting the supply of water.

Nevertheless, the Nuisance Removal Committee was right in regarding the middensteads as a nuisance to be abolished even if the alternative was less than perfect itself. Clause 11 of the Nuisance Removal Act required landlords to provide sufficient privy accommodation and this was used to enforce their erection, although the word 'sufficient' gave no clear guide as to how many seats should be provided for a given population. The Committee initiated a programme of enforcing the statute district by district, the first step in the process being the issuing of notices to all proprietors possible in the selected district, instructing them to get in touch with the master of works, who would advise them on suitable types of privies and then oversee their construction. The first district chosen in March 1860 was the Bridgegate, and the success of the operation, no prosecutions for non-compliance being needed,¹ prompted the Committee to send similar notices to landlords in the eastern, northern and western divisions of the city in 1861.² Although by 1862, when the Nuisance Removal Committee gave way to the Sanitary Committee, courtyard dungsteads could still be found in many of the older parts of the city, by the early 1860s they were becoming less and less common as a means of refuse disposal for domestic housing. The installation of middens and ashboxes in public access ways was now considered inappropriate in all

1. NRCM, 20 March 1860.

2. NRCM, 28 June 1861.

circumstances except where attached to stables and under proper supervision, and those existing were ordered to be removed and replaced by proper privy accommodation.

Nuisance removal had therefore become once more a separate and distinct sanitary function, although working in co-operation with the general cleansing of the city by the Cleansing Department. The cleansing duties worked out under the Police and Statute Labour Committee had been continued without change during this period, and indeed up to 1868, the main work being performed by contractors who removed the street sweepings collected by the city scavengers and disposed of them after collection in the Police manure depots. During the period from the formation of the Nuisance Removal Committee to the final establishment of a Cleansing Department with sole authority for the city's cleansing in 1868, the work was performed by the one contractor, John Drummond, which gave a certain continuity to the working of the city's cleansing.¹ The work of emptying privies and ashpits, of cleansing dirty houses and whitewashing and fumigating fever dwellings was performed by the scavenging staff of the inspector of cleansing working in co-operation with the Nuisance Removal Committee.

Although cleansing remained much as before, nuisance removal had taken on a different aspect under the Committee and had extended its sphere of operations to deal with offensive industries and houses unfit for human habitation, areas of public health where previous authorities had

1. Drummond was first appointed in May 1850. (PCM, 14 May 1850, 303).

hardly dared to venture. Although not entirely successful owing to the formidable nature of the opposition to any prosecution against an offensive industry, a valuable precedent was set and maintained by the Committee in persisting in following up complaints against such trades, even to the point of taking offenders to court. A more successful drive was made against courtyard middensteads and dirty houses, although in the latter case once the attention of the police and parochial authorities was turned elsewhere, the householders no doubt relapsed back into their old, unclean habits, though possibly there was some gain made, however small, towards the improvement of domestic cleanliness among the poor as a result of the authorities' efforts.

However successful in a modest way the Nuisance Removal Committee might be, there were sufficient drawbacks for it to be no more than a stop-gap until legislation brought in by the Town Council should have caught up with more advanced ideas in urban sanitation. The Committee's powers were too narrow to allow for the initiation of policy. The members could merely operate to fulfil the terms of the Act, and there was no staff directly responsible to them through which decisions could be carried out. During the six years in which the Committee was local authority, no serious public health crisis, such as an epidemic, arose to disturb the pace of public health administration and jolt it into more adventurous paths, and left alone, the Committee might well have jogged along for several years, acting as a remedial body for the removal of nuisances once

detected without providing much in the way of a real advance in sanitary practice. In the event, the Nuisance Removal Committee was to become the immediate ancestor of the Sanitary Committee, a body which was to prove the real break-through in urban public health in Glasgow and form the dividing line between true municipal involvement and a mere holding operation against the enormous weight of dirt within the city, as the Nuisance Removal Committee and its predecessors had largely been.

Responsibility for this metamorphosis lay principally with one man, John Ure. It is difficult to explore the development of public health administration in Glasgow without sooner or later coming across the influence of this remarkable man, who is nevertheless very little known except as a later Lord Provost at the time of the building of the present City Chambers. John Ure was a master baker and a man deeply interested in all aspects of urban sanitation. He had been one of the original members of the Nuisance Removal Committee, possibly his first acquaintance with urban public health problems, and he appears to have used his time spent on Committee business to formulate ideas on how a body like the Nuisance Removal Committee might best be put to work to bring about vital sanitary reforms. In November 1858 he became Chairman of the Committee and by April of the following year he had developed his theories to a point where he could lay them before his colleagues. They were sufficiently impressed to vote the sending of a deputation to visit the major cities of England and Scotland in order to report on the

ways their local authorities tackled public health problems with a view to formulating a co-ordinated policy for the city of Glasgow.

The deputation consisted of Ure himself, the chief constable, the master of works and another councillor, James Moir. Moir's connection with public health went back without interruption to the days of the old Police Commissioners, but although a tireless worker in the cause of better urban sanitation, he lacked the perspective that Ure was to bring to the subject and concentrated more on remedying specific evils that had come to light.¹ His experience must have been invaluable to the party, which made its journey during the summer of 1859 and reported back in the autumn. However the Report, in which Ure presented a detailed examination of their findings, was not given to the Nuisance Removal Committee until January of 1860.² Unfortunately this extremely important document has been lost, and although a number were printed and circulated efforts to find an extant copy have not been successful. It has been possible to reconstruct parts of the Report from the Minutes of the Nuisance Removal Committee and other sources, and this reconstruction forms Appendix A at the end of Volume II of this thesis.

In his Report, Ure lays the blame for much of the insanitary state of the city on the nature of working class housing, which piled small dwelling-houses one on top of

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1. PBM, 20 August 1846, 409.
 2. NRCM, 30 January 1860.

the other without permitting adequate ventilation, living space or privacy. He was impressed with the cottage-type homes he saw in England which gave to every family a front door and generally permitted a certain amount of fresh air and sunlight into the rooms.¹ Ure was not the first or last Scottish sanitary reformer to point out the evils of high density buildings with a common access stair,² but his recommendations on improving them were an uncomfortable reminder to the Town Council that little had been done in the way of improving building regulations since their abortive attempt to obtain a bill in 1850,³ the immediate cause for which had been the erection of a new tenement in the Drygate which perpetuated all the insanitary features of the ancient structure it had replaced. The councillors were therefore predisposed to pay attention to Ure's aims, which at this stage were to regulate new buildings so that at the very least each room should have certain minimum space requirements and a window to let in light and air.

With regard to sanitation, Ure advocated that privies and ashpits should be constructed in sufficient numbers to provide adequate facilities for a given area, and to approved designs. This was already allowed for in the various Acts through which the Nuisance Removal Committee operated, but had not been implemented sufficiently thoroughly to effect a measurable improvement. Far more

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1. Ure returns to the same theme in his Report of the Deputation appointed by the Board of Police of Glasgow to visit the City of Bristol of 1869.
 2. Both Russell and Gairdner in their writings as medical officers of health emphasise this.
 3. See above, pp. 111-112.

important, he wanted a system of compulsory cleansing of the insides of working class dwellings, the actual rooms to be whitewashed by the occupiers and the lobbies and access stairs by the owner or factor of the property. To ensure that the work was done even in the type of tenement where tenants 'flitted' too frequently for this to be practicable, he suggested that the owner or factor be regarded as the occupier of houses whose annual rental did not exceed £6 per annum, by this figure including all the very poorest homes.¹ This was an innovation which attacked the final right of a man to be dirty in his private dwelling. If it was arbitrary in its disregard of human rights and dignity, the intention at least was honourable and aimed solely at improving conditions among those most in need of a lesson in domestic cleanliness. Attempts to persuade the working classes to clean up their houses either by example or by moral force had been tried previously with some limited success,² but the idea of compulsion was novel and repugnant to some members of the Committee, and when this suggestion came to be voted on before approval and insertion in the official Minutes, it was responsible for the only dissention.³ Nevertheless, compulsory cleansing found its way into the 1862 Glasgow Police Act through clause 258.

Ure's Report also contained suggestions for making the provision of a water supply to the tenements compulsory,

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1. NRCM, 30 January 1860.
 2. See above, p. 221.
 3. NRCM, 30 January 1860.

and a recommendation that the entire night soil and ashes of the city should be the property of the authorities instead of private individuals, who must then have the responsibility of removing it, an essential prerequisite to cleansing reform. His most important suggestion was for the appointment of a medical officer of health and sanitary staff, to be directed by a Sanitary Committee.

Ure's fifteen suggestions, condensed into this compact Report, provided the Nuisance Removal Committee with a workable and forward-looking sanitary plan. With the backing of James Moir and the two senior officials of the Police Committee, the chief constable and master of works, it was not a scheme to be examined and laid on one side, the fate of so many plans. As a result, the Report resulted in the framing of a new bill for Glasgow which incorporated the recommendations as the core of the public health clauses, with the exception of that concerning the water supply which had to wait until the Glasgow Water Works Amendment Act of 1865. The bill passed through Parliament and became law as the Glasgow Police Act in 1862,¹ the old Police and Statute Labour Committee re-appearing as the Police Board of the Town Council of Glasgow, and a Sanitary Committee, as recommended by Ure, receiving the powers of local authority to administer the public health clauses of the Act. The Nuisance Removal Committee was disbanded, its members forming the first Sanitary Committee of the Police Board of Glasgow.

1. 25 & 26 Vict. c. 204.

The 1862 Glasgow Police Act, the first piece of sanitary legislation passed by the Town Council since 1843, thus owed much to the energy and foresight of one man, although Ure in his turn must have owed a considerable debt to his colleagues on the deputation and the Nuisance Removal Committee, the former in particular having special skills to bring to the framing of the Report upon which the legislation hinged. Nevertheless, the Report bears the unmistakable mark of Ure's methodical approach to sanitary problems. Over the next few years he was to produce other similar Reports with their summing up in the form of suggestions, collectively forming a blueprint for the infant public health service in Glasgow.¹ His activities in the cause of urban sanitation illustrate how important the determined and far-sighted individual could be in bringing about sanitary reforms in this period, particularly when he had won and then held the respect and confidence of his colleagues.

1. These included his Statement by Mr. Ure for the information of the Board of Police on the Sanitary Scheme and the Medical Officers of Health, 1865 and the Report of the Deputation appointed by the Board of Police of Glasgow to visit the City of Bristol and various towns in England as to Sanitary Matters, 1869. He was also a member of the Sanitary, Cleansing, Fever Hospitals, Smoke Abatement and many other committees connected with public health.

The 1862 Glasgow Police Act, in addition to being a significant advance in itself in public health legislation, ushered in a decade of almost continuous progress. Beginning in 1862 with the passing of this Act, it was to see the creation of the first Sanitary Department, the appointment of a medical officer of health with a staff of district medical officers working to his direction, the establishment of the first municipal fever hospital, the setting up of a Cleansing Committee divorced at last from statute labour, and the gathering together of sanitation, cleansing and the municipal medical services into one department under the direction of a Committee on Health in 1870. The decade was to end in 1872 with the appointment of the first full-time medical officer of health.

Perhaps the most important aspect of this decade is the way in which municipal involvement in public health became less concerned with cleansing and more with the medical aspects. The very name of the Sanitary Committee was a departure from the old idea that the local authority was chiefly concerned in removing nuisances and cleaning up the streets of the city. The appointment of a medical officer of health to direct the small Sanitary Department was another significant step away from the narrow definition of the police authorities' responsibilities as cleansing agents to a broader outlook, for he brought a medical training and experience into a field where formerly the

master of works and inspector of cleansing were the chief advisors on public health problems. Inevitably their opinions veered towards their own fields of public health administration, leaving only the police surgeon of the central district to redress the balance when specifically called upon to give advice.¹ Hence the appointment of a medical officer of health gave a more complete picture of the issues involved than had been available to the authorities hitherto.

This change of emphasis did not in any way reduce the importance of cleansing and nuisance removal as a branch of public health improvement. In many respects it enhanced it by providing sound, scientific reasons for even the most insignificant activities of the Sanitary Department. Nuisance removal in its widest interpretation remained the core of the Department's work, whether in the old sense of removing dungheaps or in the newer sense of preventing overcrowding in small houses. There was another side to the coin so far as the progress of municipal medicine was concerned. If urban sanitation had been given an increased importance by being more closely allied to medical factors, the advance of public medicine relied to a very great extent on the routine of nuisance removal to maintain the work of the Sanitary Department when disease was at a low point. Many of the more important medical duties of the authorities could only be initiated when an epidemic was in full swing, when the full-scale epidemic control operations

1. NRCM, 21 February 1862; SCM, 3 February 1863. Under the Police Committee, medical opinion was rarely sought.

allowed for in the 1862 Act could be put into effect. These required the Magistrates' Committee of the Police Board,¹ on the advice of the medical officer of health, to publish emergency regulations which would then be in force for six months unless renewed again on the advice of the medical officer. Reforms such as house-to-house visitations and the setting up of the fever hospital were not possible without these regulations, and when they were not in force the Sanitary Department operated its disease control programme through the medium of nuisance removal. It was fortunate in the long run for the progress of public health in Glasgow that an epidemic broke out soon after the Sanitary Department had been set up, for otherwise there was a grave danger that the Department might settle down to work purely as a nuisance control authority with little scope for branching out into the control of epidemic disease. The Nuisance Removal Committee, in spite of clauses giving it wide powers for setting up dispensaries and other medical facilities, had had no cause to put these into operation and had therefore not made significant advances even in nuisance removal. The typhus epidemic of 1864 made quite certain that urban sanitation was not going to stand still under the Sanitary Committee, and the emphasis was rapidly changed from nuisance removal to nuisance prevention, a significant move.

To ensure a change of direction from the start, Ure drew up suggestions for the appointment of a medical officer

1. The Police and Statute Labour Committee was renamed the Police Board of Glasgow in the 1862 Act.

of health, in which he outlined his plans for the running of a Sanitary Department.¹ Much of the Report deals with the medical side of public health administration, but Ure nevertheless had a great deal to say on general sanitation, particularly with regard to the poorer districts, and introduced the novel idea that the poor themselves should be involved actively in the improvement of the urban environment. In Ure's words, 'it may advance the objects of the Sanitary Committee that the medical officer take steps to inform and enlighten the people, more especially the humbler classes, as to their duties. It should be the aim of the staff to carry the good feeling of the community along with them to show them that the end in view is their personal good. Coercive measures should only be resorted to in important cases and when persuasion has failed'.²

Ure's enlightened views were a reminder that the whole object of public health was to bring better conditions and increased prospects of a healthy life to all citizens, rich and poor alike. Too often in the past public health measures had been seen as a means of protecting the rich against the diseases engendered by the poor through their dirty and dissolute habits. The poor were nonetheless also citizens, even if their way of life and ethical standards were in marked contrast to those of their better-off neighbours, and if by education and example they could be made to improve their living conditions voluntarily, half the battle

1. The full Report, which was engrossed in the Minutes and not printed at the time, forms Appendix B.

2. SCM, 23 December 1862.

for a better environment would have been won.

Ure's plans for the new Sanitary Department revolved around the office of the medical officer of health. He regarded him as the spear-head of an organisation which should attack epidemic disease from all sides in order to bring it under control. The role of nuisance prevention and removal in this campaign was vital. In Ure's opinion, this formed the first move in the drive to prevent epidemic disease. A sanitary inspector to command this wing under the overall supervision of the medical officer was therefore essential. His job would be 'to deal with material nuisances, discovering their existence and procuring their abatement by a system of persuasion rather than coercion'. Unlike the medical officer, it was not his job to anticipate disease and act in advance to prevent its occurrence, but merely to undertake such actions when required to do so as would minimise the spread of disease through the medium of nuisances.¹

Ure was, of course, merely an amateur in the field of sanitary science and it was fortunate for him that no other person with equal enthusiasm but opposing views sat upon the Sanitary Committee, for his colleagues accepted his leadership without question. Nevertheless, it was of the utmost importance to select the right man for the office of medical officer of health. The man appointed needed to possess dedication to the cause of improved public health in the city, considerable professional standing and good administrative ability, not to mention patience and tact,

1. SCM, 23 December 1862.

if he was going to drive a sometimes apathetic Police Board to dip into its purse for the purchase of equipment or the employment of staff he felt essential for his purpose, or if he was to be successful in persuading his employers to put into operation plans to which they might be opposed or felt were too expensive. In addition, he would have to deal with manufacturers who permitted their chimneys to smoke, their liquid effluent to pollute the sewers and water-courses of the city and their industrial processes to cause annoyance to the local inhabitants.

The Sanitary Committee was fortunate in the choice of Dr. William Gairdner, a physician of considerable standing within the city and professor of medicine at the University of Glasgow. His appointment in January 1863 was followed soon after by that of a sanitary inspector.¹ The five district police surgeons were appointed medical officers for their districts, with duties resembling those performed by the parish doctors with regard to the certification of nuisances. With the addition of a clerk, the new Sanitary Department now numbered eight, six of whom were doctors, while in addition to this small staff of permanent officials the chief constable, the master of works, the assistant police superintendents of the various districts and the inspector of cleansing were all designated inspectors of nuisances, together with fourteen lieutenants of police.² Auxiliary sanitary help was also given by the staff of the Cleansing Department who undertook the fumigation and white-

1. SCM, 17 March 1863.

2. SCM, 14 November 1862.

washing of infected houses. The overall number of men engaged in sanitary work was therefore much larger than the size of the permanent establishment would suggest. However, the work of the latter was considerably limited by the fact that much of the practical work to be performed had to be carried out by men not under the direction of the Sanitary Department but of the cleansing authorities.

