PUBLIC HEALTH LEGISLATION AND PROBLEMS IN VICTORIAN EDINBURGH, WITH SPECIAL REFERENCE TO THE WORK OF DR. LITTLEJOHN AS MEDICAL OFFICER OF HEALTH

A thesis presented by Hector Macdonald to the University of Edinburgh in candidacy for the degree of Doctor of Philosophy.

1971.
This thesis has been composed by myself and represents my own work.
Summary

This thesis seeks to provide a study of the local public health situation in Edinburgh in Victorian times. While such a study has to cover many topics, contemporary public health legislation provides the key. It represented, up to a point at any rate, contemporary public health thinking; from it action over public health matter was based. The activities of the local M.O.H. are important: the post was a specific creation of the 19th century.

In Edinburgh, as elsewhere, there was little consciousness of the need for any permanent public health legislative programme before the 1840's. Though Chadwick's revelations did not hit Edinburgh with the same impact as in English cities, the partial impact of the sanitary literature in circulation and the cumulative effect of severe epidemics meant that the local municipal authorities had by 1860 gone some way to meet an increasingly acknowledged need for public health legislation. The great lack was a systematic administering of such legislation and, initially, the appointment of Dr. Littlejohn did not remedy this defect. Not even the authorising of a massive Improvement Scheme, progressive step as it was, did so. When the appointment of the Public Health Committee in 1872 at last did so, machinery existed from which administrative expansion could later be made. The need for this and for legislative extensions was constantly apparent in the 1870's and 1880's, though nearly all topics associated with the 19th century had already received some legislative attention. By the 1890's most contemplated extensions had been made, and the Town Council were following the national pattern in moving into new areas of legislative activity, associated more with the 20th century.

Dr. Littlejohn was rarely publicly prominent. His celebrated 1865 Report on the Sanitary Condition of Edinburgh did not have its suggestions all carried out immediately. The credit for neither the immediate launching nor the execution of the Improvement Scheme lies with him.
SUMMARY (cont'd).

From 1862 to 1900 he publicly advocated public health legislation very rarely. However, for local public health legislation to evolve, he did not have to be publicly prominent: his mouthpieces on the Town Council and other sanitary officials could press his opinions. Furthermore, his frequent production of health statistics was the justification and guide for public health legislation.

When legislation offended some interests, important legislation could be delayed or prevented. However, much important legislation was passed with little or no opposition. Legislation tended to make the recognition of further problems and the need for further legislation more apparent. While early legislation produced only limited results, there were dramatic improvements in public health in the 1870's, but, subsequently, legislation failed to achieve much further improvement.

With topics, recognised as suitable for public health legislative action, being gradually covered, massive and seemingly insoluble barriers to further improvement loomed up ever more clearly. Vastly extended public health legislation was required: the real problem was that improvement of public health was an endless task.
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ABBREVIATIONS

For no. read number
For M.O.H. read Medical Officer of Health
For st. read street
For J.C. read water-closet
For Dr. read Doctor
For Rev. read Reverend
For P.P. read Parliamentary Papers
For rd. read road.

When municipal bodies (or committees of such bodies), or local institutions are referred to and no indication is given as to which town such bodies or institutions belong, they shall be taken as belonging to Edinburgh.
In presenting this thesis, a word of acknowledgment to those who have helped to make this possible would not be inappropriate. I owe much to Professor G.F.A. Best for having initially interested me in the history of urban public health, for having encouraged me to write on this topic and for sparing no effort to help me, especially in the early stages. As Joint Supervisors, he and Professor H.W. Flinn have always been ready to encourage me, help me with useful ideas, ensure that my work was on the right lines and caution me when it was not. I owe much to Professor Flinn, sole Supervisor latterly, for his useful and thorough advice as to the production of the contents and as to the form of the finished work. I am indebted also to other members of staff of this University of Edinburgh, too numerous to mention individually, for being ready to direct me to appropriate sources and to give me useful ideas.

The collation of information on this subject has involved consultation of material at a number of institutions in Edinburgh. I have consulted the bulk of my local material in the Edinburgh Room of the Central Public Library where Mrs. Armstrong and her staff have been ready to go to any trouble to search for material on my behalf and, over a long period, have given me every facility for study. Likewise, I have to thank Miss Armet, who was Archivist in the Edinburgh City Chambers while I was consulting material there. She went to much trouble to search out material I was anxious to read; she was ready to elucidate me over difficult points and to help me in every manner possible. I must also thank the staff of the Edinburgh University Library for the ideal facilities given me for study, and for their expert help when I have been unable to find a book.

I am indebted to various distinguished local public health experts for sparing the time and trouble to suggest to me useful material, offer
PREFACE (cont'd.)

guidance, and for the interest they have displayed in my work. Professor Brotherston of the Scottish Home and Health Department, Dr. Cameron of the Usher Institute of Public Health in Warrender Park Rd., and Dr. Tait, Deputy M.O.H. for Edinburgh, have to be thanked. Dr. Tait must also be thanked for having so willingly allowed me facilities to study in his office in Johnston Terrace and for having lent me the use of some valuable sources.

The thesis could not have been presented in this form had it not been for the expert and painstaking manner in which Mrs. Sheila Campbell has typed the final version from a difficult and lengthy manuscript. For having typed an earlier working version of a large part of the thesis to a high degree of accuracy from the original version which was almost illegible with my annotations, I have to acknowledge my gratitude to two of my colleagues in the National Library of Scotland, Mrs. Jennifer Robson and Miss Anne Martin, for having given up so much of their spare time over a long period.

Finally, as a member of staff of the above Library, I have been in an enviable position. Not only have I had easy access to a wealth of material, but I have also been able to use my daytime working room as a place for study and have had no problems of security about my thesis, whether in manuscript or typescript version. For being in that privileged position, I am indebted to my colleagues in the Library.
CHAPTER 1

INTRODUCTION

This thesis aims to trace the origins of a collective effort, on the part of the Edinburgh municipal bodies, to undertake sanitary work with the conscious purpose of improving the public health situation, and aims to assess the degree of success achieved by the close of the period covered by this story. The study attempts to have two closely connected and fundamental features of public health in view, without which such a study would be meaningless. The sanitary legislation available for use in Edinburgh through the decades, set limits to what the municipal bodies were competent to do: the acquisition of new legislation revealed a consciousness of problems felt by the municipal bodies to be serious enough to require legislative treatment (or felt to have been inadequately dealt with by previous legislation). The contribution of Dr. Littlejohn, the M.O.H. for Edinburgh from 1862 to 1908, to the public health work of the Edinburgh municipal bodies requires examination, both as a commentary on his own characteristics and as a commentary on the public health organisation within which he worked.

The story commences in 1825, some 37 years before the appointment of a M.O.H. in Edinburgh and more than a decade before it could be claimed that any local or national public health consciousness had awakened. Even if the time span of this thesis has run half its course by the date of Dr. Littlejohn's appointment, it is fair to say that his contribution to any local public health movement can be measured by comparing the condition of sanitary administration before
and after his appointment. The state of sanitary administration before his appointment also requires examination, so as to offer an explanation for the circumstances leading to his appointment. Needless to say, the overwhelming portion of the thesis concerns events which took place after his appointment.

To obtain an understanding of the state of local sanitary administration in its early days, it is essential to trace its real genesis. Such origins of conscious collective sanitary effort are seen in their best perspective if the situation, before such efforts could really be seen to be in evidence, is studied.

1825 might appear to be an arbitrary date to choose as a starting-point, since no event, significant in terms of this story, occurred in that year, but it has not been chosen only because it neatly divides two quarter centuries off from each other. The collapse of the building boom in the New Town in that year may not be directly significant but it is symbolic! The optimistic expansionist spirit of the late 18th century would appear to be giving way to the mood of concern of the 19th century. That is not strictly true, for the acute sanitary problems that were to show themselves later in the century had not done so. 1825 takes one back to a time before there was any real sanitary consciousness, but it also begins to set the stage for Edinburgh society to cease its expansion of the New Town and look back at the problems left in the Old Town.

A process had taken place by 1825 whereby the Old Town was clearly distinct from the New Town. The day had passed when families of greatly differing social gradations were based on the same common stair in the High St., Canongate and surrounding areas. The upper and middle classes were moving into the New Town and the expanding southern suburbs in the other direction while the Old Town was, for the main part, being abandoned, as a place of residence, to the poorer classes.

The tenements, abandoned by the richer classes, were liable to fall into a fast rate of dilapidation when subjected to exclusive occupation by the poorer classes, especially when such residences were so liable to show a rapid turnover of tenants. Pressure of population, aided by immigration and a natural increase of births over deaths, encouraged subdivision of dwellings and consequent overcrowding.

The Industrial Revolution had scarcely affected Edinburgh in the late 18th and early 19th centuries, but a process had taken place not unlike that in other cities. The richer classes had abandoned the city centre and moved to the outskirts, while the poorer classes were left to accelerate the descent of the residences in the city centre to slumdom.\(^1\) The one general difference was that in Edinburgh the richer classes, as it were, planned their own migration; in other cities, migration was forced upon them as they witnessed how their surroundings were becoming. As the richer classes settled into their spacious and elegant dwellings in the New Town, people's standards, of what housing should be, rose, and the abandoned dwellings in the Old Town appeared all the more intolerable.\(^2\)

In such a situation, the question arises as to what extent Edinburgh society was conscious of the sanitary problems confronting the Old Town. A case can be made that, at this period, Edinburgh was subjected to a reasonable amount of sanitary regulation. While the Town Council, as the supreme civic body, played hardly any part in matters affecting sanitation, another municipal body, the Police Commissioners (whose membership could often overlap with that of the Town Council), appointed as far back as 1771, were involved in matters

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2. Scotsman, 25 July 1827, publishing article on Improvement Scheme.
which could be described as sanitary. A perusal of the minutes of the Police Commissioners, in the early years covered by this story, reveals many instances of meetings being taken up with miscellaneous matters affecting public health, such as the times for cleaning streets and the efficiency of such operations, the watering of streets, the state of public necessaries, the slaughtering of cattle, the state of gutters. The Police Commissioners were the body responsible for policing (in the strict sense), lighting, and cleansing; that the Cleaning Committee ranked as a principal committee of the police establishment and had the Inspector of Cleaning and Lighting as a permanent official, is sufficient evidence that cleanliness was not a desideratum which suddenly revealed itself as such upon the Victorian public. Most cities in Britain possessed a municipal body of such a nature, under differing titles, at this period.