An ominous increase in the incidence of typhus and smallpox in the summer of 1863 ensured that the newly formed Sanitary Department did not drag its feet in commencing operations. Ure had suggested that statistics should be used as a means of finding out where particular diseases were most liable to occur. Gairdner began the collection and collation of statistical information on mortality from the registrars without delay,¹ and used the resulting information to pin-point those fever districts which required particular attention from the sanitary authorities. As an epidemic looked imminent when he first began his duties, any comprehensive plans for the long-term development of the sanitary services he may have had when accepting office had to be immediately shelved in order to deal with the current emergency. So far as nuisances were concerned, this meant putting the clauses of the 1862 Glasgow Police Act concerning the removal of accumulations of dung and waste matter and preventing the overcrowding of small dwelling-houses into operation without delay and concentrating the Sanitary Department's inadequate resources

1. SCM, 24 March 1863.

on cleaning up the most densely populated quarters of the city.¹

Gairdner planned his attack on epidemic disease in three stages, the first involving the general cleansing operations designed to prevent the spread of disease from one neighbourhood to another, the second requiring the detection of cases of fever and their immediate removal where possible to hospital to limit the spread of infection to other members of the household, and the third giving to the victim's house, bed and body clothing a thorough cleansing and fumigation. The plan does not appear to have been formulated as a result of deliberation but evolved over the summer and autumn of 1863 as the typhus epidemic progressed. However he may have arrived at his conclusions, the method of coping with infectious disease adopted during 1863 involving prevention of accumulations of dirt, detection of fever cases, immediate removal to hospital and thorough fumigation of infected houses and clothing remained the core of Gairdner's epidemic control measures until he resigned as medical officer of health in 1872.

The 1862 Police Act gave the municipal authorities considerable powers of compulsion to make proprietors and householders clean up their premises and remove nuisances. As a last resort during periods of excessive infectious disease, special regulations could be drawn up and enforced by the Magistrates' Committee of the Police Board during a specified period and applying to specified areas of the

1. SCM, 7 July 1863.

city, allowing the sanitary officials compulsory powers of entry into private property and compelling proprietors in the designated areas to cleanse and whitewash their property, whether disease had been reported there or not. Gairdner did not in fact request the Magistrates' Committee for special regulations to come into force until July 1864 by which time the epidemic had passed its peak.¹ His staff were already working beyond their capacity and the special regulations could only add an additional burden. His reasons for applying to the Magistrates' Committee may in fact have been connected with the need to provide for additional hospital accommodation for fever patients, the municipal authorities being authorised to maintain a fever hospital only while the Magistrates' Committee regulations were in force.

As the 1862 Act had made all the dung and refuse of the city the property of the municipal authorities, and at the same time laid responsibility for its removal on the Cleansing Department, it was now possible to draw up an overall plan for the removal of refuse which did not need to make provision for vested interests in manure and could penetrate into the heart of the wynds and closes to make sure the dungsteads were emptied and cleansed. An investigation into the condition of ashpits and privies, unsatisfactory dungsteads and the remaining private middens was begun in August 1863² which enabled the Sanitary Committee to concentrate the attack on certain districts

1. SCM, 19 July 1864, 53.

2. SCM, 4 August 1863.

such as the Garngad, the Gallowgate¹ and the eastern villages of Parkhead and Camlachie, which were reported in 1865 as being ill supplied with ashpit and privy accommodation.² Although the courtyard middenstead lingered on in such areas, the result of twenty years of sanitary activity had been a general replacement of open dungsteads by ashpits and privies, erected in blocks in the courtyard or on the back 'green' of the tenement houses. As many were totally inadequate for the population they served, infrequently emptied and still less frequently cleansed, they themselves were becoming the target for attack by the authorities. While cleansing was partly carried out by employees of the Department of Statute Labour and Cleansing and partly by a contractor, it was impossible to co-ordinate the cleansing services adequately to meet the additional strain imposed by the 1862 Act. A recommendation by the inspector of cleansing in 1865 that the many small ashpits and privies of the city should be emptied three times daily in areas of high density populations could not reasonably be implemented without an enormous increase in the size of both Cleansing Department and the contractor's establishment.³ The actual cleansing of the closes themselves was less of a problem. The Sanitary Committee arranged with the Superintendent of Fire Engines of the Police Board for the periodic hosing down of courtyards and wynds once the rubbish and ashes had been swept up and removed by the joint activities of

1. SCM, 1 April 1863.

2. SCM, 11 May 1865, 119.

3. SCM, 12 October 1865, 145-6.

municipal scavengers and contractor's men.¹

Nuisance removal was more directly under the control of the medical officer of health. Under a scheme of epidemic control for the five districts instituted by Gairdner probably early in 1864,² assistant sanitary inspectors were appointed for each district with duties which involved the detailed investigation of their districts to discover a variety of nuisances ranging from overcrowded houses to defective water supply. Experience was to show that efforts to find fever cases and to 'ticket' small houses³ were the surest means of revealing other matters needing urgent attention, such as accumulations of refuse on common stairs or choked sinks and water closets.⁴ The activities of the Sanitary Department in the field of domestic hygiene met with a mixed reception, some landlords proving co-operative while others resented any suggestion that their

1. SCM, 16 August 1864, 57.
2. See below, Chapter 18 for a more detailed explanation of this scheme.
3. The 'ticketing' of small dwelling houses is more fully dealt with in Chapter 20.
4. A typical Report from the chief constable of cases brought before the Police Courts for three months ending 22 December 1864 reads:-
(SCM, 22 December 1864)

Overcrowding of dwelling houses	45.
Overcrowding of lodging houses	33
Keeping an unlicensed lodging house	1
Contravention of lodging house byelaws	4
Dirty Stairs	73
Dirty Jawboxes (Sinks)	144
Dirty Courts	58
Stagnant water permitted to collect	5
Dungsteads out of repair	3
Dirty provision shops	7
Keeping pigs so as to cause a nuisance	11
Throwing dirt from windows	27

property was insanitary.¹ On occasions landlords had gone to some expense to improve their tenements but had then failed to keep these improvements, particularly water closets, in good repair, with the result that they became objectionable or failed completely to provide the amenity intended.²

A common cause of complaint was the inadequacy or lack of a water supply. Since the opening of the Loch Katrine scheme in 1859, most districts of the city were well supplied with water, the exception being those elevated areas such as Garngadhill where the pressure was insufficient to raise the water to the top of the highest buildings. The Sanitary Committee had good liaison with the Water Committee, not surprisingly since both were made up of town councillors and it was perfectly possible for a councillor to sit on both committees, but in spite of this the law itself was sometimes inadequate to enable the Water Committee to force proprietors to pipe water into domestic housing when the Sanitary Committee requested this for health reasons. A proprietor in Villiers Street, part of the notorious Garngad district, persistently refused to bring a water supply to a crowded building nearer than a standpipe in an adjacent close,³ which had to provide an inadequate water supply for one hundred and seven families. Only after protracted correspondence and threats of legal action was the water supply improved. However, a good

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1. SCM, 16 February 1864, 27.
 2. SCM, 1 March 1866, 174-177.
 3. SCM, 2 February 1865, 92.

water supply by the mid-1860s had become standard in many parts of the city and tenants who might never complain to the authorities about lack of privy accommodation, would appeal to the Sanitary Department to intervene on their behalf when failure on their landlord's part to pay water rates had resulted in their supply being cut off.¹

Although during a period of increasing typhus fever domestic sanitation had necessarily to monopolise the work of the Department and its inspectors, other aspects of nuisance removal could not be neglected. A considerable amount of time was taken up with the measuring and 'ticketing' of small dwelling houses to limit the number of occupants each might accommodate, a project upon which Gairdner placed great emphasis as he believed that a large part of public health improvement depended on the initial improvement of working class housing.² Once ticketed, the houses had then to be regularly inspected to make sure contraventions of the permitted numbers did not occur. These inspections were very useful, as previously stated, in revealing other insanitary features which might need attention and could be noted down in the inspector's book for disposal the next day.³ In addition to the inspection of small dwelling houses, the inspectors had considerable work to do among the many hundreds of common lodging houses

1. SCM, 10 May 1864, 43-44.

2. SCM, 26 May 1863; 9 June 1863.

3. An investigation into reports of fever at the Black Land and Paddy's Castle, two tenements in the Garngad, undertaken in October 1864, revealed cases of tenements with no water supply, open dungsteeds hemmed in by houses and dirty sinks and stairs. (SCM, 11, 25 October 1864; 8 November 1864; 2 February 1865).

in the city, inspecting them for contraventions of the regulations and uncovering unlicensed houses which might harbour cases of fever.¹ Offensive trades and industries, accumulations of dung and rubbish on waste ground, cow-byres and piggeries and drains and sewers giving off smells had also to be inspected in a very full day's programme. Not all the nuisances requiring attention could get equal treatment, and during the period of the Sanitary Committee, between 1862 and 1870 when it was replaced by the Committee on Health, the number of investigations into cases of offensive industries dropped to nineteen over the period of eight years, as compared with the thirty-four investigations undertaken by the Nuisance Removal Committee between 1856 and 1862 and eleven by the Committee on Health in its first two years of operation.²

The nuisance removal and cleansing procedures outlined above were part of the general cleansing operations designed to prevent the spread of disease from one area to another. The third part of Gairdner's plan for epidemic control, the thorough fumigation and cleansing of the fever victim's house, bed and body clothing, had also to be tackled if the entire scheme was to work smoothly. The fumigation and whitewashing of fever houses by the cleansing authorities was already standard procedure and it was only necessary to tighten up the arrangements whereby parishes and Infirmary informed the Sanitary Department of cases

1. SCM, 1 March 1864, 30.

2. For the complete figures over the period 1842 to 1872. see Table of Nuisances on page 282.

so that the Cleansing Department's team of fumigators could move in without delay.¹ The main gap in the service concerned the washing and fumigation of personal clothing and bedding. Prior to the arrival of Dr. Gairdner, the parochial boards had been considered responsible for doing this work, the clothing remaining behind in houses due to be fumigated for the parish officials to remove since the cleansing authorities 'had no facilities for cleaning and storing clothes as the parish had'.² Such an arrangement was out of step with Gairdner's rationalisation of the procedures for dealing with fever cases, and since the authorisation for a municipal washing house had been inserted into the 1862 Police Act, it was among the first reforms for which he made application to the Sanitary Committee.³

Gairdner had to wait a year between his original application and the opening of the first municipal washing house, a wooden and brick shed in the High Street, in September 1864, but its existence closed a gap in the cleansing side of his epidemic procedures in much the same way as his later acquisition of a municipal fever hospital closed an important gap in the medical side. The washing house, put under the direction of the inspector of cleansing under the overall supervision of the medical officer of health, enabled Gairdner to ensure that clothing was properly disinfected before being handed back to its owner or his relatives. In addition to the washing house, a

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1. SCM, 13 October 1863, 8.
 2. NRCM, 5 March 1862.
 3. SCM, 29 September 1863, 6.

covered vehicle was purchased to carry the clothing and mattresses to and from the washing house. Straw bedding was burned, a procedure by which many infected lice must have been eliminated, and after fumigation the tick was restuffed.¹

Following on the fumigation of bed and body clothing and the whitewashing of apartments came the thorough cleansing of courts and closes from which fever victims had been removed. Again this had been standard procedure, but the system was tightened up and a detailed record kept of the number of closes dealt with to ensure that as few as possible slipped through the net and escaped attention.² Gairdner regarded the scavengers, who probably went into the worst areas of the city more than any other of the various officials employed by the Police Board, as a type of 'sanitary police' who not only could keep a sharp look out and a keen nose for insanitary objects while performing their duties, but could be given other duties on occasions to carry out in the cause of better urban sanitation. Gairdner did not specify what these might be, but he did at least recognise that the humble scavenger was the first line of defence against the spread of epidemics.

1. SCM, 13 September 1864, 60-61.

2. In a typical fortnight, the inspector of cleansing reported to the Sanitary Committee the cleansing of 119 houses where 181 apartments had been whitewashed and fumigated; the disinfection and washing of the bed and body clothing of the inmates of 35 houses; the burning and replacement of 80 bundles of straw. In addition, 2,907 closes and parts of streets fouled by removal of city manure had been washed with water. (SCM, 8 November 1866, 1).

3. SCM, 16 February 1864, 27.

The entire operations of the Sanitary Department and scavengers probably no more than scratched the surface of the dirt and disease existing in Glasgow, but procedures were established under the fear of an epidemic which were then maintained once the immediate danger was over. Some improvement might be considered to have taken place by the fact that the city, with a vastly increased population since the last great typhus epidemic, that of 1847, suffered around 15,000 cases of typhus according to Gairdner's own estimation, as compared with around 40,000 cases in 1847.¹ Further proof of the efficacy of the sanitary service came with the 1866 cholera epidemic, which followed hard on the heels of the waning typhus fever. Gairdner was able to keep the Magistrates' Committee special regulations in being as soon as it became known that cholera was likely to arrive in the British Isles, and after an investigation into the most up-to-date medical thinking on the subject of the spread of cholera, he stepped up the cleansing of ashpits and privies in the city and arranged for the distribution of disinfectants to medical officers, chemists and officials of the Cleansing Department.² The supplying of water to those tenements still without a supply was urged and the Water Commissioner's help sought to compel proprietors to pipe water into their property under the terms of the Glasgow Water Works Amendment Act of 1865.³ As a result of his

1. W.T. Gairdner, Report of the Medical Officer of Health for 1864.
2. SCM, 13 September 1866, 218.
3. Water Commission Minutes, 19 July 1866.

efforts, or so it must have appeared to a grateful city, there were only sixty-eight cases of Asiatic Cholera with twenty-six deaths. Although subsequently a few voices were raised against the continuing sanitary service,¹ the programme on the whole was vindicated and the 1866 Glasgow Police Act reflected this.² Prior to 1866 the whole Sanitary Department had been regarded as temporary and experimental, the sanitary inspector being a temporary appointment and only the medical officer of health's position being relatively secure. After 1866 the entire establishment was placed on a permanent footing, the municipal fever hospital maintained and the dependence on the Magistrates' Committee for special sanitary powers lessened.

The decline of epidemic disease after 1866 gave the Sanitary Department time to turn to other pressing matters which needed urgent attention. The attack on intramural burial grounds was begun and successfully completed with the closure of twelve of the most over-crowded graveyards by the early 1870s.³ The 1867 Public Health (Scotland) Act⁴ was another important milestone in sanitary reform. Clause 30 of this Act prevented the establishment of industries liable to be offensive, such as blood boilers, tallow melters, tanners and slaughterers of animals, among centres of population without written permission from the

1. CHM, 24 July 1871, 230-235.
2. 29 & 30 Vict. c. 273.
3. CHM, 25 February 1870.
4. 30 and 31 Vict. c. 101.

Board of Police. This was an important preventive measure which was frequently used in the following years to control the establishment of new industries by laying down stringent regulations which had to be adopted by manufacturers before they could set up their industries among areas of domestic housing.¹ Existing offensive industries presented particular problems. Many of the smaller ones, such as pickle manufacturers who worked from a basement workshop or backyard smithies, could be easily dealt with by the medical officer of health or master of works without recourse to the Courts. Where industries were larger it was frequently necessary to prosecute. The Springbank Chemical Works, the subject of complaint in February 1860 and again in September 1862, adopted a policy of repeated appeals to the Circuit Court to keep the case from final despatch.² Many firms were powerful enough to resist the unwelcome intrusion of the police authorities in their affairs and wealthy enough not to have to count the cost. The 1867 Public Health Act helped to ensure that the problem would be limited to existing firms and need not be perpetuated in the future.

The Act also gave wider powers for dealing with cellar dwellings, of which there were many in Glasgow, particularly in the northern district around Port Dundas and Garscube Road, and houses unfit for human habitation. Operations

1. When the first application was made, by a soap works, Gairdner first sought the advice of 'a London expert, Dr. Letheby', before reaching a decision. (SCM, 21 May 1869, 149-150.
2. SCM, 17 February 1860; 27 December 1861; 13 June 1862. Later in 1862 the firm refused to allow the inspector of nuisances and police officials admission to their works. (SCM, 12 December 1862).

against both these nuisances were stepped up after 1867, more successfully against cellar dwellings than uninhabitable houses as so much of the housing stock of the city came into this category. As standards of what was or was not acceptable advanced, so the number of houses which fell below the habitable line increased and presented the sanitary authorities with a continuing problem.

In the eight year period in which it had performed the duties of local authority, the Sanitary Committee had proved its worth to the city. Commencing duties at the end of 1862, the Committee had implemented the main reforms allowed for in the Act by the time the Committee on Health took over its powers in 1870. A medical officer of health had been appointed in January 1863 and a small Sanitary Department set up soon after, which was to become the nucleus of the much larger department that was to emerge in the 1870s. A concerted attack on epidemic disease had been started immediately, the cleansing and whitewashing of infected houses and districts put on a more thorough footing and a municipal washing house instituted to ensure that infected clothing and bedding was properly treated and could not spread disease in a household. A beginning was made in controlling the occupancy of small houses and of cellar dwellings, intramural burial grounds were closed and nuisances of all types, from overfilled privies to dirty pigstyes, tackled with as much efficiency as the limited resources of the Sanitary Department would allow. The setting up of offensive industries was put under the control of the Sanitary Committee as local authority and the law

against those already in existence enforced to the best of the Committee's powers. Towards the end of the Committee's life an attack was made on the existence of cow-byres and piggeries among domestic housing, which were now limited to certain specified areas,¹ and on the remaining public wells whose supply was analysed and, if found contaminated, discontinued.²

The appointment of a medical officer of health had injected a practical and scientific approach into the whole subject of cleansing and nuisance removal, which had previously been conspicuously absent. Gairdner was capable of pursuing a line of conduct to its logical conclusion, giving careful thought to each step on the way. Thus the removal of cases of infectious diseases to hospital required first of all detection, then removal in ambulances provided by the local authority in order to prevent the contamination of public vehicles, and finally the provision of municipal accommodation for the treatment of fever so that all stages of the process could be controlled from a single point. Similarly with the aftermath of cases of infection, not only had the houses to be fumigated and whitewashed, but also the bedding and clothing must be removed, again in a municipally-owned vehicle to prevent cross-infection, must be efficiently dealt with to ensure no possibility of residual infection and, if possible, a large area around the infected house cleansed and whitewashed. Gairdner continually used science as an ally in the public health

1. SCM, 15 August 1867, 39.

2. SCM, 23 October 1867, 49.

drive. He engaged eminent chemists to perform various services for him, such as the analysis of well-water mentioned above, and injected an atmosphere of practicality and purpose into the whole field of urban sanitation.