Legislation, over matters affecting sanitation, was hardly ever absent from the frequent local Police Acts obtained for Edinburgh; that the Police Commissioners were constantly aware of the need for improvement of such legislative powers is evident from the frequent changes and additions to such legislation in the various Acts. The sale of unwholesome meat was being penalised, albeit lightly, as early as 1828; police legislation in 1822 granted powers to municipal authorities to build drains and sewers, gave power to proprietors of flats to build soil pipes, allotted the Inspector of Cleaning and

1. Edinburgh Police Commissioners, Minutes, 2 February 1829.
2. ibid., 7 April 1828.
3. ibid., 8 March 1828.
4. ibid., 26 November 1827.
5. ibid., 6 November 1827.
6. Scotsman, 14 June 1828, reporting case involving sale of unwholesome meat.
Lighting specific duties as to the cleansing of streets and removal of filth; attempted to impose a time limit on the accumulation of dung at slaughter-houses. 1 Police legislation in 1832 made some refinements on the 1822 legislation regarding matters of cleanliness and included some more matters, such as the conduct of businesses dealing with rags and bones, the keeping of swine, the cleaning of common stairs. 2 Police legislation, as early as 1822, also made some attempts to deal directly with the spread of disease. Lodging-house keepers were given a time limit for reporting cases of disease, especially infectious disease, upon their premises, 3 and this piece of legislation was further expanded in 1832. 4

Apart from the fact that sanitary regulations were already to be found established at the period in which this story opens, voluntary public health agencies did not suddenly come into being in mid-century; quite a number were in existence in the early years of this story. With Edinburgh University recognised as a world-famous school of medicine, the Edinburgh medical profession included a substantial number of distinguished figures; Edinburgh could boast of having a well-established Royal College of Physicians and Royal College of Surgeons. At the time that this story opens, the Royal Infirmary was nearly a century old; Edinburgh was also supplied with two good dispensaries: the Royal Public Dispensary, established in 1776, and the New Town Dispensary, established in 1815. These dispensaries

gave the poor facilities for gratuitous medical advice and also
visited the poor at their own homes, if necessary. 1 Most cities
of comparable size were acquiring hospitals and dispensaries in this
period; but Edinburgh, as a seat of medical learning of the highest
order, was better supplied than most. Run by a Board of Managers
which contained an admixture of medical figures and laymen, and
supported by voluntary funds, 2 the Royal Infirmary's most vital
contribution to public health lay in its housing of fever patients.
This was important in limiting the spread of the disease, and the
necessity of removing such patients early was realised at this point
of the story. Shortly before and shortly after the opening of this
story, the Royal Infirmary's capacity in this respect was put to the
test. A severe fever epidemic from 1817 to 1819 meant that, each
month in the winter of 1818-19, 160 fever patients had to be accommo-
dated. 3 Another severe epidemic lasted from 1826 to 1828. At one
stage in 1826, the Royal Infirmary had to accommodate 242 fever
patients. 4

There were also other voluntary public health agencies at work.
In 1817 a Destitute Sick Society was formed. While the Royal Infirm-
aries and the dispensaries attempted to treat fever cases, the
Destitute Sick Society included as part of their duties that of seeking
out fever cases. Their self-imposed function was to remove fever
cases to hospital after a certificate from a medical practitioner.
They could proudly claim that rarely did more than 24 hours elapse
between the issue of a medical certificate and the admission of the
patient to hospital, and that in no other city could such an efficient
organisation be found. From 1817 to 1830 6,532 patients were removed

1. J. S. Thomson and others, Statement Regarding the New Town Dispensary
(Edinburgh, 1816; Annual Report of the Edinburgh New Town Dispensary
for the Year MDCCCLXXI (Edinburgh 1832).

2. Report Respecting the Affairs and Management of the Royal Infirmary of
Edinburgh, for the Period from 1st October 1836 to 1st October 1837
(Edinburgh, 1838), pp. 2, 8, 10-12.

3. ibid., p. 5
4. ibid., p. 5.
to hospital in this way, the number being as high as 1,837 in 1827. Not only did they scent out fever and deal with it appropriately; they performed physical sanitary work in fumigating and cleansing the houses affected. From 1827 to 1830, more than 3,000 houses were dealt with in this way. The Destitute Sick Society were in fact the real public health body.

In 1830 they decided to restrict their activities to social work for the destitute sick, and they saw that their public health work was taken over by a voluntary Fever Board. As the continuing public health body, their resources were to be put to a severe test in the most severe fever epidemic locally recorded in the years 1837, 1838 and 1839. In their appeals for donations from the public, they claimed to be "guardians of the public health", and guardians they indeed were. These "guardians" had, significantly, a committee almost completely composed of medical practitioners.

While most of the credit for the voluntary public health facilities should rest with the medical profession who were much involved in the running of the medical institutions and voluntary public health bodies, and who generally formulated the public health ideas that were carried out, the Town Council was not indifferent to the work done by such agencies. The Town Council and Police Commissioners did not, save on exceptional occasions, see it as part of their responsibilities to do any work in the direct treatment of infectious disease, but they were interested in what was going on. When the Fever Board superseded the Destitute Sick Society as the public health body, a committee of the Town Council was taken into consultation over the step, and it was the Town Council that set up the newly constituted Fever Board. In 1837,

1. Scotsman, 15 May 1830, publishing article on establishment of Fever Board.
2. ibid., 28 July 1838, publishing notice by Secretary to Fever Board.
3. New Edinburgh Almanac (1839), 539.
4. Scotsman, 15 May 1830, publishing article on establishment of Fever Board.
5. ibid., 15 February 1837, reporting meeting of Town Council, 14 February.
when Councillor Deuchar (also Secretary of the Fever Board) moved that a clause be inserted in the Police Bill that the Police Commissioners grant £100 each year to the Fever Board, the motion was adopted without question. 1 The dignitaries of the municipal bodies usually figured on the committees of medical institutions and voluntary medical bodies.

A major work on the sanitary problems with which Edinburgh was confronted had been written before 1825. In 1809 Roberton, an Edinburgh surgeon, had written A Treatise on Medical Police and on Diet Regimen, which contained a substantial section on Edinburgh's sanitary problems. Since the theme of his work was the need for direct police action to deal with visible causes of disease, 2 he can be classed as an early exponent of the idea of a public health system. It was in fact the first notable treatise in English on the subject of public health. 3 Most of the relevant sections of his treatise described individual nuisances such as hollows which filled up with putrid water, 4 damp houses, 5 nasty industries, 6 but his plea for more street intersections 7 and his condemnation of the hovels 8 in which so many of the poor lived sound similar to the loud cries for sanitary improvement some 50 years or more later.

However, no one could claim that what was being done by the municipal bodies, on the one hand, and the voluntary bodies on the other hand amounted to anything like what Roberton had been advocating. His treatise may have been clear and thorough, but it was a lone voice in the wilderness. The limitations to the public health work done in Edinburgh

1. Scotsman, 15 February 1837, reporting meeting of Town Council, 14 February 1837.
5. ibid., p.248.
7. ibid., p.283.
8. ibid., pp.258-259.
were enormous. The Police Commissioners might have attempted to deal with the environments, the voluntary public health bodies more directly with disease; but, despite the municipal interest in the voluntary public health activities, there was little integration of action between the municipal and the private bodies.

The environmental work performed by the Police Commissioners could only scratch at the surface of sanitary problems. The day was far distant when police legislation included any provision as to the regulation of insanitary dwellings. Power was given for house proprietors to provide themselves with drainage and sewerage services; there was no thought of penalising the absence of such facilities. In any case, such clauses were not really applicable to the areas, in the Old Town, that were most in need of them. Legislation dealt with the removal of filth from the streets, but did not concern itself with the abominable filth within houses. In 1832, sanitary legislation made provision for the cleaning of common stairs, but the legislators declined to let their laws penetrate any further into the interior of houses. The Police Commissioners discussed miscellaneous sanitary topics, but a perusal of their minutes fails to reveal any sign of indignation with insanitary conditions.

Generally speaking, the Police Commissioners may have been interested in cleanliness, but they saw it more as a matter of amenity than of public health. The legislation that they promoted was, with very few exceptions, designed principally to improve the amenities of the city; the amenity matters dealt with may have had a bearing on public health, but this was

2. ibid., p.23.
3. ibid., p.25.
a result of a consciousness of their responsibilities to perfect the amenities of the city, not a result of any awareness of the need to take an interest in public health. Even if the Inspector of Cleaning might appear to be a sanitary official with his responsibilities for cleaning streets and removing filth, he was above all an amenity official when one considers he was Inspector of Lighting also. The concept of such an official was very far removed from any concept of a municipal official with exclusive public health responsibilities.

With the Police Commissioners as the amenity body and the Town Council as the general civic body, even if both bodies were always sympathetic to the Fever Board when it found itself faced with difficulties in coping with fever epidemics, neither municipal body saw it as necessary to take over the work of the Fever Board on a grand scale. Their grant to the Fever Board, as set out in the 1837 Police Act, represented a gesture of sympathy with the work of the Board rather than any conscious desire to embark on a municipal public health programme.