Gairdner's staff were no less enthusiastic in their work, particularly the district medical officers. Although primarily doctors, they worked with equal capability on the more down-to-earth side of urban public health and were well supported by the nuisance inspectors who might spend several hours on extra duty at night, inspecting ticketed houses or investigating complaints.¹ It would be misleading, however, to accept the favourable impression of the activities of the Sanitary Department which official records tend to put across as proof of a major improvement in the state of the city's cleanliness. Other contemporary reports paint a picture of persistent dirtiness, delapidation and poverty, with areas of squalor and overcrowding that matched similar areas of a decade earlier.² Nevertheless, although such districts could still be found by the determined investigator without much difficulty, the existence of a Sanitary Department created for the purpose of eliminating such black-spots was a notable advance and the groundwork was being laid, however inconspicuously, for significant advances in the future. Possibly most important was the gradual shifting of responsibility, over a number of years since 1842, for cleanliness and an improved urban environment from the individual, be he proprietor or

1. SCM, 21 November 1867, 54.

2. See articles in North British Daily Mail, December 1869.

tenant, onto the local authority. Once this had become accepted as normal the Sanitary Department, with all its imperfections and inefficiencies in the performance of its duties in a practical sense, had a permanent place in the life of the city.

The Sanitary Committee was the first important reforming committee to be set up in this decade of progress. It was followed in 1865 by the Fever Hospital Committee and in 1868 by the Cleansing Committee. Cleansing, the branch of municipal public health most prominent in the early years of the century, was by the late 1860s lagging behind nuisance removal and epidemic control in being merely a department of the Committee on Statute Labour and Cleansing, having one foot in the camp of the Sanitary Department and the other in Statute Labour. The establishment of a specific Cleansing Committee to direct a newly-formed Cleansing Department was therefore a necessary reform.

The procedures for cleansing the city of Glasgow did not substantially alter between 1842 and the establishment of the Cleansing Department in 1868. The scavenging department of the Committee on Statute Labour and Cleansing employed scavengers to sweep the public streets and collect the manure together from both private courts, into which they might go by arrangement with the proprietors, and from public thoroughfares. A contractor then provided men, carts and horses to lift the city manure and remove it to depots situated either just beyond the city boundary or at the canal quays and railway goods yards for despatch into the country. The cleansing of the streets was also performed by the contractor's men unless a district was one

where cases of fever had recently occurred, when men employed by the municipal authorities, with the aid of fire engines and hoses, went in to complete the work of fumigation by giving the courtyards a good hose down and a thorough cleanse.

In practice, it appears that a certain blurring of roles occurred. The contractor's scavengers frequently did the cleaning out of privies and ashpits and emptied ashboxes while the Police Board's employees were actively engaged in cleaning and whitewashing tenement property and it is difficult to be precise about the exact proportioning of duties. The contractor himself, a certain John Drummond from May 1849 until 1868,¹ tendered for carting and cleansing the streets and removal of the contents of dungsteads and ashpits. Contracts were arranged for several years at a time, and any extra work which might be incurred by the middle or end of a contractual period through the city's expansion was paid for separately on presentation to the Police Board of a detailed account.²

The legislation of 1862 and 1866, which vested all city manure in the local authority and required the Police Board to be responsible for cleaning private as well as public streets, made the Board members reconsider the whole subject of contracting out the cleansing of the city. The work was already beginning to be beyond the capacity of a single private firm to perform. Ashpits and privies needed more frequent emptying than middensteads and the increased

1. PCM, 14 May 1849, 303.

2. CCM, 7 October 1869, 72.

amount of manure collected had to be stored and then sold before it finally left the city for good. In spring, when the ploughing and sowing of crops was at its height in the surrounding farmlands, this might not be very difficult, but at certain other times of the year the sale of manure dwindled to a fraction of its spring-time levels and great heaps of manure might be left at despatch points, where they soon attracted complaints as nuisances.¹ Drummond was beginning to find himself a frequent attender before the Police Courts on charges of causing a nuisance, and with very little prospect of being able to remedy the situation.

The imminent expiration of Drummond's contract, at Whitsun 1868, set the Police Board on a course of investigation into the possibility of taking over responsibility for the cleansing of the city. A delegation was sent out in the usual manner to investigate procedures in other Scottish and English cities, with John Ure a prominent member, and reported back in March 1868 with the recommendation that the Police Board should take over the entire management of the lifting, removing and disposing of the city manure. A department should be set up for the purpose with a qualified officer at its head and money from the sale of the manure should be handed over to the

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1. One of Drummond's most important despatch depots was at the Caledonian Railway goods yard near Parliamentary Road, which unfortunately was very close to the City Poorhouse. As a result he was brought before the Police Court in October 1865 to answer a complaint lodged by the Inspector of the City Parochial Board, and ordered to close the depot down. (SCM, 25 October 1865, 149).

Police Board.¹

As Drummond's contract was due to expire in a matter of weeks there was little time for the usual procrastination before making a decision, and the recommendation was accepted and implemented immediately. The job of Inspector of Cleansing was given to Mr. Ellison from Liverpool, with Mr. Waters, the inspector since 1849, as his assistant. Although Mr. Waters had an experience of Glasgow's conditions unequalled by anyone, he was less knowledgeable in the other essentials of running a large Cleansing Department and he had to take second place. The simplest method of getting the cleansing operations off the ground was to take over at valuation all Drummond's stock, horses, equipment and even premises, at a final price to the Board, arrived at after much haggling, of £20,775.²

The performance of the cleansing of the city in full brought the Police Board into contact with the world of market forces and industrial relations with which they were unfamiliar. On one or two occasions the entire body of scavengers threatened strike action for extra pay, leaving the police authorities with the startling prospect of mountains of manure collecting within rather than beyond the city boundaries.³ Ellison averted this threat by bringing men over from Ireland which forced the scavengers back to work. The Board had also to become acquainted

1. Police Board Special Minute Book, 21 November 1867, 327.

2. CCM, 22 June 1868, 23.

3. Cleansing Committee Report Book, 12 April 1872.

with the workings of the manure market. Competition for disposal of manure came from Greenock nearer home and from Edinburgh, Leith, Dundee and even Aberdeen further away.¹ The drop in the price of manure per waggon load or ton in any of these cities meant a similar drop in the price asked by Glasgow for its manure, even when that sometimes meant a considerable loss. In May 1870, after the seasonal peak of demand was over for the year, the price per ton at Dalmarnock and Garngad Road depots had to be reduced to 2/6d. per ton to fall into line with Greenock and the other cities.² By the end of 1872 the Cleansing Department was collecting in the region of six thousand loads of manure per fortnight³ and the amount available caused the bottom to drop out of the market and made its collection unprofitable on a commercial scale. The Police Board had to dispel any ideas of making the Cleansing Department pay for itself and merely offset sales of manure against expenditure in order to bring costs down to some extent.

The Board was also to find that cleansing was an expensive part of municipal activities. Large numbers of men had to be employed, the establishment containing three hundred and seventy five labourers, one hundred and forty scavengers and two hundred closemen in 1872, with fumigators, night inspectors, horse-keepers and agents for the sale of manure additional to these numbers.⁴

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1. Cleansing Committee Report Book, 9 June 1871.
 2. Cleansing Committee Report Book, 27 May 1870.
 3. Cleansing Committee Report Book, 8 November 1872.
 4. Ibid.

In addition to this formidable wages bill, manual refuse disposal required a considerable expenditure on stock replacements, the purchase of horses, hay and fodder, and on improvements to the service. The major advances in the system, with the establishment of Corporation-owned dustbins in the back courts of the houses in which all rubbish had to be deposited for nightly disposal, came later in the century but certain improvements were made by the Cleansing Department in the performance of the work done by its employees. New sweeping machines replaced the old birch brooms in July 1868,¹ and bell carts for removing paper and other non-excremental rubbish from the business area of the city were introduced in November of the same year.²

There was one area within the city of Glasgow over which the ordinary municipal departments had no authority. The Clyde Navigation Trust was responsible for the harbours, streets and quays that bordered the river Clyde.³ During the period of the Police Commissioners, the work of cleansing these areas had been performed through putting the work out to contract, with the Commissioners contributing towards the cost a modest sum of around £30.⁴ This was raised to £50 under the Police Committee, a totally unrealistic sum by 1868. After the setting up of the Cleansing Department, the trustees of the Clyde Navigation

1. Cleansing Committee Report Book, 29 July 1868.

2. CCM, 11 November 1868, 40.

3. The major Act setting up the Trust was 21 & 22 Vict.c.149.

4. PCM, 30 April 1849, 295.

Trust negotiated with the Police Board for the work to be done by the Cleansing Department scavengers and a sum of £1,350 to be paid by the trustees for the work performed was finally fixed. From the point of view of the Cleansing Department this sum hardly covered the cost, since the refuse collected from the harbour area was mostly rubbish with little manure, so being an expense rather than a profit.¹

The Police Board had very much to leave Mr. Ellison to himself in controlling his small empire through sheer ignorance of the workings of a large Cleansing Department. As an inspector of cleansing he appears to have been very efficient, but as an administrator he was to prove less satisfactory. As the costs of his department rose, so did the protests among ratepayers. A loss of money and an unfortunate scandal caused him to disappear quietly in 1875 and at once the critics of the cleansing scheme demanded that the whole business be returned to contract on the grounds that when the work had been performed by this method it had been considerably cheaper.² A detailed examination of the workings of the department from its commencement in 1868 to 1875, the year of the crisis, was undertaken and shows up clearly the great increase in wages and costs which had taken place between these two dates. The sub-committee appointed to undertake the investigation produced a report which showed that although the contract with Drummond, which had been for a five-year period

1. CCM, 19 June 1868, 21.

2. CHM, 19 May 1875, 141-148.

expiring in May 1868, was for cleansing the city at a price of £7,000 per annum, he himself had re-tendered in April 1868 before the establishment of the Cleansing Department at a price of £22,000 per annum, an enormous jump in estimated cost. The Cleansing Department's own costs in 1868, the first year of operations, was £10,843., and the average cost over the first three years was around £12,749. 3s. 1d. The first major rise in cost took place in 1872 when expenditure rose from £13,961.11s.11d., the 1871 figures, to £18,702.10s.8d., and thereafter costs rose rapidly until they had reached £34,301.10s.7d in 1874. The Report of the sub-committee pointed out that the price under contract would be considerably in advance of the £22,000 tendered by Drummond in 1868 should the Police Board return to this method for cleansing the city, and the dismantling of a whole Department carefully put together and operated over a period of years could not then be reversed without considerable difficulty and expense.¹ This particular storm was weathered successfully by the Cleansing Department, but it was a sharp reminder that local authority activities were still not blindly accepted by the ratepayers, particularly where they proved expensive to run.

The real advance, therefore, in cleansing in the period after 1868 was not so much in practical terms, the methods adopted by the new Cleansing Department being very much those of the contractor previously, as in administrative,

1. CHM, 19 May 1875, 145-146.

the Town Council now making itself fully responsible for the whole performance of the cleansing function within the city. The division of labour between corporation scavengers and contractor's employees had proved less efficient and workable as the cleansing problem became more complex. The creation of the Cleansing Department was a rationalisation which had to be made sooner or later and had become even more urgent with the passing of two important Police Acts within the decade of the 1860s, giving all the manure of the city to the police authorities and at the same time putting the responsibility for its removal and the cleansing of the streets and courts onto them entirely. The contractor, a private citizen in business on his own account, had found it increasingly difficult to perform his contract efficiently without at the same time contravening the nuisance laws of the city. A public body such as the Police Board was better placed both to cope with any increase in cleansing and refuse removal that might occur in the future and to combat or circumvent threats of prosecution over their very large manure depots on the perimeter of the city.¹

The practical advances in refuse disposal lay in the future. Minor improvements, such as more efficient sweeping machines, could be instituted, but the establishment of major despatch works for refuse disposal and the apportioning of the city into districts for refuse collection belong to a later period. The most important

1. NRCM, 30 June 1862; SCM, 25 October 1865, 149.

development of the early years of the Cleansing Department was its inclusion in 1870 in the Committee on Health, so making cleansing an integral part, along with epidemic control and general sanitation, of the public health improvement of the city.

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By the closing years of the 1860s, the number of Acts of Parliament dealing with health matters had increased and included, besides the 1862 and 1866 Glasgow Police Acts and the 1867 Public Health (Scotland) Act, various measures regulating conditions in bakehouses, workshops and factories, providing for the inspection of markets and slaughterhouses and attempting to prevent smoke pollution. Much of the responsibility for administering these laws fell on the Police Board, who in consequence had to engage a large staff of inspectors and clerks to cope with the additional duties.¹

A thorough overhaul of the administration of public health legislation was desperately needed by the end of the decade and moves in this direction were begun in 1869. Led by John Ure, a deputation left for England to study the operation of public health administration in several towns, particularly Bristol, and obtain ideas on how best to reorganise it in Glasgow. While the deputation was away the medical officer of health and master of works, who

1. In 1871 an Act of Parliament relieved local authorities from the responsibility of administering the Workshops Regulations Act of 1867. (CHM, 4 September 1871, 246).

remained behind on this occasion, also prepared reports in their particular fields on the same problem. The year of these investigations, 1869, was one of exceptionally high mortality, the chief pulmonary and infectious diseases being responsible for 52.3% of all deaths and the number of deaths, at 15,648, being the highest for any year since accurate records had begun in 1855.¹ Although the full impact of these figures could not be felt until statistical analysis had been made in 1870, the monthly returns made up by Dr. Gairdner were sufficiently disturbing by March 1869 to make some positive measures to improve the public health services essential.² High as the mortality figures might be, there was no recognisable epidemic of any disease upon which blame might be placed. It was obvious that the sanitary programme was not having the impact on disease that had been hoped for and the investigations undertaken during the year were in part a response to this fact.

In January 1870 the Board of Police met to consider the findings of the deputation and senior officials. These had been condensed into a Resolution, drawn up and put to the meeting by John Ure, which stated succinctly the public health problems still facing the city. The Resolution moved:-

'that the closed staircase so frequently found in the very centre of dwellings for the poorer classes with

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1. See below, Table II, page 378.
 2. Gairdner went so far as to write a special report to the Sanitary Committee entitled Report on the Health of Glasgow with special reference to the unusually high rate of Mortality in March 1869. (Board of Police pamphlet).

lobbies branching off on each landing are generally very imperfectly ventilated; that therefore the staircase should have an opening to the roof of sufficient size, and that through and through ventilation should be secured in the lobbies.

2. 'That the apartments in these dwellings are generally too small for the number of occupants; and the people being mostly ignorant of the necessity of change of air, that some simple means of ventilation beyond their control be provided and that the sanitary officers be instructed to see that it is kept in working order.
3. 'That it is needful to the health, comfort and cleanliness that there be privy or other accommodation having relation to the number of dwellings, and that there be sufficient ash-pits and water supply; that therefore in every case there be provided not less than one seat for every five dwellings, that some deoderising material be introduced once or twice a day and that the ordure be frequently removed; and that there be a supply of water at the very least upon every landing.
4. 'The deputation deem it of much consequence to the health and tending to foster cleanly habits amongst the people that the pathways to every dwelling be in proper order, that there shall be in no place any stagnant water or filth remaining and the surfaces of all courts and closes be laid with pavement and other impenetrable and durable material.
5. 'That great difficulty is experienced in keeping these

crowded stairs and closes clean, the inhabitants throwing filth on the surface which ought to be put into the ash-pit; that as this is strictly a police offence, the chief constable be requested to call attention of his subordinates to it and to take measures to enforce the Act.

6. 'That a judicious system of visitation to inculcate cleanliness and ventilation and to prevent overcrowding would have a beneficial effect; that Dr. Gairdner be requested therefore to inform the Board whether with his present sanitary staff he can properly overtake that duty.
7. 'The deputation were much impressed with Dr. Davies'¹ theory of infectious disease founded on a large experience in Bristol of typhus fever spreading only by infection; that each case may be traced to another from which it sprang and that its spread is not affected by mere cleanliness but that the destruction of the germs by strong chemicals of which carbolic acid is the best is a sure means of stopping it and therefore earnestly recommend that the practice pursued in Bristol so successfully to the best attention and consideration of Dr. Gairdner and his staff of medical officers, and lastly
8. 'As the deputation believes with Dr. Gairdner that the question of housing accommodation is at the very 'root of sanitary reform and that all else is mere surface

1. Dr. Davies was medical officer of health of Bristol at the time of the deputation's visit to that city.

work', we are sincerely desirous to see improved construction of dwellings for the working and poorer classes and are impressed with the advantages in social as well as in a sanitary point of view of the self-contained cottage form of building prevailing in Bristol and other English towns and therefore heartily recommend that form as an example to builders here, and take leave to suggest to the Improvement Commissioners, should they be prevailed on to exercise the powers they obtained for reconstruction in some of the quarters where they have exercised their powers of demolition; that they will set a leading example to private enterprise in the character of buildings they may erect,¹ avoiding as much as possible the barrack style now so prevalent as being inimicable to all the higher virtues in social life, by massing human beings together without regard to health or decency, and instead approach as near as possible to the cottage form of building which spreads out the population over a larger area, giving a better chance of pure air, preserving health and decency and increasing facilities for fostering family life.'²

There are several points of interest to be considered in this Resolution. Although much of it is a restatement of old problems still unsolved, such as the apparent

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1. This passage refers to powers given to the Improvement Commissioners under the 1866 Glasgow Improvement Act not only to clear areas of insanitary housing but to replace demolished buildings with suitable working-class housing. See below, Chapter 20.
 2. Board of Police Minutes, 12 January 1870.

admission that the sanitary programme had not succeeded in eliminating even such minor practices as emptying 'slops' into the courtyards, there are more positive aspects of the Resolution. In the first place, much of it is concerned with working-class dwellings, and this is in fact a pointer to the way the sanitary programme was to swing in the 1870s. The 1840s and 50s had been concerned chiefly with cleaning up the city and overcoming the problem of the courtyard dungheap and commercial manure depot. The 1860s had seen disease prevention and control given considerable importance with Gairdner's programme for the removal of fever sufferers to hospital with an extensive follow-up service in the nuisance removal side through the fumigation and disinfection of houses and personal clothing, the programme being completed with the opening of the municipal fever hospital and the washing house. The 1870s were to see the accent on improving the housing of the working classes, with first Gairdner and then Russell as medical officers of health educating the ratepaying public through lectures and pamphlets on the need to provide better homes for the poor, while the Improvement Commissioners worked at the clearing of the worst slums.