In terms of the figures issued by the Destitute Sick Society, and afterwards by the Fever Board, as to the number of houses fumigated and the patients removed to hospital, the work of such voluntary bodies was impressive. However, it also imposed heavy financial burdens on private bodies, and there was a limit to the work that private bodies could do. This problem was becoming pressing in the later 1830's with the increasing severity and length of fever epidemics. From October 1836 to October 1839, there were 4,850 admissions to the Royal Infirmary. In such a situation, the Fever Board came to realise that the work they could do was limited and had to make several urgent appeals to the public

1. From its establishment in 1830 to March 1836, the Fever Board had dealt with 9,609 fever cases and fumigated 4,065 houses (Scotsman, 15 February 1837, reporting meeting of Town Council, 14 February 1837).

for financial aid; they were also coming to feel that the municipal authorities should, certainly during severe fever epidemics, take over their functions of removing fever patients to hospital and of fumigating the houses of those affected. On their part, the municipal authorities courteously offered to do what they could to help, but they did not regard the taking over of such duties as an urgent matter. They felt they were helping the Fever Board in their own sphere of work; they did not at all feel that this was work they should automatically do.

The medical profession, in dealing with such severe fever epidemics, may have felt that the help of the municipal authorities was urgently necessary, but there was little sign of them tracing such epidemics to the hideous sanitary conditions prevalent. Harassed by the work they had to do in meeting such epidemics, they were nevertheless not moved to righteous indignation by the indifference of the municipal authorities to the sordid conditions that provided nests of fever. The medical profession in their various voluntary bodies and institutions, wished for a more efficient method of dealing with fever epidemics as they arose, but there were no demands; that the public authorities be more active in taking preventive measures, from the medical profession or the various medical voluntary bodies. Collectively, the Destitute Sick Society and afterwards the Fever Board might have been acting as independent Medical Officers of Health, but they did not seem interested in the idea of an individual M.O.H. under municipal auspices.

In 1825, and from then to the late 1830's, even if there was a recognition of the prevalence of infectious disease, this was hardly traced to environmental nastiness and, moreover, there was little sign

1. Scotsman, 15 February 1837, publishing article on fever epidemic.
2. Ibid., 23 January 1839, reporting meeting of Town Council, 22 January 1839.
3. Ibid., 3 January 1838, reporting annual meeting of Contributors to Royal Infirmary, 1 January 1838.
of any pressure on the municipal bodies that there should be any effort to deal with such environmental problems systematically or recognition by the municipal bodies that they should do so. The work done by the Police Commissioners may have had some beneficial effects on public health, but they did not see themselves as being a body for attending to public health problems.

The remainder of this introductory chapter will attempt to show that certain events, which occurred between 1825 and 1840, and which might be construed as exhibiting the genesis of a public health consciousness, were not really so significant at all.

In 1827, after much municipal deliberation and much voicing of public opinion, an Improvement Act was obtained to authorise the construction of what is to-day called George IV Bridge and Johnston Terrace. The construction of these thoroughfares, which saw the responsible Improvement Commission involved in successive financial crises and which took so long to execute, affected the western part of the Old Town and certainly had some effect on public health conditions. On the one hand, it meant the destruction of insanitary dwellings to make way for the new thoroughfares; on the other hand, it meant that the housing supply position for the poorer classes was aggravated. At the time of the launching of the celebrated Chambers Improvement Scheme in the 1860's (a measure designed to improve sanitary conditions), reference was made to the beneficial effect that the 1827 Improvement Scheme had had in clearing away insanitary dwellings. Often, during discussion on the Chambers Improvement Scheme, the earlier one was referred to as the first

2. Scotsman, 11 November 1865, reporting inaugural address of Lord Provost Chambers to meeting of Town Council, 10 November 1865.
Improvement Scheme; such discussion betrayed an assumption that the two Schemes were on much the same lines. That was not so at all. The 1827 Improvement Scheme was designed exclusively for the improvement of communications; if it had some results of sanitary importance, they were never discussed at the time. The 1827 Improvement Scheme represented a natural follow-on from the construction of the South Bridge at the beginning of the 19th century (itself a further measure in the improvement of communications which had been going on since the New Town was first conceived of). Such an Improvement Scheme did not anticipate any mid-century Improvement Schemes based upon sanitary need.

While the 1827 Improvement is almost completely irrelevant to the problems under scrutiny in this thesis, it would be ludicrous to describe the 1832 cholera epidemic in Edinburgh as irrelevant. It claimed 1,065 deaths out of 1,886 victims; it involved, especially, the Police Commissioners and a specially constituted Local Board of Health in frantic activity; it caused an expenditure of £19,000 on the part of the Local Board of Health.

At this time, none were certain as to the true causes of cholera; and many of the measures taken were irrelevant to the true cause of the spread of the disease, namely the presence in water of the excrement passed by cholera patients. The hectic activity could, at best, have only an indirect effect in limiting the spread of the disease. Yet, the degree of involvement of so many bodies, the fact that all action taken was designed specifically to deal with the disease, go to suggest an early adoption of a public health consciousness on the part of the

1. *Scotsman*, 4 April 1866, publishing address by Miller on 1827 Improvement Scheme to meeting of Architectural Institute of Scotland, 2 April 1866.
various public bodies. For more than a year, it could be claimed that a public health machinery, albeit somewhat cumbersome, was at work.

Since cholera had broken out in other cities in Britain and was known to spread in a slow but sure fashion, attempts at preventive action were taken early. The first cholera case in Edinburgh did not come to light till January 1832; yet in October 1831 the Royal College of Physicians had recommended that now was the time for a Local Board of Health to be formed, which held its first meeting on 4 November.¹ The Police Commissioners were active at an early date, and their activities suggested that they were acting more as a public health body than as an amenity body.

On instructions from the Board of Health, District Boards of Health, based upon individual wards, and composed of the police Commissioners for each ward assisted by one or two doctors, were set up which looked over the various wards as to the state of cleanliness and general health, and which submitted reports to meetings of the Police Commissioners shortly afterwards.² In the more purely environmental sphere, the Police Commissioners eliminated the keeping of pigs in houses and the accumulation of dung in stables and mew-lanes.³

The knowledge and expertise of the medical profession was regarded as the source to be relied upon for guidance. Apart from the presence of Lord Provost and Magistrates and some heads of various professions, the Local Board of Health was almost completely composed of doctors.⁴ In their ward visitations, the Police Commissioners relied heavily upon the expert knowledge of the medical profession.⁵

² Edinburgh Police Commissioners, Minutes, 25 November 1831, 22 December 1831.
⁴ Scotsman, 25 January 1832, reporting constitution of Edinburgh Board of Health.
⁵ At the meeting of the Police Commissioners, where the progress of the visitations of wards by the District Boards of Health, was reported upon, some Police Commissioners gave as a reason, for the lack of progress of visitations in some of the wards, that of a lack of physicians (Edinburgh Police Commissioners, Minutes, 22 December 1831).
The medical profession had also, in October 1831, formed an association voluntarily to organise a system of medical care should cholera arrive in the city. 1

Despite the hectic activity of the Police Commissioners, despite the publication by the Local Board of Health of thousands of copies of reports stressing the need for cleanliness, the cholera made its inevitable arrival and was to continue for almost the whole of 1832 with peaks in April, July and October. 2 During the year, while the Town Council, as represented by the Lord Provost and Magistrates, took an urgent interest in the work done to combat the cholera, especially over the question of how to impose a local assessment to pay for the measures being taken, 3 the Police Commissioners attended energetically to the work of cleanliness and fumigation, and the Local Board of Health acted as the main body operating measures to combat the disease. The Local Board distributed handbills as to how best to guard against the cholera and what to do should it occur, issued reports periodically on the progress of the disease periodically as well as issuing daily reports as to the number of new cases, deaths and recoveries, saw to the removal of cholera patients to temporary hospitals specially opened to meet the ravages of the disease. 4 Though the Local Board of Health was not strictly a municipally constituted body, the Town Council and Police Commissioners felt so involved in the Board's work and the functions of the various bodies were so intermixed, that it can be claimed that municipal activity in the public health field was very real. One cannot omit to mention the efforts of voluntary committees to feed and clothe the poor; such

2. loc.cit., 21-22.
3. Scotsman, 5 May 1832, reporting meeting of Magistrates and Police Commissioners, 4 May 1832.
charitable activities were nothing new, but, in this instance, the action taken was designed specifically to guard against the ravages of cholera; it was felt that the poor were less likely to succumb if they were properly clad and nourished.\footnote{1}

Despite the activity in 1831 and 1832, it would be wrong to claim that these years saw the genesis of a municipal public health consciousness. The hectic sanitary activity not only forms a fitting contrast to the more leisurely attitude to sanitary problems in previous years; it also contrasts with the equally leisurely activity in the sanitary field in the immediately following years. The activity in the year 1832 bore little resemblance to the general pattern of public health thought in this period. The activity was exceptional, for the various bodies concerned felt they were dealing with an exceptional situation. Cholera was a new disease making its first major visit to Edinburgh; it had only first come into prominence in 1817 in Lower Bengal.\footnote{2} It was known to be a disease dramatically swift in taking its victims to their graves; its novelty and swift action made it particularly dreaded and let it have a colossal impact upon the minds of people in Edinburgh and other British towns. The adoption of emergency measures to cope with a dreaded epidemic was nothing new; from time immemorial drastic measures were taken to cope with outbreaks of plague.\footnote{3} The activity in 1831-2 was rather a throwback to the measures taken to deal with the plague than a rehearsal of permanent municipal public health responsibility.