In a less abstract way, the Resolution gave official approval to a change of direction over the best means for paving back courts. Up to this time the directives of the sanitary departments officials had usually been for the causewaying of courts, which left a rough, uneven surface not easily cleaned. The accent now switched to paving stones, a move already made by some proprietors,

as being more hygienic and easier to clean. The idea of a 'judicious system of visitation' possibly gave rise to the introduction of the female visitors whose appointment followed a few months after the meeting. Perhaps the most interesting aspect, from the point of view of general sanitation, was the attempt to introduce a minimum standard for domestic hygiene, in particular the fixing of an acceptable ratio of families per privy or water closet, which could then be used as a guide both for the use of builders planning new housing and for landowners attempting to modernise existing property. The main drawback of the ratio, suggested at one seat for every five dwellings, was that it was geared to the household rather than the individual, and whereas in some tenement blocks one privy to every five families might not prove too low by contemporary standards if family size was correspondingly low, in others where family size might be large and with a lodger or two sharing the accommodation, one privy was obviously going to be totally inadequate when shared by five households. A study of the census reports for the Garngad, an overcrowded district to the north of the city, has shown that not only whole tenement blocks but whole streets might have average room occupancies of over three and sometimes just under five per room.¹ A parallel study of sanitation provided in new buildings in the same area compiled from

1. Information obtained from the Enumerators' Reports for the census of 1861, 1871 and 1881 lodged in Register House, Edinburgh. The study included the notorious Middleton Place, where the highest average room occupancies per tenement were found.

Dean of Guild Court records shows that, although water closets were replacing the privy fast as the commonest means of domestic sanitation in new working class housing, even in the mid-1870s tenement blocks were being erected in the Garngad where six, seven and occasionally greater numbers of families were expected to share one privy or water closet.¹ This was an area of the housing problem where the Board of Police could have prevented such a state of affairs by refusing permission to build when application was made to the Dean of Guild Court, but it is obvious from the records that many such houses throughout the city were built and passed for occupancy by the Court's officials.² Nevertheless, the setting of some sort of standard in the Resolution was a beginning and the number aimed at probably represented one which could be achieved, whereas anything more acceptable to the sanitarians would be ignored by builders and Dean of Guild officials alike as impracticable.

The most immediate outcome of the Bristol visit and the subsequent meeting in which the Resolution was debated and finally passed, was the setting up of a Committee on Health. This committee incorporated the Sanitary, Cleansing and Fever Hospital Committees with their respective departments. It thus commenced operations in control of a sizeable staff. However, changes were felt necessary in the Sanitary

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1. One of the worst examples is of a tenement begun in April 1872 in Millburn Street, Garngadhill, and passed as completed in March 1873, where a single privy and ashpit was provided for eighteen one-apartment houses and thirteen two-apartment. (Dean of Guild Court Records).
 2. The one surviving Inspectors' Report Book covers the period 11 April 1872 to 22 October 1873 and is lodged in the Glasgow City Archives.

Department which had previously had only a small staff of permanent officials. An inspector of nuisances was appointed to head this department, Mr. Kenneth MacLeod being the first to hold the appointment, so that the three departments making up the Committee on Health now were headed by a senior official, Mr. Ellison directing cleansing, Dr. Russell the fever hospital and Mr. MacLeod general sanitation, with the medical officer of health and master of works in a general supervisory and advisory capacity.

After further detailed investigations, the Sanitary Department was further augmented until it numbered thirty five officers working as sub-nuisance inspectors, epidemic inspectors and inspectors of lodging houses. The city was divided into five sanitary districts and the staff appointed according to the size and population of the district.¹ The men employed as inspectors were carefully picked, their qualifications having to be relevant to the particular post they filled, for example sub-inspectors of nuisances had to

1. District I, the southern district with a population of approximately one hundred thousand, was to have one sub-inspector of nuisances, two lodging house inspectors, two epidemic inspectors and two nuisance inspectors. District II, the northern district with a population of eighty thousand, was to have one sub-inspector of nuisances, two lodging house inspectors and one epidemic and one nuisance inspector. A similar staff was appointed for District III, the western district with a population of one hundred thousand, which though large had a better health record than the others. District IV, the east end of the city with the largest population at one hundred and ten thousand, was given a staff of seven officers while District V, the city centre with the smallest population standing at around sixty thousand, had to have a staff of eleven, consisting of one sub-inspector of nuisances, three lodging house inspectors, four epidemic inspectors and three nuisance inspectors. In addition each district had one female inspector for house-to-house visits, paid fifteen shillings a week. (CHM, 11 March 1870, 35-38).

have some experience of the building trade in the capacity of foremen or inspectors of works so that they could point out defects in ventilation, in water supply and in privy and ashpit accommodation. They also had to be able to sketch and describe any alterations and improvements they were recommending with sufficient skill to make plain to proprietors or occupiers the work which was necessary, and had to have a standard of education enabling them to keep neat records of all complaints and to instruct and guide the officers under them.¹

In addition to this increase in the staff of male inspectors, the Committee on Health took the unusual step of employing women inspectors.² Five were engaged in the first place, one for each district at a weekly salary of fifteen shillings and with the task of making house-to-house visits in the poorer districts in order to instruct the inmates of the tenements in improved hygiene. Although they had no medical training or formal qualifications of any sort, these women can be regarded as the forerunners of the army of women, health visitors, social and voluntary workers, who were to work among poor families in the twentieth century. Their ability to make noticeable improvements was obviously strictly limited by their small numbers, for a single district might include around one hundred thousand inhabitants and no woman could visit more than a tiny part of her area in the course of a year. However, the women inspectors were to prove their worth

1. CHM, 11 March 1870, 35-38.

2. Ibid.

when first relapsing fever and then scarlet fever were to hit the city in 1871, and at this time their numbers were increased to cope with the extra work of visiting patients' homes and educating the mothers of sick children in how to deal with nursing and domestic chores at the same time.¹ They were probably more acceptable to the working class women as mentors than the male inspectorate, who were frequently treated with hostility by the tenement dwellers.²

The reforms in the Sanitary Department enabled it to cope more efficiently with the increased burden laid upon the health officials by legislation and the demands of more advanced sanitary ideas. Nevertheless, it also brought about increased expenditure. A centralised Sanitary Office now administered all three branches of the public health service, but each department had large numbers of employees on the payroll and possessed in addition such establishments as the two municipal fever hospitals and the Parliamentary Road scavenging depot, not to mention district cleansing stations and the large manure depots on the outskirts of the city. The Sanitary Department prior to 1870 had cost

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1. CHM, 9 December 1870, 152. The services of these extra women were not retained once the epidemic was over.
 2. The ordinary Glaswegian could also show adaptability in dealing with these unwelcome attentions and turn them to advantage. Neighbours of fever victims would obtain a free wash for their clothing by including their garments in the pile of infected clothing awaiting collection by the Corporation washing-house van. An elaborate system of watchmen and messengers was evolved to pass the word when an inspection of ticketed houses was imminent. The inspectors for their part developed an instinct for uncovering contraventions of the regulations, particularly with regard to overcrowding, which matched the ingenuity of the tenement dwellers. (Sir Alexander MacGregor, Public Health in Glasgow, 1905-1946, (Glasgow 1967), p. 41).

in the region of £658 per annum with an establishment consisting of the medical officer of health, one indoor inspector, two nuisance inspectors and six other officers performing the duties of epidemic and lodging house inspectors, although the district medical officers were additional to these officers. The increase to a non-medical establishment of forty-three meant an increase in the cost of the department of £2,682 per annum to a grand total of £3,340.¹ None of this expense took into account cleansing and the fever hospital but was entirely for the general sanitary side of public health. Criticism by ratepayers or other sections of the general public who harked back to former and cheaper times when the police performed a dual function of keeper of the peace and nuisance inspector was only to be expected and the Committee on Health was kept constantly on the watch for inefficiencies among the staff or ways to improve the service in order to maintain satisfactory relations with the ratepaying public.²

Since its foundation in 1870, the Committee on Health had provided a co-ordinated public health service which directed from a central point the workings of the cleansing, epidemic control and general sanitary functions of the Police Board as aspects of public health improvement. Sub-committees, on cleansing, fever hospitals and sanitation, were convened to direct the day-to-day running of the departments

1. CHM, 30 November 1871, 267-268.

2. As a result of complaints, a detailed investigation into the operations of the Sanitary Department was undertaken in November 1871. No reduction in staff followed but a number of minor administrative changes were made to increase efficiency. (CHM, 30 November, 1871, 267-270).

and a senior official headed each department, the inspector of cleansing and the nuisance inspector both responsible ultimately to the master of works and the superintendent of the fever hospital to the medical officer of health, although the latter official also had a hand in the direction of the cleansing and nuisance services. The medical officer of health provided co-ordination between the various departments and liaison with the other police departments with which the Committee on Health inevitably came into contact in day-to-day administration, such as the Department of Statute Labour and of Finance, and with other Corporation Boards and Trusts, such as the Water Commission and Improvement Trust, was maintained through the senior members of the Committee on Health who also served on the directing Committees of these other bodies.

So far as the Cleansing Department was concerned the system instituted in 1868 was maintained for a number of years. No major changes could take place in refuse collection so long as the earth closet and the manual removal of its contents dominated the cleansing procedures. Once the water closet had triumphed in even the poorest area and domestic rubbish was free of manure, it became possible to institute the back court dustbin, but this was an advance of the last years of the nineteenth century.¹ On the nuisance removal side of public health improvement, the specialisation of official rolls^e was perhaps one of the most

1. Right up to 1900, when the dustbin system was developed, refuse was pitched from the ashpit onto the back court or street before being shovelled up. (J.D. Marwick, The Water Supply of Glasgow, (Glasgow 1901) Appendix, p. 84).

important advances. Formerly there had been a considerable amount of doubling, so that a nuisance inspector might also do the work of a lodging house inspector, and was quite possibly technically a police constable as well. Under the new arrangements, the activities of individual officers were limited to one particular job, with regulations laid down as to how these should be performed and with a limited territory within which each officer operated. This increased the efficiency with which an inspector performed his particular work and had the added advantage of enabling him to become intimately acquainted with his district and the people with whom he came most in contact. If the inspector of the past had been something of a Jack-of-all-Trades, the new inspector was to become an expert in his own field. Collectively the inspectorate formed a body of trained, responsible men performing specific public health functions.

The work of the municipal authority in the field of public health had grown in the decade 1862 to 1872 from comparatively limited activities in the fields of cleansing and the removal of nuisances to a formidable array of duties. In addition to the acquisition of important medical duties in relation to the control and treatment of epidemic disease, the authorities had widened the scope of their cleansing and nuisance removal services to include the setting up of two major departments, the creation of an inspectorate supported by a considerable staff of clerks, scavengers, fumigators and others, and the work of the Sanitary Department had been extended to include the regulation of small house occupancy,

of cellar dwellings and of houses unfit for human habitation. In addition the officials had to superintend piggeries and cowsheds and ensure their removal from centres of population, close down the overcrowded burial grounds of the city and regulate burials in both the intra and extramural graveyards where pit graves were used as a means to bury those whose relatives were unable to provide them with individual graves, inspect markets and slaughterhouses and attempt to control industrial nuisances. Many of these tasks had been performed by the Nuisance Removal Committee and even by its predecessors, but the creation of responsible departments and an adequate inspectorate was essential to an improved level of efficiency. This did not result at once in an improved urban environment. A long process of education of the ordinary Glaswegian had first to change the habits and ideas of tenement dwellers, but more important the whole standard of living of the workers had to be raised before they could improve their lot by voluntary efforts, and much of this process was beyond the scope of the public health improvers.

From the point of view of the employees in the public health departments, and even of the Committee members directing them, the work must have appeared endless and the problems insoluble, with little thanks from the people who benefitted most from their efforts. Nevertheless, over the years since 1842 great changes had been made in the sanitary state of Glasgow. A journey round the wynds and closes in 1872 might have revealed privies in a state of disrepair or ill-used and overflowing ashpits, but the

central dungstead would have disappeared. In place of the infrequent visits of the commercial manure collector, the Cleansing Department's scavengers would visit each close at reasonably regular intervals and attempt the cleansing and hosing of as many as possible. Although still wedded to the earth-closet as a means of sanitation, the department had introduced reforms such as the removable pan and disinfectants and deoderising substances.¹ If plunge baths were a rarity among poorer houses, the water tap on each landing and even the water closet were becoming commonplace. The rough causewaying of courtyards had given way to asphaltting, largely as a result of municipal directives to proprietors. Burial grounds within the city were closed and even converted to small green parks, where the citizens might sit among trees and grass while in the heart of the city.² Industrialists could no longer set up businesses among crowded houses with ease and operate a trade unendurable to the inhabitants for several months or even years before being forced to moderate or cease their activities. Piggeries now had been banished to the open countryside or areas where the smell caused a minimal amount of discomfort to anyone except their owners, in contrast to the back-court pigstyes such as that in Jeffrey's Close in 1849.³ Although much remained to be done and the sheer size and complexity of

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1. CHM, 16 September 1872, 340.
 2. The former burial ground of St. David's, Ramshorn, remains to-day a small, green oasis in the busy commercial centre of Glasgow.
 3. See above, p. 16.

the city of Glasgow was sufficient to ensure that much dirt and disease would remain, however efficient the public services might be, a start had been made which, given time and effort, would result in a cleaner, healthier city.

The work of the medical officer of health was becoming increasingly complex by the 1870s and as a result the Committee on Health took the decision in April 1872 to appoint a full-time official who would devote his working hours entirely to the public health of the city. Gairdner himself was unwilling to give up his professorial Chair and declined the post, which was given to Dr. J. B. Russell, medical superintendent of the municipal fever hospitals and already a dedicated worker in the field of urban public health. During Russell's period of office the dry ashpit and privy system was finally abandoned and water closets ordered to be installed in all tenements,¹ considerable advances were made in general cleansing and a major sewage scheme for the city opened.² None of these reforms would have been possible without the achievements of the early years of public health administration, which formed the bedrock upon which Russell and his colleagues and successors could build the public health system of the early twentieth century.

1. CHM, 11 March 1889, 34-36.

2. See below, pp. 314-315.

TABLE I - Nuisances reported to the various local authorities, 1842-1872.¹

Type of Nuisance Investigated	Police Board 1842-1846	Police Committee 1846-1856	Nuisance Removal Committee 1856-1862	Sanitary Committee 1862-1870	Committee on Health 1870-1872	TOTALS
Offensive Trades	6	12	34	19	11	82
Manure & Refuse						
Dungheaps, depots	12	11	11	28	4	66)
Privies, ashpits	1	2	6	19	3	31)
W.C.s, urinals	-	2	-	5	-	7)
Stagnant water	1	7	5	6	3	22
Offensive drains etc.	1	1	4	15	2	23
Delapidated housing	1	1	13	19	16	50
Pigs & Livestock	2	-	4	4	-	10
Defective water supply -	-	-	2	11	2	15
Polluted rivers etc.	1	25	4	11	13	54
Other & Unspecified*	17	10	4	8	1	40
	42	71	87	145	55	400

* E.g. burial grounds (2 complaints), deposits of filth on roads (3), slaughter houses (4).
Complaints against smoke nuisance are not included as there are no exact figures for these in the records.

Table compiled from information contained in the Minute Books of the various Committees.
For details of complaints in selected periods, see Appendix

The aspects of urban sanitation considered so far have been chiefly concerned with the cleansing of the city and the removal of refuse, the control of offensive industries and the improvement of domestic hygiene. This necessarily leaves out much of considerable importance in public health and in the following chapters three other aspects of urban cleanliness are briefly examined, the attempt to control smoke within the city, the problem of sewage disposal and the provision of a good water supply. The first two were not attended with much success during the period, but the last was to result in the most successful enterprise in public health administration of the century, the provision of a water supply which was reckoned to be as good, if not better, than anything to be found elsewhere in the United Kingdom.

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Glasgow entered the nineteenth century a city of golden sandstone buildings. It was to leave it with these same buildings and their successors blackened by soot and smoke until their original colouring was completely obscured. At a time when increased dirt and disease was accepted by the average Glaswegian without much protest, the pollution of the atmosphere by smoking chimneys aroused

a sense of outrage which was reflected in the press and the pamphlet literature of the day. There is an illustration in the Glasgow Looking Glass of 1825 showing the effect of smoke pollution on the city. In two small sketches placed one below the other, the artist first depicts 'Present' and shows chimneys belching out smoke, birds dropping poisoned from the skies while in flight, people choking in the street and dogs overcome and ill as they trot along the pavements. The second sketch, named 'Future', shows the reverse, with birds nesting safely on the tops of the chimneys that had previously caused their deaths, trees in full leaf instead of withered, people smiling and healthy as they walk the streets. Although it was to be more than a century for 'Future' to begin to come true, the people of Glasgow had begun a campaign to clean up the air over their city.¹

The Town Council responded to public feeling early in the century and as early as 1814 took the opportunity of inserting smoke control clauses into a bill they were passing through Parliament for the erection of a new bridge over the Clyde.² This clause attempted to regulate the height of chimneys and prevent furnaces used in a variety of manufacturing processes from causing a nuisance to the neighbourhood.³

1. The Glasgow Looking Glass, Volume 1, No. 8, p. 28.

2. 33 Geo. III, c. 124.

3. The manufacturers included those involved in distilling, glass making, lead smelting, dyeing and brass founding - a competent court, on the application of three householders or the procurator fiscal, could authorise five persons of skill to report on the best height and dimensions for the chimney.

Although an interesting example of an attempt by a local authority at smoke control, as an effective measure this legislation was useless. The number of industries in the Glasgow area constantly increased, and the number of steam engines along with them, bringing smoke pollution in their wake. Among the largest of these industrial concerns was Charles Tennant's giant St. Rollox chemical works to the north of the city. In 1822 the chimneys at St. Rollox and their furnaces were the subject of a court case brought by market gardeners in the Garngadhill area of the city, then open countryside, who complained that the smoke had blighted their crops. There is also evidence that this was not the first case of its kind to be brought against the St. Rollox works by the market gardeners.¹ The gardeners do not appear to have been successful in taking on Goliath, but Tennants were better than many industrialists in attempting to solve the problem of excessive smoke. The firm built the famous 'Tennant's Stalk', a giant chimney reputed to be the tallest in Europe and a famous landmark in Glasgow for many years,² and by the 1860s had adopted a method whereby the smoke from their one hundred and fifty furnaces was led into three chimneys which smoked continuously rather than intermittently. By this method the quantity of smoke

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1. Mitchells Johnston papers, GCA T-M3-409.
 2. Nancy Crathorne, daughter of the founder of the firm, Sir Charles Tennant of the Glen, used the chimney as the title of her book on her family. (Nancy Crathorne, Tennant's Stalk; the story of Tennants of the Glen, (London 1973)).
 3. Smoke Committee Minutes, 11 November 1864, 141-144.

actually given out into the atmosphere was supposed to be reduced, but the psychological effect on the Glaswegians of the continually-smoking chimneys was not favourable. Tennant's Stalk was featured among other notorious chimneys in an illustrated pamphlet published in 1850 entitled The Chronicles of Gotham in which the chimneys represented evil giants and the local authority was blamed, in allegorical style, for failing to act as giant-killers.¹

The Town Council had in fact attempted to improve on its earlier legislation by obtaining an Act of Parliament specifically designed to abate the smoke nuisance in 1827. This Act was to become the basis of the local authority's smoke control programme for the remainder of the nineteenth century. It applied to all works within two miles of the Glasgow Cross, thus crossing over existing burgh boundaries, and required firms whose chimneys emitted large quantities of smoke to adopt remedial measures as recommended to them by the Dean of Guild Court, so that 'furnaces shall be constructed agreeably to the most approved plans then in use or which may be in use at the time (of their construction)...', the report of three engineers or other skilled persons to give directions to the Court as to what these might be. If the offending manufacturer failed to adopt the improvements within forty days, the Dean of Guild Court could impose penalties, although appeal to the Court of Session was authorised.²

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1. An extract from this pamphlet was quoted by Hugh McLean in an article entitled 'The Smokeless City - A Retrospect and Prospect' printed in the County and Municipal Record, 1910.
 2. 7 & 8 Geo. IV, c. 43, clauses 21, 22 and 23.

Armed with the 1827 Act and with public opinion firmly behind them, the councillors might have been expected to prosecute offending industrialists with vigour in an attempt to clean up the air over the city. The local authority, however, found itself in the usual embarrassing position of being uncertain whether to pursue an important public health measure with energy and offend the powerful manufacturers upon whom the prosperity of the town depended, or put up a mere token resistance to the manufacturers and risk criticism from the ratepayers. Prior to 1850 the Council appears to have adopted the latter course. Responsibility for enforcing the 1827 Act had in any case been given over to the police authorities, who in turn handed over the practical work of investigation and prosecution under the Act to the ubiquitous Committee on Health and Vagrancy. This Committee tended to treat smoke pollution as a nuisance similar to any other, an individual complaint against a smokey chimney being investigated and dealt with in much the same way as overfull dungpits or choked drains.

The Police Commissioners did attempt to assess the size of the problem, however, by undertaking an investigation into the number of steam engines in Glasgow and the suburban burghs, discovering by this means that there were two hundred and seven firms using steam engines, of which sixty-eight had been established within the Royalty, presumably being squeezed into back courts and the few remaining open spaces among the already overcrowded houses of the poor, and the remainder scattered throughout Calton,

Anderston, Gorbals and the villages beyond.¹ However, the investigation did not lead to any systematic attempt to compel the manufacturers to implement the 1827 Act or modify their chimneys in any way.

There was, nevertheless, a change of official attitude on the way. The Police Committee that took office in 1846 was to show more concern with smoke abatement than had its predecessor, the Police Commission. In 1850, the year of the publication of the Chronicles of Gothan, a sub-committee was formed bearing the title of the Committee for the Prevention of Smoke Nuisance, or more simply the Smoke Abatement Committee.² This committee commenced its operations by approaching the industrialists in as mild a manner as possible, with a circular letter summarising the main points of the Act and requesting them to implement these or face possible prosecution. This circular was to be followed by others, by verbal requests to individual offenders and by the occasional prosecution, but the response of the industrialists by and large was to ignore and obstruct every attempt to obtain their co-operation. Even the appointment of a smoke inspector, whose sole occupation was to track down smoking chimneys and give advice to their owners as to how their furnaces might be improved, failed to move the manufacturers into implementing the Act, although one or two more public-spirited industrialists did express their willingness to

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1. List of Public Works and Number of Engines. (Pamphlet, GCA D-POW-1/1), c. 1840.
 2. The first meeting was held on 5 April 1850. (Special Committee Minute Book, 5 April 1850).

alter their furnaces in accordance with the Committee's instructions.¹

As these coercive methods were proving insufficient to improve smoke pollution in the city, the committee was forced to move from its rather timid position more forcefully into the attack. The members were helped to some extent by the passing of the Smoke Abatement (Scotland) Act² in 1857, although this Act was severely restricted in its usefulness by the fact that under clause 3 the Lord Advocate's concurrence was required to every complaint for contravention of the Act. Ultimately an Amendment Act was passed in 1861 remedying this.³ In addition the Act specified certain industries only as being subject to its controls, which made it possible for firms to claim to be outside its competence.⁴

In spite of these restrictions on its effectiveness, the general Act added a second string to the bow of the Smoke Abatement Committee, which could be used to good

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1. John Ure, as a master baker, was largely responsible for the alterations to the furnaces of the mills belonging to the Incorporation of Bakers at Clayslaps, near Partick. (The Glasgow Herald, 30 October 1890).
 2. 20 and 21 Vict. c. 73.
 3. 24 and 25 Vict. c. 17.
 4. This claim was made on behalf of a Glasgow chemical works in an appeal to the Lord Ordinary in March 1863, but the appeal was rejected on the grounds that 'the clause in the present Act must be read by itself and with reference to its object, that is of the abatement of smoke nuisance arising from furnaces in Scotland. A restricted interpretation of the word 'Factory' would to a great extent prevent the attainment of this object'. The defendant had claimed a chemical works was not a 'factory' and therefore not subject to the operation of the statute. (Special Committee Minute Book, 6 March 1863, 32).

effect when the occasion arose. It was never more than supplementary to the local Act as the Smoke Abatement Committee found it useful only in cases where it was easier to prove poor management rather than faulty furnace construction was responsible for repeated emissions of black smoke.¹ As any prosecution meant visiting the works and inspecting the apparatus, for which no statutory authority was written into the Act, there was always the danger that the management would refuse entry to the smoke inspector or other officials, but here the local Act provided a valuable ally as it was only necessary to prove black smoke had been discharged from the chimneys in order to prosecute. In cases where managers proved awkward or obstructive to the smoke inspector carrying out an inspection under the terms of the general Act, it was possible to continue to case under the terms of the local Act. The advantage of the general Act was in the heavy penalties laid on those using furnaces not altered or constructed so as to consume smoke, which were as high as £5 for a first offence, £10 for a second and double thereafter, a cost additional to any alterations on the furnaces the management would need to carry out in order to avoid further prosecutions.

In the 1850s the attempts at smoke control by the local authority appear to have achieved little success. A retrospective report of 1863 refers to these early years of the Smoke Abatement Committee's work as being years of little or no progress, in which proprietors' promises to

1. Special Committee Minutes, 4 April 1864, 10.

amend matters were not kept and the committee 'exhausted every conceivable means of improving things, both written, by circulars and notices, and verbal, through the Smoke Nuisance Inspector, and finally adopted new procedures in 1860'.¹ Under these procedures, the chief constable reported to the committee at their meetings the names of firms whose chimneys had been kept under observation during one hour on each of three different days and during this period had been observed to emit black smoke. The worst offenders were then selected for prosecution. During the period in which this procedure was followed, between 1860 and early 1864, twelve hundred cases of smoke pollution were reported, of which one hundred and seventy eight had been prosecuted.²

This system must have closed loopholes used by the industrialists under the previous methods for detection and prosecution, for they took great exception to it. Previously they appear to have used considerable ingenuity to get round the regulations, and there seems to have been some co-ordinated attempt to render the local Act inoperative in 1856, although an unaccountable gap in the Smoke Abatement Committee records between January 1852 and October 1855 makes this period obscure and the proceedings are not reported again fully until the early 1860s.³ Although few manufacturers were willing to risk the expense of

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1. Special Committee Minutes, 4 April 1864, 8.
 2. Ibid.
 3. The firm of Todd and Higginbotham were so incensed by attempts to force them to alter their furnaces by statutory means that on two occasions, in 1856 and in 1864, they appealed to the High Court, unsuccessfully on both occasions. (Special Committee Minutes, 19 February 1864).

appeals to the High Court, many who found themselves faced with expensive alterations under order of the Dean of Guild Court could show masterly skill in delaying the implementation of the required work by 'placing every possible obstruction in the way of a final decision' on the right method of smoke control to be adopted, or by complaining repeatedly on the grounds of expense with regard to the inspector's fees, the cost of the action and on any other grounds available to them.¹ They were aided in this to some extent by the rather vague wording of the 1827 Act which stated that furnaces should be constructed according to the most approved plans then in use, thus opening the way to a wide range of interpretations which could be used to hold up prosecutions while investigations into 'the most approved plans' continued.

The new procedures proved sufficiently unacceptable to the industrial fraternity for a combination of members, in protest against this move by the local authority, to delve deeply into smoke control regulations and draw up a Memorial to be presented to the Smoke Abatement Committee. The manufacturers expressed their displeasure at the cost to them of legal proceedings and complained that 'in no district in the kingdom are manufacturers exposed to such oppressive and inconsiderate interference as is at present exercised in Glasgow with reference to the construction and management of the furnaces of the public works under the (local) Act'. They saw no reason why Glasgow should be

1. Special Committee Minutes, 4 April 1864, 4-14.

2. Ibid, 13-14.

placed on a different footing from the other major towns of the kingdom, many of which had milder Acts. Before presenting their Memorial, they had done considerable research into the London smoke control Acts, which they appear to have quoted in support of their claim for a respite.¹

The Smoke Abatement Committee's reply held little sympathy for the memorialists. In the first place, the committee strongly suspected them of ignoble motives in presenting their Memorial, since prosecutions were pending against sixteen of the signatories, a further seventy-eight having already been successfully prosecuted, leading the committee to the firm conviction, which the members did not hesitate to write into the Minutes, that the outcry had been manufactured by those awaiting prosecution in order to get rid of the expense of legal proceedings and avoid proper measures for abating smoke pollution.² They did, however, modify detection procedures so that the firms were notified immediately if smoke had been observed issuing from their chimneys, so that the management could make investigations while the incident was still recent, rather than receiving a summons weeks later for an offence whose cause could no longer be traced.

In one important respect the industrialists had good cause for complaint. With the best of intentions, the Town Council had inserted into the Act of 1827 the idea

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1. The Memorial itself is no longer in existence, but it is examined and quoted in a detailed Report of the Smoke Abatement Committee of 4 April 1864.
 2. Special Committee Minutes, 4 April 1864, 11.

that the local authority should arbitrate, through advisors, on the best means of procuring smoke abatement. This sometimes led to delays in effecting improvements in furnaces and chimneys while experts differed over what might be the best means of construction. It also led the local authority to become involved in the mechanics of furnace construction and the purchasing of patents. Soon after its formation, the convenor and clerk of the Smoke Abatement Committee travelled to London to investigate various methods of smoke control installed in works in the capital, and as a result the patent for one method which impressed the deputation by its efficiency was purchased for use in Glasgow.¹ This particular method, Juke's patent moving firebars, was abandoned in 1860 for Wyse Williams' method involving shutters for varying the apertures in the furnace doors. However, the efficacy of this system was apparently lessened by modifications introduced by the committee, which tended to reduce smoke but at the cost of increasing fumes and the production of carbonic acid. Owing to this and other similar instances, some manufacturers and citizens felt that the police authorities were not necessarily the best-equipped body to decide on methods of smoke control and should refrain from direct interference in matters beyond their competence, leaving it to industrialists and engineers to adopt the method of smoke control most suited to their individual requirements.²

1. Special Committee Minutes, 16 October 1851.

2. William Gorman, 'On Prevention of Smoke and the Means adopted by the Authorities of Glasgow for its Suppression'. Transactions of the Glasgow Philosophical Society, V, 1864.

In discussing atmospheric pollution through smoke, the industrialist has inevitably been cast as the villain and was treated so by the local authority at the time. Although much of the blame certainly lay with the many workshops throughout the city using steam engines as a source of motive power, a considerable volume of smoke went up the chimneys of domestic housing. A pamphleteer of 1910 pointed out that even had all the commercial chimneys in the city ceased producing smoke, there would still be sufficient from the chimneys of the city's houses to produce pollution.¹ The situation would not have been very different in 1860 or 1870 when the Smoke Abatement Committee so valiantly strove to combat smoke pollution. The last entry in the Minute Book for the committee is dated 27 September 1867, and from that date there is silence on the subject of smoke abatement. Possibly the committee was considered sufficiently important to warrant an individual Minute Book which has become lost, but the story of smoke abatement is almost impossible to trace after that date. From odd speeches reported in the press and pamphlets it is certain that it remained an issue frequently discussed, but very little practical results had come from half a century of effort. Dr. Gairdner blamed fog and atmospheric pollution for the high mortality of 1869, and by 1910 the hopeful picture of 'Future' in the Glasgow Looking Glass was nowhere nearer achievement.

By 1910 it was certainly easier to express in the

1. Hugh A. McLean, 'The Smokeless City - a retrospect and prospect'. Reprinted from The County and Municipal Record, 1910.

form of statistics the number of deaths which might be laid at the door of smoke pollution. A comparison made between two weeks in November 1909, one of which had been particularly foggy, showed an increase in the death rate from eighteen per thousand to twenty-four per thousand, and after a further week of fog to thirty-two per thousand, respiratory diseases being responsible for forty per cent of total deaths.¹ Such improvements as the local authority might make only served to prevent worse pollution, the Town Council finding that, like Alice and the Red Queen, they had to run at great speed in order to remain on the same spot. Given the technology and fuel needs of society in the mid-nineteenth century the problem was insoluble. It was necessary to wait upon the introduction of better fuels and the Clean Air Acts of the twentieth century before the smoke-laden atmosphere of Glasgow could be materially improved.

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If Glasgow entered the nineteenth century a city of golden sandstone buildings untouched by grime, it also could boast a large number of streams and small rivers whose clear waters augmented the citizens' water supply. This is perhaps too fanciful a picture, for by the beginning of the century the Molendinar burn at least had ceased to

1. Quoted in the article by Hugh A. McLean, 'The Smokeless City - a retrospect and prospect', reprinted from The County and Municipal Record, 1910. See also Chapter XXV in A.K. Chalmers, The Health of Glasgow for a study of smoke control in the 1909-1925 period.

be the 'pellucid stream' in whose waters fish could swim, giving the owners of property in the Saltmarket privileges of fishing from their portion of its banks.¹ The Molen-dinar was a stream closely bound up with the development of Glasgow and meandered right through the centre of the old town, on whose banks the original settlement had been made. The other streams making their way into the Clyde fared better until urbanisation overtook them as well. There were a considerable number of them, ranging in size from the river Kelvin which divided Anderston and Partick to the west of Glasgow to the small Jenny's burn which was scarcely more than an open ditch, making its way towards the Clyde unobtrusively through the southern district.

The plentiful supply of streams and watercourses was probably responsible for holding back the formation of sewers in Glasgow, for few houses were very far from some natural running water which could draw off storm water and later liquid sewage. By 1842 a rudimentary system of sewers had been laid, amounting by 1832 to some eight miles and fifty-six yards.² These sewers were purely for the purposes of conveying storm water away from the houses and channelling it into the nearest stream or into the river Clyde. Responsibility for the formation of these sewers had been laid upon the Town Council by the Police Act of 1800. Surface drainage in the city was very imperfect, consisting of little more than gutters following the slope of the street in order to convey as much water as possible

1. Senex, Glasgow, Past and Present, p. 31.

2. James Cleland, Description of the City of Glasgow, (Glasgow 1846), p. 70.

in the direction of the nearest public sewer. Among the courts and closes, responsibility for drainage of rain water ended with the construction of a rhone from the roof of the tenement to within six inches of the courtyard or street. After the passing of the 1807 Police Act, house proprietors had to make a groove or channel in the stone pavement to ensure that water travelling down the drain-pipe ended up in the common sewer and was not dissipated over pavements and courtyards, but this did not need to be covered over. The imperfection of this system led later Police Acts to authorise householders to connect up rhone-pipes with underground private drains. This meant the construction of common sewers leading from a building to the nearest public sewer, an expense borne by the various proprietors of a building, and as this was costly and meant a certain degree of co-operation on the part of the landlords, agreement was frequently difficult to get among them as to apportioning expenses. In this case, the Dean of Guild Court might step in and compel the construction of a common sewer.

Urgency over the question of efficient drainage for the city did not appear to confuse the issue while refuse disposal and drainage were entirely separate matters and storm water was the chief reason for having a system of sewers at all, the city's solid refuse being removed by manual collection. With cleansing and nuisance removal the major problem in public health improvement so far as the police authorities were concerned, there was little

incentive to press ahead with expensive schemes for the construction of sewers. Although it was to take a period of many years before the municipal authorities paid as much attention to drainage and sewerage problems as they did to refuse collection and general cleansing, they were forced by the effect of increasing industrialisation by the mid-century on the rivers and streams of the city to take some action.