Even during the heat of the cholera epidemic, there was little sign of any wish to change the order of things, so far as the management of public health went. In 1832 the Police Commissioners went ahead in

\begin{itemize}
\item \textit{loc cit.}, 21
\end{itemize}
promoting their legislation, which, whatever its merits, did not attempt to radically alter the set-up in municipal sanitary activity. Even though the medical profession were so heavily involved in coping with the epidemic and were relied on so much by the public bodies, there was no sign of any recognition that there be a single medical officer, under municipal auspices, to direct the measures taken to cope with the cholera. When, during a severe epidemic, there seemed to be no wish for a M.O.H., there was little likelihood of such an idea being canvassed when the epidemic died down. Just as, during fever epidemics in this period, there was little sign of public opinion blaming them upon sordid sanitary conditions, so, during the 1832 cholera epidemic, there was little outcry at the hideous conditions of so many of the cholera victims. (People were ready to remedy such conditions while the cholera danger lasted, but not on a permanent basis.) Shortly after the cholera epidemic died down (except for a short outbreak in 1833-4), the Scotsman referred to "murmurs", on the part of ratepayers, over the question of an assessment to pay for the expenses incurred during the epidemic. 1 If ratepayers resented the imposition of a single heavy assessment for the obvious work of coping with a cholera emergency, it was unlikely that they would tolerate a permanent addition to the local fiscal burden for sanitary work by the municipal authorities on a permanent basis. However, the municipal authorities quickly returned to exercise their normal limited functions in the public health field (except for their support of the Local Board of Health when it functioned briefly during the limited cholera outbreak of 1833-4), 2 and there was no danger of such rates as were imposed immediately after the cholera epidemic creating a precedent.

1. Scotsman, 30 January 1833, reporting decision on imposition of assessment with regard to cholera epidemic.
The severity of successive outbreaks of the more familiar disease of typhus fever was to prove to be far more decisive than the celebrated 1832 cholera epidemic in forcing a debate on public health questions. However, the process by which the municipal authorities assumed a public health consciousness was not to be a simple one. This introductory chapter has sketched the situation before this process could be claimed to have properly begun.
CHAPTER 2

SLOW GROWTH OF MUNICIPAL PUBLIC HEALTH CONSCIOUSNESS BEFORE ADVENT OF M.O.H.

The impact of the 1832 cholera epidemic in Edinburgh was so great that it is easy for historians of Edinburgh in the 19th century to overlook the ones which followed. Two epidemics, falling within the span of this chapter, demanded equally rigorous preparation; though the 1848-49 epidemic claimed substantially fewer victims than the previous epidemic ¹ and though the 1853-54 one was very much milder, ² they were both taken seriously at the time.

However, the relatively smaller psychological impact lay in the fact that, in the new climate of sanitary opinion, not only was a cholera epidemic no longer novel, but also it could no longer be studied in isolation. While in 1832 the cholera epidemic was felt to demand hectic municipal intervention in sanitary affairs on a very special scale, in 1848-9 and 1853-4 the municipal bodies (or rather an ad hoc combination of municipal and other bodies) were seen to be performing sanitary work which was quite appropriate for cholera-free periods. In 1848-9 and in 1853-4, a public sanitary opinion existed that was prepared to point out that the community be more energetic in dealing constantly with the work of permanent sanitary improvement.

Such a body of opinion looked on cholera not simply as a Divine visitation which had to be dealt with when it became imminent, but as

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1. During the cholera epidemics the Scotsman published regular statistics as to the number of cases, deaths since their previous report. By adding together the number of deaths over the period of the epidemic, it can be calculated that there were approximately 550 deaths from cholera in 1848-49.

That compares with 1,065 deaths from cholera between 27th January and 15th December 1832. (H.P. Tait, 'Two notable epidemics in Edinburgh and Leith', Book of the Old Edinburgh Club XXXII (1966), 31.)

2. During the 1853-54 cholera epidemic, calculation from the current Scotsman statistics as to the incidence of cholera reveals that there were approximately 100 deaths.
related to the increasingly spotlighted sordid sanitary conditions and vast social sore. So great was the spotlight that cholera epidemics occupy only a very small part of the story about public health conditions in Edinburgh in the 30 years from 1832 to 1861.

It goes without saying that the changed attitude to cholera epidemics coincided with a growing national sanitary consciousness from the 1840's onwards, the public interest in Chadwick's Sanitary Report and in the various reports of Royal Commissions being both a symptom and a creator of such interest. Of course, the pattern and intensity of sanitary consciousness and response of municipal authorities could vary greatly from place to place. In Edinburgh a case could be made that the performance of the public authorities was utterly inadequate. The sanitary legislation promoted by the Edinburgh municipal bodies in 1848 was simply a tightening up on that of 1832 which itself was promoted in an age when one could scarcely speak of any sanitary consciousness. The emphasis lay on individual nuisances rather than on dealing systematically with a grossly insanitary environment. " Bill in 1850 designed to apply Chadwick's systematising sanitary legislation of 1848 was vigorously resisted; subsequent legislation in 1854 only nibbled at the fringes of the gigantic housing problem. By 1861 the Edinburgh Town Council had failed to provide any systematised or unitary sanitary administration, and showed no signs of any urgent desire to appoint a M.O.H. with adequate powers or to promote legislation which could take account of the need to inspect the interiors of houses. This was so in a city where the need for vigorous sanitary legislation was especially great. Chadwick's Sanitary Report had shown Edinburgh in a really bad light. 1 The writings

1. In the text of his Report, Chadwick recorded that the most wretched population which he had seen was that in the wynds of Edinburgh and Glasgow. (E. Chadwick, Report on the Sanitary Condition of the Labouring Population of Great Britain. Edited by M.W. Flinn, (Edinburgh, 1965), Report, p.79,).
of Bell and Johnston conclusively demonstrated the wretchedness of the sanitary environment in the neglected Old Town both in general terms and by reference to individual localities.

Nevertheless, such a picture of the Edinburgh municipal authorities fails to take account of some significant factors. Edinburgh was not unique in its failure to promote far-reaching legislation for a far-reaching problem by the early 1850's; those who provided evidence of the scale of social and sanitary problems did not always urge solutions of the kind urged by Chadwick; in many cases, the solutions urged were by no means clear; the solutions urged by Chadwick were not necessarily those which would be the means of substantially modifying the wretched Old Town environment; it cannot be said that the legislation promoted by the Police Commissioners and the Town Council failed completely to take account of Chadwick's suggestions.

Furthermore, at the time of Chadwick's maximum impact in England, his teachings were largely irrelevant to the questions raised by the agitation in Edinburgh over the conditions under which the poor were obliged to live. The agitation originated quite independently of any of Chadwick's activities. It was the growing frequency and severity of fever epidemics in the 1830's, reaching its peak in the 1840's,

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G.Bell, Blackfriars' Wynd Analyzed (Edinburgh, 1850).


3. Though Chadwick referred generally in his Report to the desirability of pulling down tenements in the poorest areas of large towns, with Glasgow and Edinburgh particularly in mind, (R. Chadwick, Report on the Sanitary Condition of the Labouring Population of Great Britain. Edited by M.W. Flinn (Edinburgh, 1965), Report p.366), it remains true that Chadwick saw as his principal sanitary remedy that of improving drainage (C. Rosen, A History of Public Health (New York, 1958) p.215). Events were to show that, when serious attempts were made to improve the drainage of the Old Town in the 1850's, they had very little effect in modifying the foul environment of the Old Town. That such attempts did not approach Chadwick's vision of a complete system does not alter the point.
(probably on account of the increasing urban population) that was
decisive in drawing attention to the plight of the poor.\(^1\) The medical
profession, dealing professionally with fever cases, and being involved
in the activities of Infirmaries, Dispensaries and voluntary medical
relief bodies like the Fever Board (organisations with which Edinburgh
was exceptionally well endowed) were the vehicles of a social conscience.
With Edinburgh a medical centre par excellence, the voice of the medical
profession might be expected to be heard loudly.

Amidst the unprecedented volume of fever cases, the principal
voluntary public health agency, the Fever Board, found itself unable
to cope; and had to call on the Police Commissioners for their aid in
cleaning and fumigating fever-stricken dwellings, the result being that
the municipal and voluntary bodies worked out an improvised method of
co-operation during the fever epidemics.\(^2\) While the Fever Board obtained

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1. The returns furnished by the Fever Board as to the number of cases
they had attended to since their establishment in 1830, and as to
the number their predecessors, the Destitute Sick Society, had
attended to in previous years, are a useful guide.
1824:218; 1825:326; 1826:696; 1827:1837; 1828:1868; 1829:619;
Even allowing for the greater efficiency of such bodies in tracing
fever cases as the years went by, these figures demonstrate the
fluctuating but nevertheless steady upward trend in fever cases.
Excepting the figures for 1827 and 1828 which were abnormally heavy,
no figure from 1830-36 fell as low as any figure from 1824-31 except
for the slightly lower number of cases in 1834 as compared with 1826.
(Scotsman, 15 February, 1837, publishing report on current fever epi¬
demic). Figures as to the incidence of fever in the following years
are not available in such tabular form. However, instances of the
use made of the Royal Infirmary by fever patients furnish quite a
reliable guide.
There were 2244 fever patients in the year 1838 (ibid., 9 January,
1839 reporting Annual Meeting of Contributors to Royal Infirmary,
7 January 1839). There were 1235 fever patients in the year 1839.
(ibid., 25 December 1839, reporting meeting of Town Council, 24
December 1839). During the 1843 fever epidemic there were as many as
482 patients in the Royal Infirmary at the one time. This does not
include the fever patients catered for by the special facilities made
available by the parochial boards. (ibid., 8 November 1843, reporting
public meeting on 'Increase of fever,' 6 November 1843). During the
1847 fever epidemic there were as many as 530 patients in the Royal
Infirmary at the one time. (Edinburgh Evening Courant, 2 December
1847, publishing article on "State of Fever.")