Once they had become aware of the dangers from the unfettered discharging of industrial waste matter into the natural watercourses of the area, the various burghs before 1846 and the city of Glasgow thereafter attempted through the local Police Acts to prevent water pollution. If a stretch of water was declared a nuisance cognizable under the nuisance bye-laws, the local authority could compel the proprietors on either bank to clean up the water or cover the burn over. By this method the majority of Glasgow's small burns were to disappear, the first to vanish along its entire length being the St. Enoch's burn which was only a memory as early as 1849.¹ The Camlachie burn, famous at the turn of the century for its clear waters and avenues of ash-trees,² was to follow over the next thirty years but long before its final disappearance under paving stones, this and the other streams had become stinking open sewers.³ The last to go along its whole course was the Molendinar itself. Although the lower

1. Senex, Glasgow, Past and Present, p. 151.

2. Ibid p.93.

3. Ibid p.131, 136, 142.

reaches were covered over by the mid-century, the upper stretch of this river fell through a small gorge in the vicinity of the cathedral and here the Town Council had established a mill, known as the Sub-Dean mill, with a mill-dam. The mill-dam held back the waters of the Molendinar at a point where the common sewers of the Royal Infirmary discharged into the river, forming a 'monster cesspool' by 1849.¹ However, the mill was so lucrative to the Town Council that it turned a deaf ear to requests for the mill-dam to be removed, in spite of a constant barrage of criticisms, barbed with comments on the unscrupulous conduct of a Corporation that prosecuted parties for causing a nuisance of considerably less dimensions while carefully preserving one of their own.² Eventually the Town Council gave way, and the mill-dam was removed in 1870 to permit that particular stretch of the Molendinar to be covered over, leaving it open to the skies only near its outflow from Hogganfield Loch.³

The piecemeal covering over of the polluted streams within the city was a last resort and not the root of the problem. Some attempt had to be made to control the discharge from the innumerable workshops and factories of industrial effluent in the first place, and later from domestic water closets. The waste products from the many

1. Senex, Glasgow, Past and Present, p. 60.

2. Ibid.

3. CHM, 22 August 1870, 96. There were, however, some portions of the river further downstream still uncovered and in particular the stretch passing the Duke Street prison, which used it as a convenient sewer. (CHM, 5 February 1872, 293).

chemical works within the city and from the gas industry caused particular concern. Anderston burgh council included clauses specifically dealing with the problem of the contamination of water by products of the gas industry in their Police Act of 1826, although the immediate cause of this may have been some incident which occurred while the bill was being drawn up.¹ The clauses were of sufficient importance to be inserted in a revised form in the Police Act of 1843.

The laws controlling drainage and water pollution were, however, neither numerous nor effective. They empowered the police authorities to compel proprietors to connect up their properties or works with the public sewers - although only with the permission of the local authority - and forbade industrial premises to discharge their effluent direct into streams. However, as there was an insufficient number of public sewers, industrialists had a more ready excuse for flouting the law than was the case with smoke pollution and the authorities had in general to turn a blind eye to evasions of the Act unless a flagrant case of pollution occurred, when a prosecution could be brought by the Procurator Fiscal before the Police Courts.²

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1. 6 & 7 Vict. cap. 105, clauses 55-58.
 2. Gas-tar was the cause of investigations after discharge into the River Clyde near Rutherglen Bridge, a favourite bathing spot, which was traced to faulty filters at a nearby works. Prosecution was threatened after the owners, having declared themselves willing to rectify matters immediately, allowed a further discharge of gas-tar at the same spot shortly after. (PCM, 7 July to 18 August 1856). Detection of the source of pollution was not always easy. See Note 1, page 219 above, for the tracing of chemical pollution.

The local authority had other problems to contend with which were not of its own making, although with some foresight they might have been lessened. Much of the land around the city was marshy and poorly drained and therefore unsuitable for development, but nevertheless had been the target for either factories or domestic housing. The local authority had then to face the effects of damp and frequently flooded houses or contaminated springs. The most notorious case was that of the Pinkston bog and burn in the northern district of the city. This area had the misfortune to be within drainage distance of the giant St. Rollox chemical works and by the mid-century the bog had become covered by alkali waste from the factory. As the burn rose to the surface through deep underground springs, the water became contaminated. To this original contamination was added the effluent of the other industries which followed the line of the burn on its way to join the Kelvin, including breweries, distilleries and quarries, and the domestic sewage of the houses that sprang up in the wake of the industries to house the workforce. While the whole area was described as dismal and depressing by investigators,¹ the Pinkston burn itself could on occasions provide a veritable Joseph's Coat of colours, having been observed to turn from white to black and all shades of colour over a fairly short period, all due to the effluent from dye-works discharging into the burn. Some sixteen thousand tons of organic matter per year was estimated to

1. PCM, 18 December 1848, 222-223; 5 March 1849, 267. Even as early as this period, the situation was described in these reports as 'intolerable'.

come down the Pinkston burn and find its ultimate destination in the Clyde.¹

The difficulties in the way of devising an overall drainage plan for the area were legion. Although numerous sub-committees were appointed between 1848 and the 1860s to consider the Pinkston bog and burn, all foundered on the rock of expense and the difficulties of getting the various proprietors to co-operate in paying their share of such a venture. An Act of Parliament would have been needed to put this through on police authority initiative alone and the alternative was to compel the compliance of individual proprietors in piecemeal litigation. Plans were prepared at some cost by the Police Committee² but came to nothing, and six years spent in fruitless investigations, during which the opinions of several eminent chemists and engineers were sought on the subject, but none of this bore any fruit in practical terms. A second plan was drawn up which involved the sinking of a mine shaft to channel off the spring waters before they came in contact with the alkali waste, but the cost dampened the Police Committee's enthusiasm considerably, and they finally laid the whole business to one side on the assurance by the St. Rollox works that the firm would undertake an extensive drainage scheme itself which should go far to curing the initial contamination of the Pinkston bog.³

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1. Thomas Orr, 'On the Duty of Municipal Authorities to improve the Sanitary Conditions of Towns'. Transactions of the National Association for the Promotion of Social Science, 1858. (Orr was a Council member).
 2. PCM, 5 March 1849, 267.
 3. PCM, 13 October 1856, 402-403.

The case of the Pinkston burn was only the most notable example of the local authority's inadequacies when coping with drainage schemes on a large scale. Another example was the Dalmarnock area of the city, which required a similar drainage plan in order to make some improvement in a very low-lying district drained only by open ditches. Here again the principal proprietor was willing to contribute a substantial sum if the other property owners in the area could be prevailed upon to do likewise, but lack of co-operation on the part of other industrialists forced the abandonment of a sensible drainage scheme.¹ The gradual covering over of the city's burns did increase the number of public sewers available for drainage at a comparatively small cost to the municipal authorities, the proprietors on either bank bearing the major cost of such projects, but the whole question of disposal of industrial effluent had to await the building of a comprehensive and planned system of sewers before the problem could be solved satisfactorily.

By the mid-nineteenth century, the inadequate sewers of the city, both private and public, were coming under stress from a different quarter. The water closet was becoming increasingly popular as an alternative method of domestic sanitation to the dry privy, particularly in well-to-do houses. By 1849 there were sufficient water closets discharging into the city's drainage system for an observer to remark '...the effect of some thousands of water-closets pouring their contents into the Clyde cannot

1. NRCM, 14 January 1859.

but be odious in the extreme; and every one may have felt that in summer days, after a long drought, the river from this cause literally sweats abomination...'¹

To the local authority, the advent of the water closet was a threat on two fronts, firstly on the ability of the sewers to cope with the added volume of water-borne sewage, and secondly to the profitability of the existing system of manual refuse collection which depended to a great extent on the value of human manure to make sales. They may have used their powers under the local Police Acts to prevent the connecting up of water in domestic housing with public sewers, so forcing the spread of underground cesspools,² but there is little evidence that they took any direct action to prevent or control the installation of water closets or the building of a drainage system by private enterprise, which was thus entirely unsupervised by the statute labour authorities. The master of works of the Police Committee was aware of the dangers inherent in this situation when he pointed out to the Committee that drains were being installed with no adequate supervision as to the type or quality of materials used, so that builders were still using flat-bottomed drains and elongated cesspools on the model of those installed a century earlier.³ He made the sensible recommendation that the Committee should

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1. Senex, Glasgow, Past and Present, p. 131.
 2. In writing of the sanitary state of Glasgow in 1862, The Builder concluded that '...the Glasgow authorities are so annoyed at the pollution of their noble river that they prefer the principle of cesspools to the principle of sewers...' (Quoted in The Glasgow Herald of 5 February 1862).
 3. PCM, 27 August 1849, 289-291.

ensure only glazed stoneware was used, the police authority possibly following English precedents by buying large quantities of suitable drainpipes and selling them to builders at cost price.¹

This advice apparently went unheeded and no action was taken to prevent the proliferation of underground drains and cesspools, so that over a period of time the existence of many became unknown or forgotten and they frequently lay broken and choked up, the liquid sewage seeping into the surrounding soil.² Many parts of the city, such as Bridgeton and Camlachie in the east end, were totally without public sewers or official drains of any description as late as 1858, no accurate plan of the city sewers existed and not until the summer of 1866 was a Return of the city's cesspools undertaken to find out how many there might be.³

The enormous improvement in the water supply after the opening of the Loch Katrine works in 1859 increased the demand for water closets. While these were limited to the more expensive housing the threat to the city's sewers was not great, but the spread from middle class to working class homes in the early 1860s was rapid. By 1862, when Dean of Guild Court records for the building of new houses in the city begin, water closets were replacing the dry

1. PCM, 27 August 1849, 289-291.

2. Thomas Orr, 'On the Duty of Municipal Authorities to improve the Sanitary Conditions of Towns'. - Transactions of the National Association for the Promotion of Social Science, 1858.

3. SCM, 21 June 1866, 196.

privy as the most common form of sanitation to be provided for new houses. The records are patchy from 1862 until 1870, but from that period they are more complete.¹ In this year permission to build was granted for a total of three thousand, three hundred and forty-four domestic houses, of which 73 per cent were one or two roomed and can therefore be described reasonably as working class housing, and to serve this number of houses a total of one thousand, five hundred and thirty-nine water closets were proposed to be installed and only sixty-eight privies, thirty-one of which were additional to water closets and probably attached to stable yards or back courts. By 1875 the process had gone even further. In this year, of the five thousand-odd houses passed for building, only thirty-nine were to be served by privies and three and a half thousand water closets were to be installed for the remainder. The persistence of privies was frequently due to topographical features, for example in the Garngad area where the height of Garngadhill caused difficulties in supplying cisterns.² The east end of the city also continued to use dry privies longer than the other districts for no obvious reason. Almost all the privies installed in new housing were located either in the Garngad or the eastern district of the city.³

1. These figures have been compiled from the Record Books of the Dean of Guild Court, lodged in the Glasgow City Archives.

2. Water Commission Minutes, 3 August 1874.

3. Where privies were installed, these rarely came within the standard of one to every five families, one to ten or more being not uncommon. On the other hand, where water closets were used for sanitation, they almost always fell within the standard of one to every five families.

So far as the Police Board was concerned, this threat to the city's drainage system could only be met by pressing ahead with the building of main sewers and ensuring that water closets were efficiently connected up with private drains and common sewers. Even with the growing number of water closets, the larger number of houses in the urban area still used the dry privy and ashpit system for the disposal of excrement and they had therefore to maintain the cleansing system in being since the beginning of the century. Ultimately demolition of old property and the abandonment of privies in new housing had the effect of making the manual system of refuse collection out-of-date and in 1889 the historic decision to abandon it was taken, water closets becoming compulsory in all tenement blocks.¹ It is still possible to see old houses in Glasgow to-day with brick structures up the side of the building, showing where a range of water closets, one or two per floor, had been built to comply with the new regulations.

However, this piecemeal attempt at a solution to the drainage problems of the city was never satisfactory and it was the responsibility of the Town Council, rather than the Police Board, to formulate some overall scheme for putting matters finally to rights. The Town Council was the only body empowered to draw up a bill which could raise the necessary capital for large-scale sewage works or for the purification of the Clyde. The Town Council was to drag its feet over the whole sewage question, taking the

1. CHM, 11 March 1889, 34-36.

best part of half a century between the first attempts at dealing with the problem and the final opening of the Dalmarnock sewage works.

The Town Council's first serious encounter with the sewage question came through concern over the erection of the Drygate Rookery, which led the councillors to pursue the police bill of 1851 which, if successful, would have given them powers over the erection of houses and buildings and generally improved the state of hygiene in the city.¹ As already outlined, the bill was stopped in the Committee stage by Lord Redesdale, who recommended the Town Council to include provisions for the improved sewerage and drainage of the city as a subject demanding immediate attention, '...having in view the great and growing evil arising from all the sewerage being at present run into or above the harbour...'² As a result, the councillors found themselves involved in an investigation into the whole question of sewage, and engaged Bateman, the engineer of the Manchester water works, to advise them in September 1853. Bateman had already been working on the Town Council's behalf since 1852 on the projected Loch Katrine water scheme, and once the Water Works bill had begun its long journey through the parliamentary processes, there was little time left over for either the councillors or Bateman to consider the subject of sewage, with the result that the sewage problem was temporarily shelved. The only permanent feature of this phase in the tackling of the sewage question was a

1. See above, pp. 111-112.

2. Town Council Special Minutes, 19 August 1853.

number of experimental tanks draining water from the Pinkston burn, which Bateman had requested should be set up and which were constructed at considerable expense and in the face of determined opposition from the landowner, Campbell of Blythswood, who had gone to great lengths, unsuccessfully, to prevent the building of the tanks in the first place.¹ Having been constructed to Bateman's specification, they would have remained unused and neglected had not other sanitary engineers, hoping to persuade the Town Council to purchase their particular method, made good use of them for conducting experiments in sewage disposal.²

The Town Council, however hesitant in making a final decision on how best to dispose of the city's sewage, was not lacking in advice on the subject. Plans put forward for the consideration of the councillors ranged from one put forward in 1851 which aimed at creating an artificial spate for scouring the river Clyde through the construction of storage tanks in Upper Lanarkshire, to a more professional proposal put forward ten years later by Mr. Carrick, the master of works, which planned for the construction of intercepting sewers to run from the west end through the suburban burghs of Hillhead and Partick, finally reaching to the Kilpatrick hills some miles from the city where the sewage should be used to irrigate the land. To all these plans the Town Council gave varying degrees of attention, but all were doomed to failure on the grounds of

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1. Town Council Special Minutes, 19 March, 1856; 2 May, 1856; 1 November 1856.
 2. Ibid, 17 December 1856; 28 September 1857.
 3. Ibid, 19 January 1860.

expense and of the engineering problems concerned. There were few examples of large-scale sewage schemes to give the Town Council some guidance, and the councillors were wary of spending public money unwisely. They had already learned to their cost that estimates could be wildly inaccurate, when implementing the water works project.¹

However, by the mid-1860s the state of the river Clyde as a result of pollution could no longer be ignored. Once again the Town Council engaged the services of Bateman for an investigation of the sewage problem, to whom they added Bazalgette, lately acclaimed for his London sewage scheme, and the eminent Professor of Chemistry at Glasgow University, Professor Anderson. The investigators discovered through experimenting with wooden floats, that sewage entering the city at Victoria Bridge in the central area would take at least a week to reach Govan ferry, two and a half miles downstream. The removal of the weir across the Clyde near Dalmarnock, which was then under consideration, would only have the effect of carrying the sewage by tidal action even further back upstream. On their reckoning, the sewage daily being poured into the Clyde was around seventy gallons per head or thirty-five million gallons gross per day. The volume of water coming down the Clyde to wash away this effluent was fifty million gallons a day in drought conditions and about three or four hundred times that in flood, the normal amount fluctuating between these two extremes according to rainfall. The

1. The parliamentary estimates of cost for the water works had been £540,000. By 1861 construction had cost the Water Commission £917,795.5s.11d. (WCM, 30 June 1862).

volume was increased by the water coming down several important burns on the north side, although no stream of any size flowed into the Clyde at Glasgow on the south side.

Bateman and Bazalgette in their Report, presented in 1868, recommended the construction of works by which all the sewage of the city and neighbourhood should be intercepted and carried down to the Ayrshire coast, where it should be passed through settling tanks or filters and the solid matter used on land as fertiliser, the liquid sewage being channelled into the sea. The estimated cost of their scheme was £1,253,256, which was well beyond the Council's intended expenditure at that time. The engineers must have well understood the dilemma the Council was in, with a scavenging system geared to manual removal and the city divided between those possessing water closets and those using dry privies. According to their estimation there were ninety thousand families in Glasgow, of which around forty thousand had access to water closets and the remaining fifty thousand had their night soil removed by the Cleansing Department. They thus foresaw that any changes would be slow in maturing. 'Details will accommodate themselves to the exigencies or convenience of the inhabitants and be carried out eventually more satisfactorily than they could be by any sudden radical change'.¹

The stumbling block to sewage improvement was to some extent the need for making any such scheme profitable.

1. J.F. Bateman & J.W. Bazalgette, Report to the Joint Committee of the Magistrates and Council, the Clyde Trustees and the Board of Police on the subject of the sewage of the City of Glasgow and the Purification of the River Clyde, (Glasgow 1868), pp. 17-18.

The profits to be made from the sale of night soil and street sweepings could always be put against the costs of the Cleansing Department to bring these down. Allowing water-borne sewage to be swept out to sea seemed unduly wasteful to the Victorian mind, and no sewage scheme which permitted this to happen without at least attempting to use sewage for fertiliser would be popular with the rate-payers expected to foot the bill. Bateman and Bazalgette were not to see their sewage plan for the city mature as once again the Town Council passed it by on the grounds of expense, and possibly they were correct in their estimation that the time was not ripe for such a scheme to be put into effect. Unlike the provision of a better water supply, the average ratepayer could see no personal gain in large-scale sewage works to compare with turning a tap and obtaining a plentiful supply of pure water for his drinking, cooking and bathing needs. He probably had already a water closet which he flushed without thought towards the destination of the effluent, and the purification of the Clyde was a matter remote from his everyday needs. Public attitudes needed to be educated in the direction of understanding the reasons for spending large sums of money on river purification and sewage works before these could be put in hand.