P.F.s 1844, XVII, p.199, Q.1.
municipal intervention in the work "of guarding the public health", the head of the responsible committee of the Police Commissioners felt that the assistance of the medical profession in a more organised form was required. Thus arose an early demand for an officer of health in Edinburgh; the improvised organisation, Ramsay felt, ought to be superseded by a medical man at the head of the organisation whose expert knowledge and experience in dealing with the poor could be integrated into the more powerful machinery of the Cleaning and Lighting Committee of the Police Commissioners. 

On their part, the medical profession expounded the idea of medical police also. They looked favourably on the idea of systematic visits by one of their brethren to the homes of the sick poor to inspect their condition as to cleanliness; they also asked that the Police Commissioners be more rigorous in enforcing nuisance legislation. However, the idea of medical police was very limited in scope; in nearly all cases, their envisaged medical officer was to be connected with the Poor Law Boards, not with the Police Commissioners. Apart from their insistence on the help of the Police Commissioners during fever epidemics, their demands on the municipal bodies were light indeed. Requests that the police be more zealous in enforcing nuisance legislation were politely worded and infrequently made.

Concern over social and sanitary conditions in Edinburgh in the early 1840's owed most to the presence in the medical pressure group of William Pulteney Alison. Demands for medical police, for a tightening up of nuisance legislation took a poor second place to the demands characteristic of Alison and his disciples. In his principal work,


2. Edinburgh Evening Courant, 7 March 1844, publishing article on pamphlet by R. Deuchar (Secretary of Fever Board), on "The Prevalence of Epidemic Fever."
Observations on the Management of the Poor in Scotland and its Effects on the Health of the great Towns, his statistics confirmed what was already known: namely, that the incidence of fever was growing and had now reached staggering proportions. The importance of the work consisted in his approach to the problem. So convinced was he of the fact that destitution caused disease (or, more precisely, its rapid diffusion) that he explained that he had been driven to write of matters that might be regarded as beyond his province, 1 the whole pamphlet being a plea for a more sure and substantial provision for the poor. While being cross-examined four years later by the Scottish Poor Law Inquiry Commission, he held fast to his declared opinion that destitution was a much more powerful factor in promoting fever than was overcrowding of houses or any other identifiable sanitary nuisance. 2 The close connection in time between fever epidemics and periods of depressed trade lent credence to his great thesis, and was the inspiration behind it. He laid the proper stress in accounting for the ravages of diseases by referring to a general situation rather than to individual factors. However, his emphasis on destitution led him, before the Inquiry Commission, into differentiating between destitution and overcrowding of houses as causes of disease, instead of including the latter as an inherent part of the former.

Whatever the contradictions in Alison's thesis, by his emphasis on destitution (which often led him to understate the viciousness of sanitary conditions associated with it), he was treading on a very emotive topic. Not unnaturally, there were many who had emotional, philosophical and political reasons for regarding his proposals with horror. 3 An equally vocal opinion, in favour of improving the provisions of poor relief, was

3. Scotsman, 12 December 1840, reporting meeting on "Pauperism and Poor Laws," 8 December 1840.
expressed in all cities in Scotland, and especially in Edinburgh. Medical opinion was especially heard on this theme as they gathered ministers, enlightened landowners and members of the legal profession under their wing to quickly form an "Association for obtaining an official Inquiry into the Pauperism of Scotland"; ¹ the plight of the poor captured the heart of a section of the public that, in later decades, would be heard preaching the gospel of sanitary improvement. The cause of public health (public health meaning principally fever epidemics) was, for the present, inextricably bound up with the cause of improved poor relief.

With the emotional agitation and argument over the poor laws on a high note, at the time that Chadwick's inquiries and Report were making their impact in England, the preparation and issue of Chadwick's Report made little impression in Edinburgh. Certainly, it was through the instrumentality of the most vocal of Alison's sympathisers on the Town Council, Councillor Drysdale, that Chadwick's investigations were extended to Scotland; but this was not because of any acute sense of urgency about the general loathsome sanitary state of the Old Town; rather was it because of his agitation over the single question of the Foul Burn. ²

Not only did Chadwick's Report fail to divert minds from agitation over the Poor Laws to agitation over more environmental factors; much of it was at variance with the thesis of Alison and his followers. When Drysdale felt that Chadwick's investigation of Scottish conditions be

¹ Scotsman, 25 March 1840, reporting public meeting for considering improving condition of poor, 23 March 1840.
² ibid., 8 January 1840, reporting meeting of Town Council, 7 January 1840.
In the year 1839, much heat was generated over the question of the "irrigated meadows" (to the east of the city in Craighentinny) which were fed with sewage by the Foul Burn. They were blamed by many, notably Councillor Drysdale, for aggravating the incidence of fever in that area (ibid., 7 December 1839, publishing article on pamphlet by Drysdale on Irrigated Meadows.) However, in 1840, the impact of Alison's pamphlet on the need for more poor relief tended to draw attention away from the "irrigated meadows" and the Foul Burn.
extended so as to include destitution, not only was he implicitly condemning the fact that Chadwick seemed to take no account of the interest in poverty in Scotland, he was also unconsciously turning the purpose of Chadwick's Inquiry upside down. 1 While Drysdale felt that destitution was the prime factor in causing disease, Chadwick was originally impelled to commence his investigations when he felt that destitution was caused by disease. 2 Though a notable local publisher, William Chambers, in presenting his report to Chadwick on the sanitary state of the Old Town, confined his comments to the foulness of the external environment and condemned such conditions very strongly in a manner typical of Chadwick, 3 his assistant in the inquiries, Miller, a surgeon, was more typical of local opinion in his laying of firm stress on the poverty of the inhabitants and his suggestion of improved food and clothing as the prime remedy. 4

The sole major physical feature associated with the Old Town, upon which the mainstream of local social and sanitary opinion vented their spleen (as did sanitary opinion in other cities), was that of common lodging-houses. 5 Worthy of spleen many of them were, being grossly overcrowded, filthy, a fertile growth point of fever. Even if such description easily fitted most of the dwellings that the poorer classes were obliged to inhabit, the known institution of common lodging-houses was more easily identified than the general inchoate mass of slum housing.

The agitation over common lodging-houses did not represent any new departure which might be associated with the stir caused by the enunciation of Alison's thesis. His revelations had the effect of accelerating the agitation, not of creating it. Concern over the state of lodging-houses

1. When Drysdale renewed his attempt to have Chadwick's investigations extended to Scotland, his exclusive concern was that the investigators turn their attention to the problems of destitution, as it affected the incidence of disease (ibid., 5 August 1840, reporting meeting of Town Council, 4 August 1840).
4. ibid., pp. 4-5.
5. Scotsman, 10 March 1841, reporting public meeting on Lodging-Houses for Poor, 8 March 1841.
had been present certainly since the beginning of the century; the 1822 Police Act contained provisions concerning this problem. ¹

Considering that agitation for sanitary improvement in Scotland took a vastly different direction from that taken in England, it is notable that more open hostility to Chadwick's Report was not shown by the enlightened Edinburgh philanthropists. Of course, some years were yet to pass before there was any danger of the axioms of Chadwick's Report being applied locally; also Alison and his followers were too absorbed in the agitation for a new Poor Law for them to spare the time to vent hostility upon Chadwick's Report.

What was of greater significance was that consciousness of the vast social and sanitary sore did not bring with it any demands that the Town Council or the Police Commissioners take a much broader view of their responsibilities, or that new bodies should be set up for these purposes. The time span of this chapter was well advanced before such demands were fashionable. Even though common lodging-houses had been a sphere of police legislation for so long, the swollen agitation over this topic did not, in the early 1840's, bring with it any demands that the Police Commissioners be more vigorous in dealing with the problem. Even where Chambers stressed the social and sanitary sore with reference to the role that the municipal authorities should play, his demands on them were extremely light, ² especially when compared with the demands he was to set the Town Council when he was to be at their head 25 years later (see Chapter 5). The Town Council and Police Commissioners could be forgiven


for believing that demands for an officer of health were more a matter for the Poor Law Boards. Requests that they deal with fever epidemics, while they lasted, were willingly met. Even a medical man, Stark, whose interest first and foremost was in the sanitary conditions of Edinburgh — not in destitution — and who was the principal sanitary commentator for Edinburgh in the mid-1840's, failed to work up a rage against the Town Council or the Police Commissioners as Alison could against the Poor Law Commissioners. An industrious man, his tables of mortality with causes of death and death and commentaries, prepared on his own initiative and published monthly, represented the first regular attempt to apply constant statistics of disease to the public health record of Edinburgh. 1 In his work: Inquiry into some Points of the Sanitary State of Edinburgh he included a fairly full exposition of the conditions of the interiors of the houses where the poor lived. Such faulty sanitary conditions he broke down into sections which could be dealt with by statutory sanitary means; these means implied performing operations, like limiting overcrowding of rooms, which were quite novel. 2 However, he merely implied that certain measures were necessary; he did not stress them in the forceful manner necessary to capture public attention. Though he was clearly influenced by Chadwick's sanitary ideas, his timidity in urging remedies sharply contrasts with Chadwick's forcefulness. The general tone of Stark's pamphlet encouraged complacency rather than concern; his elaborate use of statistics, designed to show that Edinburgh's death rate was so much less than that of comparable towns, served only to show that the upper and middle classes of Edinburgh lived very comfortably, 3 though he admitted that death rates among the poorer classes were thus shown in a correspondingly bad light, 4 the disproportionate amount of space devoted

1. Such mortality tables included statistics for the months from January 1846 to November 1848. The report on mortality for July 1847 can furnish a typical example of his health statistics. (Edinburgh Evening Courant, 30 August 1847, publishing report on mortality for July 1847).


3. ibid., pp.9-25.

4. ibid., p.25.
to congratulation that the general death rate of Edinburgh was so relatively low and the large share of responsibility that he placed on Irish immigrants for the pitiful environmental conditions of the poor,¹ could only divert attention away from the need to apply sanitary remedies on a grand scale among the poor.

The only sanitary issue where the municipal bodies were made to appear involved in, and in which public opinion was also involved, was that of the chronic question of the Foul Burn. This was an easily identifiable nuisance which, in extent, overshadowed all other nuisances: nuisances associated with the foulness of the Old Town could be described only in terms of their sum total; the Foul Burn of "irrigated meadows" could be vilified much more easily. This was an issue where a sizeable section of the followers of Alison demanded vigorous action on the part of the Police Commissioners and Town Council, it was an issue towards which Chadwick's investigations could be seen as having some relevance. Nevertheless, it is equally significant that an equal number of "sanitarians", including Alison himself,² representing his own school of thought, and Chambers, representing a school of thought more allied to that of Chadwick, felt that the "irrigated meadows" had only marginal reference to the incidence of fever epidemics.³ The reduction in the emphasis on the Foul Burn at this time only serves as a commentary on the other problems which were becoming increasingly recognised at this time. Though the question of the "irrigated meadows" was not to be resolved till some years after the span of this story closes, it cannot be claimed that the delay was a crucial factor in limiting any general improvement in the public health statistics of Edinburgh; in the general public health story of Edinburgh


* For approximate line of Foul Burn, see Vol. 2, Map A.
in the 19th century, the question of the Foul Burn is no more than a sideshow; for public health work was to mean principally the coming to grips with the immediate environment of the poor.

In some ways, the 1848 Edinburgh Police Act reflected the attitude, dominant especially in the early 1840's, of the limited role of sanitary, as distinct from social, agencies in preventing disease. Sanitary provisions accounted for but a small proportion of the clauses of the Act and were not regarded by the promoting body as being the main part. Rather were they regarded as a part which could be neatly labelled as falling within the scope of the Police Commissioners, and being, as such, legislation of a routine, not of an earth-shattering nature. The sanitary provisions represented nothing more than a response to pressure on the part of the main sanitary official of the Police Commissioners, the Inspector of Cleaning and Lighting, for greater powers in subduing obvious nuisances.

For him the 1848 Act was to represent a considerable advance but mainly in a field of activity which had been carried on, with few exceptions, since some time before the span of this story commences. The 1848 Police Act opened few new horizons in the field of sanitary improvement; what new horizons were opened up were done so only very tentatively; neither the municipal authorities nor public opinion felt disposed to protest with a great voice when, after a judicial inquiry, the responsible Advocate rejected the Town Council's clause, in the original Bill, for enforcing the introduction of water, sink and soil-pipes into low rented houses which, after all, were in the greatest need of them.

However, despite the lack of urgency felt about the need for massive sanitary legislation to deal with the massiveness of the local sanitary problems, it would be wrong to class the 1848 Police Act in exactly the

1. The Edinburgh Police Act (Edinburgh, 1848)
3. Scotsman, 8 April 1848, publishing report of Surveyor appointed by Commissioner of Wood and Forests on Edinburgh Police Bill.
same grade as the 1822 or 1832 Police Acts. For all its defects - and they were many - it is significant that there were signs, admittedly faint as yet, that the municipal authorities were considering the need for more effective sanitary legislation more seriously. Though the provisions in the Bill for enforcing the introduction of water, sink, and soil-pipes into low rented houses were dropped, that these provisions were introduced at all show that the municipal bodies were not completely unresponsive to the loud agitation over sanitary reform going on in England. Though the powers granted to the Police Commissioners to build main drains and sewers in the arteries of the Old Town left such yawning gaps as to preclude anything like a proper drainage system, the naming of the arteries where they were required revealed that the municipal authorities at least understood where the provision of drainage had to begin. The clause, which included among the Inspector of Cleaning and Lighting's duties, that of enforcing regulations for the improvement of health and diminution of disease and mortality of the inhabitants showed that the municipal authorities realised there was a need for a new dimension to their activities. Though, in common with the author, the Town Council were hardly disturbed by the revelations of excessive monthly death rates made by Stark, that they had been so spontaneous in meeting the suggestion that there be such statistics, suggests that the Town Council realised that the incidence of fever epidemics concerned them in ways over and above simply presiding over measures to deal with epidemics when they arose. There were not many sanitary topics in the 1848 English Public Health Act which the Town Council and Police Commissioners had not introduced, or contemplated introducing, into the 1848 Police Act; even the Public Health Act had as its main purpose the

2. ibid., p.36.
3. Scotsman, 4 February 1846, reporting meeting of Town Council, 3 February 1846.
reformation, on a comprehensive scale, of the drainage systems of the slumdom of cities, and made little attempt to regulate overcrowding of dwellings or to enforce closure of grossly insanitary dwellings. ¹ To condemn the Edinburgh Police Act for failing to do that involves condemning the Public Health Act also. Where the former fell so far short of the latter was that it made no attempt to properly systematise the working of sanitary legislation: sanitary clauses represented bits and pieces rather than part of one great whole. Though the monthly statistics of Stark might have been expected to demonstrate to them the usefulness of giving a M.O.H. a prominent part in the sanitary organisation, the municipality showed no sense of urgency about the idea of appointing one (even though they had some vague power to that effect, to be executed many years later — see Chapter 3). To condemn Edinburgh for these further defects in sanitary legislation, however, still involves condemning many other cities. Few large towns, except for London, were, in any case, to adopt legislation on Chadwick's model in the next few years; most were to be bitterly hostile towards the idea.²

The 1848 Police Act may have been an Act which delighted the main local sanitary advocate of the time, James Stark,³ and offended very few sections of public opinion; but that does not mean that it fitted in to an era where the local public attitude to sanitary legislation was hitched on the predominantly low key associated with the early 1840's. If the municipal bodies' conception of sanitary reform was growing slowly but surely in scale, so the balance of forces of attitudes towards sanitary reform was changing. The voice of the movement led by Alison was fairly quiet, now that its objective of a reform of the Poor Laws had been partially achieved in 1845. Even if the legislation of 1845 did not

satisfy all their aspirations, they were prepared to give it a fair trial.

Alison warmly welcomed the 1848 Bill. Nevertheless, that he and his followers abstained from arguing that social legislation ought to have priority over sanitary legislation did not mean that they had altered their priorities. At all times they had been prepared to welcome sanitary legislation, but only on certain conditions. There had to be no competing Poor Law legislation in the pipeline at the time; it had to be innocuous in a political sense. The 1848 legislation met these conditions.

On the other hand, agitation over the need for sanitary reform was growing in the late 1840's. With the heat off the social question of the Poor Laws, ideas voiced by strict "sanitarians" assumed greater prominence; with the clamour about the connection between destitution and disease abating, tracing of connections between absence of sanitary provisions and disease assumed greater credibility. While in 1840, improvement of the poor was seen by the dominant strand of enlightened opinion as dependent on improved poor relief, in 1849 a newspaper correspondent looked on improved sanitary legislation as a prerequisite for the improvement of the condition of the poor. In both cases, such attitudes were typical of the respective states of progressive opinion.

Such a change cannot be explained by imagining that Chadwick's ideas suddenly took hold of the minds of the Edinburgh public concerned about

2. Scotsman, 23 February 1848, reporting evidence of William P. Alison to preliminary examination of Police Bill, 18 February 1848.
3. ibid., 25 March 1840, reporting address of Rev. Dr. Muir to public meeting for considering improving the condition of the poor, 23 March, 1840.
4. ibid., 2 June 1849, publishing letter by "A Ratepayer" on "The Public Health Bill - the Landlord's Cey."
how the poor lived. Chadwick's sanitary ideas were certainly used to bolster their case, but there is no evidence of a mass conversion to Chadwick's ideas to explain the changed emphasis. A severe fever epidemic in the later part of 1847 and a cholera epidemic in 1848-49 ensured that there would be some opinions expressed about how to deal with the poor, for it was they who were principally affected and it was their sufferings which were seen as the means of diseases spreading to the more comfortably placed classes. \(^1\) What principally ensured that these opinions had a sanitary bias was the silence of the Poor Law reform advocates; such a process was also aided by knowledge of what was being attempted elsewhere in the sanitary field and by the limited but periodic discussion of sanitary questions there had been in earlier years, even when Alison's movement was at its greatest momentum.

At the time of these epidemics and in the year immediately following, meetings were called to promote the construction of improved dwellings; \(^2\) Edinburgh was now following the path of the housing societies set up in England some years earlier but the motive force giving rise to the meetings was local, not national. Concern, on a sanitary basis, with the condition of the dwellings of the poor was not now confined to common lodging-houses. In the years 1847 and 1848 the \textit{Scotsman} editorials began to argue the case for sanitary reform much more stridently, and repeatedly urged the drastic remedy of the removing masses of old houses in the poorer areas. \(^3\) (This reform was to be set in motion nearly 20 years later amidst a heat of public discussion — see Chapter 6.) Not

\(^1\) ibid., 28 October 1848, editorial.

\(^2\) A meeting in March 1849 furnishes a typical example of the point of view expressed at such meetings at this time (ibid., 14 March 1849, reporting meeting, convened by Lord Provost, to consider the best means for improving the condition of the poor, 12 March 1849).

\(^3\) ibid., 6 January 1849, publishing article on "How Edinburgh could be improved."
only was concern about the manner in which the poor lived now expressed on a sanitary basis, the remedies suggested implied drastic operations.