Few contemporaries suggested that the water closet should be promoted as a positive improvement, to the total abandonment of the dry privy system. One who did was George Thornton, whose scheme for sewage disposal was presented to the Town Council in 1869. Thornton was not

the first to suggest that water closets were better for domestic sanitation than privies for Robert Cowan had suggested that public water closets should be set up 'for the daily removal of filth' as early as 1838.¹ However, Thornton backed up his beliefs with statistics, which showed according to his calculations that there were nearly fifty-three thousand privies and cesspools in the city, or about one to every 4.72 persons, all having to be cleaned out either daily or at regular intervals. The practice of deodorising the contents of privies with dried earth or ashes was only effective when these were fresh and dry, but as soon as the ashes became saturated, the contents fermented. The constant manual removal of the contents of privies within the city produced smells which did not pass from a neighbourhood for days. Thornton advocated the complete suppression of privies and cesspools and the installation of one water closet for every two or three families. Water closet pans and traps for the drains could be made in a cheap, practical form and the cost of the operation would not be more than £100,000.² Thornton's scheme, like so many others, was read and noted but not acted upon, although a mere twenty years later the Police Board was to adopt very much the same attitude as his.

The sewage problem was not to be settled until the last decade of the century. The Town Council took advantage of tunnelling projects by the Caledonian Railway Company, which interfered with the existing sewers, to

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1. Robert Cowan, Vital Statistics of Glasgow, (Glasgow 1838) p. 13.
 2. G. Thornton, Scheme for the Disposal of Sewage in Glasgow, (Glasgow 1869).

remove their opposition to the company's bill, then before Parliament, provided they undertook to replace the sewers with a new system.¹ With the major part of the expense of sewerage the north east side of the city laid onto the Caledonian Railway Company, the Town Council were able to concentrate their resources on the sewage treatment and disposal works at Dalmarnock, which were finally opened in 1894. Other disposal works covering the remainder of the city were to follow, those at Dalmuir being opened in 1905 and an Act for the construction of sewage works for the south side being obtained in 1898.

The river Clyde and its purification was a problem distinct from the sewerage of the city. By the time it reached Glasgow, the river was already heavily polluted from the towns and villages further upstream. Before any sort of purification scheme could be put into effect, agreement had to be reached between the city of Glasgow and a considerable number of other local authorities.

In 1874 a Royal Commission under Sir John Hawkshaw was set up to consider the pollution of the Clyde and its tributaries, an area covering some one thousand, four hundred and eighty square miles. The Report, presented in March 1876, suggested sewerage the main towns and conveying the sewage in a tunnel to the sea. The whole project was estimated to cost around £2,500,000. Although the government originally insisted that the bill to raise the necessary capital must be promoted by Glasgow and the

1. Sir James Marwick, The Water Supply of Glasgow, p. 208. Bazalgette assisted the city engineer in drawing up the necessary plans.

other local authorities, agreement between these bodies was so difficult to reach that eventually the government decided to promote the bill themselves.¹ The private measure was consequently withdrawn, but a change of government brought a different policy and the new Home Secretary, Sir William Harcourt, passed the ball back to Glasgow again. The city had incurred considerable expense over its previous bill and was not anxious to take up again so difficult a cause, and the whole question went by default.² The opening of general sewage schemes for the city did assist in the purification of the Clyde by the beginning of the twentieth century, but the effective purification of the Clyde was not to be achieved during the nineteenth century.

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If the local authority failed in the attempt to solve these two problems, smoke pollution and the disposal of the city's industrial and domestic sewage, this was partly due to the technological and financial difficulties inherent in each case. Legislation to control excessively smokey chimneys had been passed as early as 1814, had been brought up to date in 1827 and augmented by government legislation in 1857, but attempts to enforce this legislation were

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1. Report of Sir John Hawkshaw, the Commissioner appointed to inquire as to the Purification of the River Clyde. Parliamentary Papers 38, 1876.
 2. For an account of the drainage of the city between 1851 and 1900, see Sir James Marwick, The Water Supply of Glasgow, Appendix pp. 93-98.

hampered by the sheer volume of smoke coming up the chimneys of both factories and domestic housing. Any improvement made was palliative rather than curative until the advent of alternative sources of energy and smokeless fuels in the twentieth century.

So far as the sewage problem was concerned, the expense involved in undertaking a large-scale drainage and sewage disposal scheme for the Glasgow area was sufficient to ensure that the local authority procrastinated as long as possible in making up its mind how to solve this particular problem. In the 1850s when public health was beginning to make an impact on the ordinary Glaswegian, sewage was probably the least attractive aspect and therefore the one most readily relegated to the bottom of the list of priorities where the spending of money was concerned, particularly as the provision of a good water supply was proving a costly, if popular, venture. Sewage technology was not well advanced and the Town Council wary of breaking new ground and possibly becoming involved in an expensive failure. Much of the city's refuse was still removed manually and as the Clyde and other streams and rivers were polluted before they reached the urban area, it seemed unprofitable to purify the Clyde on reaching Glasgow and making no attempt to ensure the river further up its course was similarly dealt with. As this involved considerable expense and liaison with other authorities, the whole prospect became fraught with difficulties that the Council was not anxious to tackle them and easily laid

the whole question of sewage purification and the cleaning of the local rivers aside. The prospect of government aid in obtaining legislation enforcing some sort of co-operation on the local authorities in the area was also a red herring which held up progress, and not until the very end of the century, by which time public health measures, however expensive, were an accepted part of municipal administration, did the Town Council feel in a position to raise the money and provide the city with a comprehensive sewage scheme for the whole urban area. Even this scheme shelved the question of purifying the Clyde, a problem left to later generations to tackle.

'An ample supply of good water to large towns, for domestic and manufacturing purposes, has always been considered an object of paramount importance'. So wrote John Burnet, first clerk to the Glasgow Water Commission in the introduction to his history of Glasgow's water supply, adding '...the great benefit derivable from it in promoting health, cleanliness and comfort is universally acknowledged, while the importation to this country of new and previously unknown diseases and the frequent recurrence of epidemics have of late years greatly enhanced its value in a sanitary point of view...'.¹

No study of urban public health can ignore the importance of an adequate water supply to a city as a factor in public health improvement. Contaminated water can be responsible for the spread of water-borne diseases such as typhoid and cholera, while an inadequate supply can lead to insufficient cleansing both of individual houses and the city at large. Glasgow is no exception to this rule, and the story of the struggle to bring a good and plentiful supply of water into the heart of the city is central to the story of public health improvement as a whole. In the case of Glasgow, the improvement of the water supply was a triumph of municipal enterprise and public spirited administration at a time when these qualities were not always very evident in the City Chambers.

1. John Burnet, History of the Water Supply of Glasgow, (Glasgow, 1869), p. 1.

However, the very success of the enterprise has had the predictable effect of making the Glasgow water supply the subject of several studies. The most detailed account of the struggle between the old Glasgow Water Company and those members of the Town Council who believed the supply of water should be a municipal undertaking was written by John Burnet in the book quoted above, written in 1869 ten years after the completion of the construction work and its official opening by Queen Victoria. Burnet had previously been clerk to the former Police Commissioners, switching his allegiance to the Water Commissioners and providing them with many years devoted service. His book presents a first-hand account not only of the administrative problems encountered by the Town Council within and without the Council Chamber, but also the difficulties met with at the parliamentary level in obtaining the necessary Act of Parliament. His book does not end with the passing of the Act in 1855, but continues with an account of the construction work involved, with detailed maps and plans of the aqueducts and tunnels necessary to bring water from a remote highland loch to the heart of the city.

In addition to Burnet's book, Glasgow's distinguished town clerk of the latter part of the nineteenth century, Sir James Marwick, published an account of Glasgow's water supply in 1900, taking the story back to the early medieval period when little more than wells supplied the city and including various other sanitary and municipal undertakings in his study, particularly the provision of a fire brigade from early on in the history of the city and also listing

the various public wells.¹ Both these books contain a wealth of detail concerning the capacities of reservoirs, the length of the aqueducts, the horse-power of pumps and annual quantity of water consumed per head of the population, and data of a similar nature. To them should be added other, lesser accounts of the water supply, which put together makes this the most thoroughly explored topic in Glasgow's public health history.² As a result, any further work on the water supply has to go over ground already well covered and restate what has already been said. For this reason, the story told by Burnet and Marwick will only be dealt with here briefly and for the sake of clarity, and other, less well examined aspects of the story of the water supply will be discussed more fully.

The story begins in the nineteenth century with the formation in 1806 of the Glasgow Water Works Company, following the passing of an Act empowering the company to raise £100,000 for the introduction of piped water into the city.³ Prior to this, the citizens of Glasgow had relied for a supply of water on thirty public pump wells and a number of private wells. Water-sellers augmented an inadequate service, most notable among them being

1. Sir James Marwick, Glasgow - the Water Supply of the City from the earliest period of record; with notes on various developments of the city till the close of 1900. (Glasgow, 1901).
2. These include the booklet Glasgow Corporation Water Works - Historical Notes, 1909, which was prepared for the jubilee of the Loch Katrine water works and other works published by the Corporation of Glasgow.
3. 46 Geo. III, cap. 136.

William Harley, who piped water from his estate at Willowbank into reservoirs in the city centre, from where it was sold at one halfpenny per stoup, the enterprising Mr. Harley being reputed to make an income of some £4,000 per annum by this means alone.¹

The Town Council of Glasgow, as interested parties in the supply to the city, held twenty of the £50 shares offered for sale by the new Water Company, an amount which enabled the councillors to interfere in the affairs of the Company to a limited extent while not costing them too large an expenditure.² In 1808 a second water company was formed to serve the growing suburbs to the west of Glasgow. This company, the Cranstonhill Water Works, had reservoirs near Anderston and, like its rival, drew its supply entirely from the river Clyde. The two companies existed in competition for a number of years, but the inability of the Cranstonhill Company to make a profit led to the amalgamation of the companies in 1838.³

The united company was not bound by the Act which joined them together to do more than give a supply of water to those areas where pipes were already laid, which in general were districts inhabited by the better-off. No compulsion was laid upon the new Company to supply the poorer areas, although in practice the intermingling of domestic housing and small workshops in the old city of Glasgow had ensured that a network of pipes went through

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1. Burnet, p. 3.
 2. Burnet, p.
 3. 1 and 2 Vict. cap. 86.

all but the smallest wynds and closes, in order to supply the needs of local industry. The piping of water into the tenements, however, was exceptional unless a building contained some small factory, slaughterhouse and the like. The Water Company was bound to supply the Police Commission with up to two million, five hundred thousand gallons a year at the reduced rate of 10d. per thousand gallons, for cleansing the city streets.¹

After amalgamation, the source of supply remained the river Clyde. Filtration of the water was achieved by making use of the sandy bed of the river as a natural filtre, a brick culvert being built along the bank of the river below its bed with joints being left in the brickwork through which water was allowed to percolate into the culvert. About three million gallons of water were supplied to the city every day in this way, the natural sand filtre being the only one in operation for a period of thirty years. From 1839 onwards, other filtres and subsidiary reservoirs were introduced at Dalmarnock and Cranstonhill, the water being raised into the reservoirs by means of Bolton and Watt steam engines, the two at Dalmarnock being aptly named Samson and Goliath.²

Although formerly water of good quality, by the mid-nineteenth century the Clyde was suffering from the effects of pollution from the many communities further up the course of the river, and was in any case liable to contamination by peat and clay at times of flood. The inadequacy

1. Burnet, p. 9.

2. Burnet, pp. 11-12.

of the sand filtre and of the supply as a whole had led to various plans for bringing a better and more ample supply of water into the city. The hills surrounding Glasgow to the north and south west were all catchment areas of a substantial flow of water and therefore were objects of attention as a possible source of supply, the river Avon near Stonehouse, the North Calder near Airdrie and the burns on the Campsie hills being at first the most popular as they were relatively close with flattish terrain between the rivers and the city.¹

However, the Water Company, spurred by criticism from its consumers, had a more ambitious scheme afoot. This was to bring water from Loch Lubnaig in the highlands across difficult country to Glasgow. In 1846 the Company obtained an Act to this end, enabling them to raise the necessary money for the engineering works.² This Act temporarily put paid to another scheme of equal ambition being prepared by a group of Glasgow businessmen, which was to bring water from Loch Katrine into the city. On the Company actually obtaining their Act, this plan was laid aside.

The search for a better water supply continued against a background of increasing public pressure. So great was the emphasis being placed upon immediate action that the Town Council began to turn its attention towards the possibility of taking over this function, and in October 1845 had passed a resolution stating '...it would be a

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1. Burnet, pp. 19-20.
 2. 9 Vict., cap. 21.

great public benefit if the supply of water to the inhabitants was taken out of the hands of private joint stock companies and placed under the control and management of the magistrates and Council or of Commissioners on behalf of the Public...¹ The Loch Lubnaig scheme seemed to solve the problem for the time being, and the Council went no further.

By the end of 1848, however, the issue had been further complicated by the appearance on the scene of a second water company, operating efficiently and profitably in the southern district of the city. This was the Gorbals Gravitation Water Company, founded in 1846 and supplying water by 1848, which drew its supply from the large catchment area of Renfrewshire and particularly from the Brock burn, to the south of Glasgow.² This company was already by 1850 seeking powers to extend its existing works in order to supply Glasgow's neighbours on the south side, Govan and Rutherglen.³

Meanwhile, the Glasgow company had run into difficulties over its Loch Lubnaig scheme. It appeared on closer investigation of the project that they would be unable to provide Glasgow with sufficient water and at the same time discharge the stated amount of water as compensation for that drawn from the loch into the river Teith.⁴ As a result, the plan fell by the wayside and after it was

1. TCM (Ms), 16 October 1845, 72-74.
2. 9 and 10 Vict., cap. 347.
3. Marwick, p. 125.
4. Marwick, p. 114.

apparent to the general public that nothing was being done by the Water Company to implement the scheme, agitation began once more.

It has to be remembered that this period, between 1847, when the Loch Lubnaig scheme was temporarily shelved and 1852, when the Town Council finally decided to bring in a water works bill itself, was one of unprecedented disease with major epidemics of typhus and cholera. Water was the most vital public health commodity available, or not available to the municipal authorities in their fight against infectious diseases. This point will be explored in more detail later, but the battle for an improved water supply was fought out against a background of sickness and high mortality and the failure of the Glasgow Water Company to provide an improved supply was of enormous importance during the epidemic period.

The abandonment of the Loch Lubnaig scheme meant the resurrection of that concerning Loch Katrine. In October 1852 the Town Council considered a suggestion from one of their number that £10,000 worth of shares in the proposed Loch Katrine Company should be taken, with special provisions being made in the bill for the supply of water to the Police Committee for sanitary purposes, for which a special rate of 1d. per £1 would be levied.¹ The Council, after registering disapproval of the Glasgow Water Company for not implementing the Loch Lubnaig scheme, decided to set up a sub-committee to consider the question of the water supply

1. TCM (Ms), 14 October 1852, 461-464.

to the city. This committee reported back 'that it appears to this committee...to be most desirable that the power of supplying the City with water should be vested in the Magistrates and Council, as a separate Trust for the benefit of the Inhabitants, rather than any private company...'¹ The Town Council endorsed this conclusion and shortly afterwards engaged the engineer Bateman to examine all the various projects for bringing water into the city, in order that the councillors might put forward a bill themselves as soon as possible.

The Town Council, in entering the lists, found itself facing an array of difficulties. Firstly there was the question of deciding on the most suitable scheme, a decision the councillors prudently handed over for investigation to Bateman, assisted at a later stage by such eminent men as Brunel and Robert Stephenson.² Secondly, the two water companies already operating within the city had to be bought out on as favourable terms as possible. The Glasgow Water Works Company had once more taken up its Loch Lubnaig scheme, on the grounds that the technical difficulties that had defeated it in 1846 had now been satisfactorily resolved.³ Once these had been overcome, the Loch Katrine scheme being recommended by Bateman as by far the most practicable, there was a long period of wrangling within the Council Chamber over the clauses of the bill. Much of this centred on the rates to be charged

1. TCM (Ms), 14 October 1852, 462

2. Marwick, p.132

3. TCM (Ms), 24 March 1853, 622-623

and whether these should be uniform throughout the city or apply to the north bank of the Clyde alone, retaining the more favourable water rates enjoyed by the consumers of the Gorbals Gravitation Water Company for the south side.¹ Finally, once the bill had been presented in Parliament, two quite unexpected difficulties arose. The first concerned the possible risk to health of bringing water a considerable distance in lead pipes which might contaminate the water supply. The second arose over the amount of water which the scheme would draw from the river Forth. The Admiralty, concerned over the stranding of naval ships in the river Forth should too much water be channelled away from it into Glasgow's conduits, scuttled the bill successfully in 1854.

By the following year, however, further chemical tests had successfully eliminated the first difficulty and the Admiralty had been persuaded that their fears were groundless. The bill was presented again, and this time passed through Parliament with relative ease, becoming law in July, 1855.² Construction work was started soon after on the many miles of aqueduct, piping and conduit, some of the work being undertaken over rugged mountain country under extremely difficult conditions. By the end of 1859 the great undertaking was nearing completion and was formally opened by Queen Victoria on 15th October. The

1. Ultimately it was agreed that the rates should be uniform within the area of compulsory supply but outside that area should be determined according to the rates charged by the two former Water Companies.

2. 13 and 19 Vict. c. 118.

finishing touches to the construction works and alterations to the piping within the city were finished early in 1860, the old works for drawing water from the Clyde abandoned and in March 1860 the water of Loch Katrine began flowing into Glasgow's network of pipes and thence into the city's houses.