Yet, this growing sanitary agitation was little evident in any pressure for securing the sanitary provisions of the 1848 Act and was hardly present in any comment on the provisions as they were being adopted. Despite the fact that a variety of municipal and non-municipal bodies shared the task of dealing with the fever epidemic of 1847 and the cholera epidemic of 1848-49 in an ad hoc manner (thus demonstrating the continuing lack of system in dealing with epidemics); neither the Town Council nor the Police Commissioners came in for the explosion of public criticism which might have been expected in the climate of growing sanitary agitation. In this, as in the promotion of the 1848 Act, there was little specific criticism of the municipal bodies. Public opinion may have been prepared to preach lessons arising from epidemics, but they were intended for the consumption of the general community, not specifically for the municipal bodies. Any pressure on the municipal bodies was implied rather than stated. This lack of precision in comments on sanitary questions was symptomatic of a vagueness in the tone of sanitary public opinion as yet. When the Scotsman editor urged a mass closure of slums, he did not feel sure as to how this was precisely to be executed. ¹ There was present a note of desperation concerning the need for sanitary measures to deal with the vast sore of the Old Town, but this made for vagueness rather than rational argument. When meetings were called for launching the building of improved dwellings for the working classes, this indicated a vagueness about how to deal with sanitary problems they recognised to be massive. They could not decide how best to deal with the existing foul environment, so the most simple answer was to create a new model one.

¹ ibid., 6 January 1849, publishing article on "How Edinburgh could be improved."
Such public sanitary opinion was unlikely to be agitated by esoteric clauses of a Police Act. This sanitary movement was acquiring some notable champions among the medical profession: Simpson, Bell, Wood: but these gentlemen had yet to make their mark upon the Edinburgh public in sanitary discussions. When sanitary legislation was proposed in the very next year which could not be described as politically innocuous, the emerging sanitary movement made little impression in countering the spontaneous political opposition to it; the sanitary advocates that were heard were the more traditional ones of Alison’s school. Though Alison and his followers ignored the axioms of Chadwick’s 1842 Sanitary Report when it represented but an academic question; when the English Public Health Act (seen as the legislative embodiment of Chadwick’s ideas) was proposed to be extended to Scotland in 1849, they could not afford to ignore the threat. As in the case of the 1848 Police Act, there was no competing Poor Law legislation being currently promoted, so the complaints were not that the projected sanitary legislation was prejudicing any Poor Law legislation. What was objectionable was not that the legislation proposed to deal with sanitary topics which were unprecedented as subjects of legislation; what they objected to was the envisaged system of administration, involving the creation of Local Boards of Health and supervision from the Central Board of Health in London. 1 In an age when local control of administration was jealously guarded, this provision was politically unwise; even Wood, an ardent sanitary advocate of the Public Health (Scotland) Bill, resented this section. 2 An additional provocation for so many of the medical profession was that it was a fundamental part of Chadwickian principles, Chadwick being one with

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2. Scotsman, 2 May 1849, reporting special meeting of Police Commissioners, 1 May 1849.
whom they were so emotionally at variance on account of his record both as a sanitary administrator and a Poor Law administrator. It was not only a sense of local pride that made a Committee of the Royal College of Physicians, headed by Alison, suggest the Scottish Board of Supervision as an alternative overlord sanitary body for Scotland;\(^1\) emotional faith in a body which administered the Poor Law was very much involved. The attitude of the medical profession made it easy for members of the Town Council and Police Commissioners to make even more emotional political grievances against the Bill, which were as effective as they were unreasonable. Thanks to the hardening in the attitude of the Town Council and Police Commissioners the Bill was postponed for one year, not only as it affected Edinburgh, but as it affected the whole of Scotland;\(^2\) postponement for one year was to mean postponement for an indefinite number of years. The reservations of the mass of medical opinion in Edinburgh towards Chadwick's ideas were enough to make them resolutely oppose any sanitary legislation which appeared to embody them, retreat into a restatement of the paramount importance of the Poor Law machinery in countering disease, and acquiesce in (or loudly proclaim) irrational political and fiscal objections.

Despite the controversy over the Public Health Bill, that did not mean that the tone of opinion represented by Alison had permanently

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1. Report by the Committee of the Royal College of Physicians Appointed to Consider any Bills that may be Brought into Parliament for the Improvement of the Health of Towns and the Applicability of Such Measures to Scotland, (Edinburgh, 1849).

2. Scotsman, 20 June 1849, reporting meeting of Town Council, 19 June 1849.
regained its influence of the early 1840's. In fact, the growing distinctively sanitary movement of the later 1840's spoke with ever more vigour in the 1850's; the events of 1849 were merely an interruption. Medical opinion in Edinburgh grew less interested in the work of Poor Law agencies in controlling public health, as disillusionment with the working of the new Poor Law in this sphere grew. Furthermore the 1849 projected legislation was a special case: its political overtones represented Chadwick's ideas. There were to be no more confrontations between the Edinburgh medical profession and the ideas of Chadwick in this form; an alliance of doctors and politically motivated municipal representatives was rendered far less likely.

The 1850's, known in general public health history as a fairly placid decade after the storms of the 1840's, was in Edinburgh the first decade in which educated opinion, concerned about the general state of the Old Town, predominantly felt that it represented a woeful physical environment rather than woeful destitution and was a matter on which the Town Council and Police Commissioners were to be judged. A tendency was apparent from 1850 to 1861 for their responsibility to be expressly stated.

The difference in tone of attitudes towards the poor between the 1840's and 1850's is caricatured by the differences between the writings of Alison in 1840 and Dr. George Bell in 1850. Both noticed the same sore of humanity, though Bell conveyed the sense of horror more effectively by listing the living conditions of the inhabitants of Blackfriars' Wynd, house by house. ¹ While Alison made out a carefully reasoned case for making greater financial provision for the poor (that being his principal answer to the problem), ² Bell gave a horrific and emotional account

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1. G. Bell, _Blackfriars' Wynd analyzed_ (Edinburgh, 1850).
of the living conditions in the Old Town. His account followed few logical patterns, and the main inference was the obvious one, namely that a vast amount of work had to be done. On this point, the greatest difference between his theories and those of Alison was that he did not see greater provision for the poor as being any answer to the problem; in fact, he ridiculed the lack of effectiveness of the Poor Law legislation of 1845 in bringing about any social or sanitary improvement.

What he did urge as remedies were more in the nature of a miscellaneous list than in the nature of a precise programme as set out by Alison. His emphasis, on the one hand, upon the need to restrict the number of public houses and Irish immigrants, and on the other hand, on the need for a vast programme of sanitary reformation, did not define the precise connection between the reforms. However, the importance of Bell's writings lies not in what he urged so much as on the impression he created. His writings represented the boiling over of the sanitary agitation which had been growing in the past five years; their impact represented the nearest approach in Edinburgh to the impact of Chadwick's Sanitary Report in England. That only three years separated the placid tone of Stark's Report and the horrific tone of Bell's writings is a telling commentary on the change in leadership of local sanitary thought in the interval. During the 1850's, most sanitary commentators were more coherent in their arguments; however, Bell's writings were the most marked example of a dominant feature of the sanitary thought of the 1850's, in that they generated a vague, nameless fear of the Old Town. Generally

1. G. Bell, Day and Night in the Wynds of Edinburgh (Edinburgh, 1849).
2. Ibid., p.11.
3. Ibid., pp.15, 22, 25.
4. Ibid., pp.33-36.
speaking, to 1850 fever and cholera had impressed themselves upon the local public consciousness and undoubtedly stimulated a fear of the areas on which their statistics were based, but the principal object creating fear was the fever and it was generally felt that a reduction in intensity of destitution could reduce the ravages of the fever. By the 1850's a process was complete whereby so much had been said and written about the horrors of the areas where fever exacted its toll that a fear of the unknown immensity of the Old Town itself became much more apparent. While describing a series of visits in the Old Town, the Scotsman could express this fear in typical fashion.

A kingdom of darkness, misery, and vice, has erected itself, and is daily strengthening its fortifications and deepening its trenches. --- Should such a commotion ever happen to break up the existence of order in Edinburgh, the High St., the Canongate, the Cowgate, the Grassmarket, and the West Port, would turn out an array which, if not in revolutionary violence, at any rate in terrific appearance, would not be surpassed by the mass of the "classes dangereuses" in any city in all Europe. 1

Above all, the moral of this fear was that sanitary action was required: even if Bell wrote vividly on the need to restrict public houses and Irish immigrants, the main lessons quoted from his writings were his advocacy of a sanitary reformation.

Such a fear impulse did not exist in so concentrated a form in other sanitary commentaries of the 1850's, but it lay at the root of many of them. From time to time, Scotsman editorials urged that the deplorable environment that the poor lived amongst be swept away, omitting of course to state practicable methods by which such a laudable and ambitious project could be achieved. 2 Correspondents to this newspaper urged from time to

1. Scotsman, 2 February 1850, publishing article on "Inquiry into Destitution and Vice in Edinburgh."
2. ibid., 8 September 1852, editorial.
time in similar vein, that there be "great structural operations." ¹ Such imprecise and utopian pleas were often to be found printed in the same paragraph as less emotive and more easily attainable objectives, commentators appealing to their reason and emotions in turn. The emotional outbursts against the hell of the Old Town and the utopian longings for its abolition were at their most frequent while there was the shadow of a prolonged cholera scare from 1852-54. This existed in epidemic form only at well-spaced intervals and was at no time severe; it was still dealt with by the loose tripartite body of Town Council, Police Commissioners, and Parochial Boards; so far as measures were taken to deal with cases as they arose, the measures taken were not essentially different from those taken in 1832. Outbursts against the hell that was the Old Town during the cholera epidemic were not, as a rule, influenced by panic as to the possible ravages of the cholera or influenced by any feeling that there should be a radically different set-up for dealing with the epidemic. What was being feared was not so much the epidemic itself as the location of so many of its victims whose sufferings reminded sanitary commentators of the crying need to drastically alter their environment. When demands were made that the municipal bodies take more permanent measures to limit the ravages of cholera, ² the object of their cries was something much more than the abolition of the cholera itself. It was the abolition of the festering sore of the Old Town of which cholera was an unwelcome reminder.