The Act set up a Water Commission to consist of the Lord Provost of the city and the Town Council, a Water Committee to administer the Act to be appointed out of their number. The business affairs of the Water Commissioners were to be kept separate from those of the Town Council and a treasurer to be in charge of financial affairs under a Water Account had to be appointed. The limits set by the Act allowed large areas beyond the city boundaries to be included, although a supply need not be extended to these districts for domestic purposes until sufficient of the owners or occupiers of houses undertook to pay rates for three years at least, which would cover one-tenth of the cost of providing and laying the pipes. Within the city boundary the supply was compulsory and the Commissioners were required to lay pipes in all streets. There, however, their responsibility ended and it was left up to the owners or occupiers of property to connect up the supply to the individual tenements or houses and provide the necessary apparatus and fittings. This obviously gave room to reluctant landlords to omit to provide their tenants with a water supply even when it flowed past their front door.

Rates were to be exacted from all dwelling houses under a 'domestic water rate' although water rates on

houses rented at £10 a year or under might be levied from the owner of the property rather than the occupier, allowing to them an abatement of ten per cent. This deduction was later increased to twenty per cent in the case of houses rented at under £7 and to fifteen per cent in the case of houses between £7 and £10 per annum, in an effort to induce landlords by concessions to install water in working class housing.¹

The introduction of a municipal water supply into the city was obviously an enormous advance in public health reform, but also an extremely costly one. The two existing water companies had had to be bought out, land purchased along the route for construction work and the cost of the construction itself had to be added to this initial layout. Small wonder that by April 1859, before the work had been completed, the Council were seeking powers through Parliament to increase their borrowing powers as Water Commissioners from £700,000 to £900,000.² The efficiency of the Gorbals Gravitational Water Company had at least spared them the task of providing extensive engineering works in order to supply the south side of the city, for only some extensions and alterations were needed in the existing network of pipes. Nevertheless, by any standards the provision of a municipal water supply proved very expensive. Why, in fact, did the Council become involved in such a project at this time, when the members might have adopted the alternative suggestion of taking

1. Marwick, p. 137.

2. Marwick, p. 143.

shares in the proposed joint stock company using Loch Katrine as a source of supply?¹

There are several answers to this question worth consideration. In the first place, dissatisfaction with the operations of the existing water works on the north side of the city had led the Town Council to consider the possibility of taking over the supply itself for many years.² Although the provision of water had been within the scope of a joint stock company in 1806 when the population of the city stood at around one hundred thousand, it was rapidly becoming beyond the capabilities of any profit-making concern by the mid-century, when the population stood at over three hundred thousand. In addition the area of the city had spread enormously in the same period, from the compact city straggling down its hillside of the late eighteenth century to the urban sprawl which had engulfed several suburban burghs and villages of 1850. Much of the middle-class housing under construction during this period was on high ground, around Kelvingrove Park and on the summit of Garnethill in the west end, and it was difficult for the company to supply these houses to the satisfaction of actual or prospective owners. Pressure was therefore increasing for some large-scale engineering project to be undertaken, and there was considerable doubt in the minds of Glasgow's citizens as to whether the Water Company could achieve this to the long-term satisfaction of their needs.

1. See above, p. 326.

2. In October 1836 the Council appointed a committee to negotiate taking over the companies. (Marwick, p. 101).

Secondly, the municipal authorities did to some extent have an existing responsibility for supplying the citizens with a rudimentary supply through the medium of public wells. The Town Council had had a Wells Committee from early on in the nineteenth century if not earlier,¹ but had provided public wells from at least a century before this.² The ten public wells of 1700 were augmented from time to time so that in theory every tenement had access to a water supply. However, an investigation undertaken in 1848 by Dr. Thomson, professor of chemistry at the University, to analyse the public wells as to their purity or otherwise revealed that the majority were unfit for use, being much more impure than the river Clyde. Several were subsequently closed down as a public health hazard.³ The poorer citizens who could not pay water rates were forced to look farther afield for water if their particular well had been closed, and requests for public wells came frequently to the Wells Committee, the demand in 1847 during the typhus epidemic becoming sufficiently large for the frugal committee to pass a resolution that no more than £500 should be expended by the town in erecting and repairing the public wells of the city.⁴

A third, and perhaps most important, reason why the Town Council took over the supply of water when it did, can be found by investigating the subject of water supply during the period of epidemic disease between 1847 and

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1. Marwick, p. 99.
 2. Marwick, p. 28.
 3. Marwick, p. 120.
 4. Marwick, p. 118.

1854. If any lingering doubts may have been left in the minds of the councillors in their capacities as members of the Town Council on the one hand and of the Police Committee on the other as to the wisdom of taking over the supplying of the city, this must have been quickly dispelled by their experiences during this period. As already pointed out, they were considering this move in any case when typhus arrived on the scene in 1847, and subsequent events must have reinforced their opinions. Water for cleansing had of course been important during previous epidemics, but the publishing of the Chadwick Report and publicity on the whole subject of efficient urban cleansing as a means of preventing epidemic disease had substantially altered the attitudes of both municipal authorities and informed public opinion between the last epidemic of relapsing fever in 1843 and the great outbreak of typhus in 1847. With so much emphasis being placed on cleansing, the absence of sufficient water to perform this function was crucial. Worse was to come with the advent of cholera in 1848, for this was a national disaster and now the local officials had a medical supervisor from London scrutinising their every move. It was no longer possible for the Town Council or its Police Committee to turn a blind eye to the subject of the lack of a plentiful water supply.

The story behind municipal efforts to contain the epidemics during this period is more fully told in Chapter 9 from the point of view of cleansing and Chapter 16 from the point of view of the medical services. From the point of view of water supply, the assault made by the cleansing

officials of the Police Committee on the warren of small courts and closes in the old city soon revealed the total inadequacy of both Water Company and Wells Committee to provide the inhabitants with water. Although standcocks and wells existed for their use, these were confined to certain closes where the landlord was willing to provide this amenity, and might be cut off by the company if their officials discovered that water was being appropriated by those not entitled to it.¹ More frequently, rates were not paid and the supply abandoned. Large areas of the city, particularly the smaller villages engulfed by the spread of industry and housing, were completely unsupplied with water. Parkhead and Westmuir in the eastern district relied entirely on water carriers.²

Even to those not accustomed to the frequent washing of their persons, clothing or dwellings, water was a vital and precious commodity which they had to obtain. The lack of piped water in or near their houses only meant they were forced to resort to various expediences in order to get it. Enterprising publicans sold water to their customers along with a jugful of liquor,³ water was begged for, stolen from standcocks, lifted from quarryholes and canals and even from the Molendinar and other burns in spite of their highly polluted state.⁴ Water carriers still plied their trade

1. PCM, 27 September 1847, 297.

2. The Glasgow Herald, 6 September 1850.

3. The Glasgow Herald, 17 June 1853. Report of the evidence of James Smart, superintendent of police in Glasgow, before the Parliamentary Committee considering the water works bill of Glasgow Corporation.

4. Ibid, evidence of Mr. Carrick, the master of works.

and the remaining public wells had to supply the needs of a vast population that otherwise would have remained waterless. Captain James Smart, Glasgow's chief constable, reckoned in 1853 that around five thousand families in the central district were poorly supplied with water, but many in the outlying districts, notably Springburn, Camlachie and the eastern villages, had no water at all without resorting to the dubious methods of stealing and begging or obtaining it a stoup at a time from water carts.¹

In 1832 and again in 1848, cholera had appeared first of all in these waterless areas, and where whole districts were not supplied with the necessary equipment and piping, it was obviously difficult for landlords and tenants to cleanse their houses in accordance with the various byelaws. The situation in the old town of Glasgow was quite different. Here pipes frequently ran near or through the courts in most desperate need of cleansing and frequently the tenants could produce receipts showing they had paid water rates but were not provided with taps. On further investigation, the excuse offered by the Water Company for removing the supply to a close in the High Street where rates had been paid was the illegal use of the standcock by unauthorised persons. During the cholera epidemic of 1848, the directors of the Water Company, under pressure from the municipal and parochial authorities, reopened ninety-five wells closed down through the failure of landlords to pay water rent.²

1. Glasgow Herald, 17 June 1853. Evidence of James Smart.

2. PCM, 16 October 1848, 173.

The aspect of the situation which most impressed the police officials initially in 1847 was their inability to carry out essential cleansing operations in infected courts and closes.¹ They soon switched their attention to the plight of individuals in the fever districts, faced with having to seek for water and possibly struggle up five storeys to reach their homes, carrying the precious supply with them. Apart from those districts without a water supply, the worst supplied areas were also those most notorious for fever - Bridgegate and the Wynds, the High Street, Blackfriars and the densely-populated closes around Glasgow Cross.² Many had wells actually in the closes, but without a connected supply.

Investigations and correspondence with the Water Company revealed the cause of this retrograde step. A dispute had occurred between the company and the landlords in these districts, who refused to guarantee payment of water rent for their properties. Although many tenants were able and willing to pay, the company refused to supply a standcock unless the landlord gave this guarantee as in their experience large numbers of tenants who had not paid water rent were given free access by one means or another to the well. The company took the easy way out by refusing to supply any water at all, leaving those unfortunate inhabitants who could pay rent and wished a supply to look for one elsewhere.³

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1. Also during cholera in 1848. (PCM, 16 October 1848, 173).
 2. The Glasgow Herald, 17 June 1853. Evidence of James Smart.
 3. PCM, 27 September 1847, 296-297.

The Police Committee delegated its Finance Committee to investigate the legality of depriving citizens of water in this fashion, once they had expressed themselves willing to pay water rent. After scrutinising the various Acts of Parliament relating to the water supply, this Committee denied the legality of this move by the Water Company. In fact, the company was under an obligation in law to provide a standcock in each close and a key to those tenants paying rent, their remedy at law for stealing water or obtaining it without payment being a court action against the offender, which might result in the latter paying a £5 fine, 'a more equitable remedy than the deprivation of those who are willing to pay for the default of others'.¹

This decision does not appear to have influenced the Water Company to any great extent, for the following year, when cholera was in the city, the closure of the ninety five wells referred to earlier took place, 'in consequence of non-payment of water rates, and although in some instances proprietors had contracted for a supply of water in the wells referred to for their poor tenants, others had not and hence the want of water'.² The chief superintendent reported at the same time to the police authorities that at least twenty-three additional wells were needed in the central district and a further seventy-seven throughout the rest of the city, which at a price of between £2 and £3 each, the Water Company were not prepared to provide. The only remedy available to the police and

1. PCM, 27 September 1847, 297.

2. PCM, 16 October 1848, 173.

parochial authorities was to put pressure on the landlords to provide these wells for their tenants.

Naturally enough, the Water Company came in for much criticism and must have decided to take a more sympathetic line by the time the 1853 cholera epidemic appeared on the scene, for the directors agreed to the erection of such wells as were necessary 'in order that the poorer classes may be enabled through the promotion of cleanliness to mitigate as much as possible the consequences of the malady if it should reach our city', in September, three months before the first officially confirmed case.¹ The supply, which was free, was withdrawn before the epidemic was completely over and the directors were thanked for their liberality, the citizens of the closes once more being left to obtain water as best they could now the immediate danger was passing.²

The difficulties experienced by the health authorities during the epidemics of the 1847 to 1854 period were in part due to the conflicting aims of the groups concerned with the supply of water. The municipal authorities, as responsible for public health, were uncomfortably and acutely aware of the need to supply water for cleansing as well as health purposes, particularly to the poorest and most vulnerable portion of the population so far as disease was concerned. The Water Company, as a profit-making concern, had to pay due regard to profits and dividends which meant that gratuitous supplies had to be kept to

1. PCM, 19 September 1853, 284.

2. PCM, 29 May 1854, 433.

a minimum.¹ The landlords, as owners of small houses, were chiefly concerned with balancing the amenities provided in their properties with the rent likely to be achieved and as a water supply constantly on tap warranted an increased rent, it was unprofitable to supply this in the type of housing to be found around the High Street and Saltmarket, where the tenant population was exceptionally poor and constantly shifting. The unfortunate consumer, the last and most important group, might find himself caught between landlord and Water Company and left totally unsupplied as a result, particularly if he was the occupier of the lowest class of rented accommodation. The landlord would neither pay for, nor guarantee, his supply without which the Water Company would not provide a stand-cock. The Water Company regarded him with suspicion as a consumer and preferred to rely on his reluctant landlord for payment. The municipal authorities seem only to have put pressure on both company and landlords when the city was hit by infectious disease, and then only for a brief period when the epidemic was at its height.

Throughout the three epidemics of this period, the lack of water in the densely-packed courts of the city had been a constant theme and a bone of contention between municipal authorities and Water Company. The municipal officials were coming round strongly to the belief, as a result of their experiences actually working in the poor districts during epidemics, that a supply of water was

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1. The Gorbals Gravitation Water Company, on the south side, provided a free supply to all paupers on the Poor Roll, even outside epidemic periods.

essential in all flats, whether the occupiers liked it or no, and that if necessary the richer areas should pay more in water rates in order to supply the poorer.¹

In his evidence before the Parliamentary Committee considering the Council's water works bill, the chief constable laid great emphasis on the experiences of all parties during the epidemics, and expressed the well-considered opinion that the profit motive had to be taken out of the water supply and the supply made compulsory before any lasting improvement in public health could be made.² The simplification of procedure to be achieved by combining the function of public health authority with that of supplying the city's water cannot have been lost on the Town Council when they came to prepare their water bill.

The passing of the Water Works Act and the construction of the Loch Katrine reservoir and aqueduct did to a very great extent provide a solution to the problems experienced in previous years, but the municipal authority was to find by experience that the problems of the poorer areas were by no means solved. Attention was switched more to the outlying districts, the central district already having a network of pipes into the courts and closes which were easily adapted to convey water to the lobbies and landings of the tenements themselves, without much expense and without the proprietors being able to find a loophole

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1. The Glasgow Herald, 17 June 1853. Report of the evidence of James Smart before the Parliamentary Committee considering the water works bill of Glasgow Corporation.
 2. Ibid.

in the regulations which might absolve them of responsibility. The most troublesome district was to prove the Garngad, an area near to the St. Rollox chemical works, with the Monkland canal and the Garngad road cutting it off from the rest of the city and giving it a separate and distinctive character. The height of Garngadhill had originally attracted villas and large houses, but it was to prove a drawback to the provision of a constant supply, and once industrial development had driven away the villa owners to pleasanter pastures, very low-class housing was built with little thought to the provision of such amenities as a water supply on tap.

One of the most notorious streets in the whole of the Garngad was Middleton Place, a small street of recently constructed and enormous tenements of one and two-roomed houses. Two wells supplied the houses of Nos. 63-88, Middleton Place, but even here the wells were dry during the day as the elevation of the street was too high for the mains supply to cope with.¹ Around the corner from Middleton Place, at a notorious tenement known as 'Paddy's Castle' at 108, Garngad road, the proprietor crossed swords more than once with the Water Commissioners. Their first brush with the proprietor, Mr. Croall, was over the subject of payment of water rates. Under section 91 of the Act, pipes further away than fifty feet from a building carried only one quarter of the water rates. Croall successfully resisted in court a bill for £4.17s. in payment of water rates in the summer of 1864, on the grounds

1. SCM, 2 February 1865, 92.

that the pipes were too far from his property.¹ The following year, when fever and smallpox were on the increase, Croall was requested to provide a water supply for the twenty-seven single-apartment houses forming his property. He prevaricated and then refused when sent a peremptory notice, and the clerk to the Water Commissioners, John Burnet, noted that there was nothing in law to compel him to bring a supply from the street into his property, chiefly owing to the distance this lay from the existing mains.² Over the road from Paddy's Castle at 5, Villiers Street, Garngad, a four-storey tenement housing twenty families had had no water for eight months, although their rates had been paid, as the factor had failed to pass the money on to the Commissioners, who had promptly cut off the supply.³

Such examples, all from one comparatively small area, show how easy it was for determined landlords to evade the spirit of the law while sticking to the letter. The Water Commissioners could only retaliate in much the same way as the old Water Company had done when rates were not paid, cutting off the supply. This then constituted a health hazard, and once Dr. Gairdner and a Sanitary Department was in control of this aspect of public health, such conditions could not be allowed to continue. Properties that were without a water supply could be declared unfit for human habitation and closed down under the nuisance

1. WCM, 17 May 1864, 123.
2. SCM, 2 February 1865, 92.
3. SCM, 25 October 1864, 69-70.

laws, which usually had the effect of forcing proprietors to pay their rates or mend broken pipes so that the supply could be reconnected.¹

Inevitably legislation was drawn up to prevent these loopholes from enabling landlords to deprive their tenants of a good supply of water. By the Amendment Act of 1865, proprietors were compelled to provide houses with water, and where they failed to do so, the Commissioners were empowered to lay the service pipes, install taps and cisterns and recover the cost from the landlords.² Where a tenement did not exceed a rental of £10 yearly, owners were only required to supply the building in a manner the Commissioners deemed sufficient, and not to each individual house. This was first of all interpreted as a sink and tap on each landing, but before very long the 'jaw-box' or sink in the kitchen window became a standard amenity in even the smallest single-apartment home.

For all its teething troubles, the water supply has proved to be the most enduring monument of nineteenth century municipal enterprise handed down to the twentieth century. Pure water from Loch Katrine, augmented since the turn of the century by water from Loch Arklet, has flowed through the aqueducts and conduits into the homes of Glaswegians ever since the March day in 1860 when the first flow of water from Loch Katrine reached the city. Since 1860 the original estimations of consumption per head have been increased and the area of compulsory supply

1. SCM, 10 May 1864, 43-44.

2. 28 and 29 Vict, c. 69, clause 8.

extended, this frequently entailing large-scale construction works. Hailed in its own day as a triumph of engineering and municipal enterprise, the water supply of Glasgow has been regarded in this light ever since, and it is perhaps appropriate to end this survey of the cleansing and general sanitation aspect of Glasgow's public health progress on such an optimistic note.¹

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1. In a recent research programme undertaken by members of Glasgow University Departments of Materia Medica, Epidemiology and Preventive Medicine, and Statistics, in conjunction with members of Glasgow Corporation Health Department, a strong connection has been suggested between mental retardation in children and a high lead content in soft water. If this should prove to be the case, then the city's water supply may be a mixed blessing. (A.D.Beattie et al., 'Role of chronic low-level lead exposure in the aetiology of mental retardation'. The Lancet, 15 March 1975, pp. 589-592).