Even if there was only a mild cholera epidemic in the 1850's, even if the ravages of fever were very much lighter than in either the 1830's or 1840's, reminders of the "fear-producing" Old Town did not require to come in the form of disease, they could come just as readily in the form

¹ ibid., 12 November 1853, publishing letter by "Aristipus" in "Edinburgh Sanitary Measures."
² ibid., 26 October 1853, editorial.
of print and lectures, the latter being in turn often the product of
the same fear. When Johnston wrote a cold analysis of the sanitary
problems of the Old Town and gave closely reasoned arguments for what
should be done to radically improve it sanitorily, even this treatment
was of a nature sufficient to keep an impulse of fear alive. 1 The
impact of more reasoned arguments for action in the Old Town, as well
as more dramatic and irrational pleas, was keeping the fear alive.

Reasoned advice to the municipal bodies, as to creating new sanita-
tary legislation or making better use of existing legislation, was never
lacking. Scarcely an example of sanitary action by any public body in
any part of the kingdom was omitted from the various suggestions made
at this time. Closure of insanitary houses, 2 improved drainage,
improved ventilation of houses, a more comprehensive removal of nuis-
ances, introduction of water closets, of privies, of a piped water supply,
were all urged as necessary improvements, 3 while the appointment of
Dr. Littlejohn as M.O.H. in 1862 appeared to be anticipated by the pleas
of Dr. Gairdner (destined to be Glasgow's first M.O.H. in 1863) for a
proper system of sanitary inspection where a committee performing the
functions of a M.O.H. would play a principal part. 4 Examples of what
was being done elsewhere undoubtedly meant that sanitary commentators
stood on firm ground in pressing their suggestions, but the factors
governing the formulation of these ideas were as much local as national.
While in the late 1840's, opinion in Edinburgh had come to be aware of a
connection between insanitation and the social misery of the Old Town,

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1. H. Johnston, Letter to the Lord Provost, Magistrates and Council of
   the City of Edinburgh on the State of the Closes in the Lawnmarket,
   High Street, Canongate and Cowgate (Edinburgh, 1856).
2. Scotsman, 5 October 1853, publishing letter by "S." on "Sanitary
   Condition of the City."
3. H. Johnston, Letter to the Lord Provost, Magistrates and Council of
   the City of Edinburgh on the State of the Closes in the Lawnmarket,
   High Street, Canongate and Cowgate (Edinburgh, 1856), pp.11-20.
4. Scotsman, 30 December 1857, reporting meeting of Town Council, 29
   December 1857.
by the 1850's opinion, while not relinquishing the irrational attitude of fear of the Old Town, had had more time to articulate what these remedies should be, the onus lying principally on the municipal bodies.

Though the accusations made against the Town Council for neglect in the sanitary sphere of operations in 1861-62 might suggest that the Police Commissioners (to 1856) and the Town Council were guilty of criminal neglect and apathy (see Chapter 3), actual evidence shows that the Police Commissioners and Town Council were more energetic from 1850 onwards in the sanitary field than ever before.

That they seemed to spend so much time deliberating over the problem of the pollution of the Water of Leith (now rivalling the Foul Burn as an item of marginal sanitary significance which assumed a disproportio-

nate importance) did not mean they were interested in this and little else. Though this had been the subject of legislation in the 1854 Edinburgh Police Amendment Act, 1 much time in the later 1850's was taken up in determining the extent of responsibility of the Caledonian Distillery in creating pollution of the river 2 and was later taken up in a dispute with Leith Town Council as to the mode of assessment for a

1. The main matter dealt with, in the clauses referring to the Water of Leith, was the construction of drains within the Water of Leith, to carry off the sewage of a large residential section of the area bordering its banks, in an attempt to purify the channel. However, some residential sections, like the village of the Water of Leith, were not affected by this measure, while some tanneries and distilleries could continue to pollute the river (ibid., 24 May 1854, publishing article on defect of Water of Leith Bill.).

2. The question of the refuse of the Caledonian Distillery was the subject of a legal inquiry under the Nuisances Removal (Scotland) Act, 1856. From 1857 to the close of the span of this chapter, complaints against the distillery were never entirely absent from discussions at the Town Council meetings. A selection of meetings which discussed the question can provide a more detailed knowledge of the issues involved. (ibid., 23 September 1857, reporting meeting of Town Council, 22 September 1857; ibid., 22 September 1858, reporting meeting of Town Council, 21 September 1858; ibid., 21 February 1859, publishing Interlocutor on Caledonian Distillery case).

* For map of Edinburgh (1864-65), including areas involved in Water of Leith pollution controversy see Vol. 2, Map A.
joint project involving the construction of a new sewer through the river, so as to carry off the drainage. However, the absorption of the Town Council with the Water of Leith question originated principally because of pressure from wealthy ratepayers who were more than usually vocal when it was a matter of being offended by smells close to their residences; even if the Town Council allowed themselves to become very much involved, they were certainly not losing sight of more fundamental sanitary matters.

The fields of sanitary operations suggested by commentators hardly included anything which the municipal authorities had not put into operation or contemplated putting into operation. The 1854 Edinburgh Police Amendment Act also gave power to close insanitary underground dwellings, so that cellar dwellings were now added to lodging houses as legitimate fields of municipal intervention in the matter of actual housing. In the early 1850's, even if critics were swift to blame the municipal authorities for the general lack of sanitary vigour on their part in the Old Town, it cannot be doubted that the Town Council and Police Commissioners, under the leadership of Lord Provost Duncan McLaren, were more than usually responsive to their complaints: the work done by the Police Commissioners, stimulated by the appointment of a temporary Inspector of Nuisances, in extending drainage works through the Old Town, in the matter of a year or two, far surpassed that done through many previous decades. In the closing years of the Police Commissioners' existence, their work in the sanitary field was the most

1. ibid., 18 September 1861, reporting meeting of Leith Town Council, 17 September 1861; ibid., 23 October 1861, reporting meeting of Town Council, 22 October 1861.


3. ibid., 25 January 1854, reporting meeting of Police Commissioners, 23 January 1854.

4. ibid., 19 April 1854, reporting meeting of Police Commissioners, 17 April 1854; ibid., 18 April 1855, reporting meeting of Police Commissioners, 16 April 1855.
active it had ever been. There was no real sudden advance or regression in sanitary work after the amalgamation of the two bodies, the sanitary work and ideas of the Town Council being really a continuation of those of the Police Commissioners. The main spokesman for the sanitary work of the Town Council in the late 1850's and early 1860's, Councillor James Ford (Convener of the Cleaning and Lighting Committee), had himself been a Police Commissioner. Being in this position, and since almost all his suggestions in the sanitary field were accepted unanimously by the Town Council, a commentary on Ford's outlook is, to all intents and purposes, a commentary on the outlook of the Town Council. The passage of the 1854 Edinburgh Police Amendment act and the 1856 Nuisances Removal (Scotland) Act were not such as to close Ford's or the Town Council's mind to the need for further sanitary legislation; the problem was such, that it was realised that the process of acquiring new sanitary legislation had to go on.

Even if Ford did not propose a Medical Officership of Health on the lines under which Littlejohn was eventually appointed, it is often forgotten that he proposed a system of public health organisation where Littlejohn (then the Police Surgeon) would act along with the medical officers of the Parochial Boards, before the collapse of a tenement in the High St. in November 1861 had prompted any loud public demands for one. This conception of a Medical Officership of Health was a very limited one compared with that in operation in the London Boroughs or Liverpool, but it still met most of the requirements which the only clear and consistent local advocate of the appointment of a M.O.H., Gairdner, had made. Likewise, it is also easy to forget that Lindsay, the Provost of Leith, did not begin to campaign for a new General Police Act for

1. ibid., 9 October 1861, reporting meeting of Town Council, 8 October 1861.
Scotland until Ford had given him the inspiration by moving a resolution in the Town Council that new sanitary powers necessary for the municipality be considered. 1 When the period covered by this chapter had reached its close in late 1861, the Lord Provost's Committee of the Town Council had declared itself interested in seeing provisions as to the introduction of running water, sinks, water closets into working-class houses of a certain class included in any general sanitary legislation that might be introduced, these provisions being recognised as of special value for Edinburgh's sanitary problems. 2 That was not all. The principal formulator of sanitary reforms in the 1850's, Henry Johnston, had as his basic suggestion that there be an Improvement Act by which the laudable purpose of improving the infested closes could be achieved mainly by a complicated process of purchase, on the part of the municipality, of insanitary property. 3 This cardinal sanitary objective was partly met in the projected new legislative powers by the inclusion of a suggestion that the municipality have power to purchase areas of ruinous tenements. Of course, the intentions fell far short of what was required: the inclusion of a limit of expenditure of a farthing per £ on the police rental per annum meant that the amount of work which could be done, in this respect, would be insignificant. 2

The mildness of the powers contemplated by the Town Council in beginning the real physical destruction of the Old Town is a commentary on the limits to which they were prepared to go in devising sanitary legislation, and lend colour to the heated demands made by sanitary organisations in the months following the fall of a tenement in the High St. in late 1861. For instance, the Town Council had not, to 1861,

1. ibid., 15 June 1859, reporting meeting of Town Council, 14 June 1859; ibid., 25 June 1859, publishing letter by William Lindsay in "Sanitary Reform - Councillor Ford's Motion."
2. ibid., 3 April 1861, reporting meeting of Town Council, 2 April 1861.
taken seriously Johnston's suggestion that the closes on the north side of the Cowgate between George IV Bridge and the Grassmarket (shown by Johnston's detailed study to include the foulest of the generally foul closes in the Old Town) should be peremptorily swept away.\(^1\) When sanitary legislation was being contemplated by the Town Council, the very slowness of the committee procedure was apt to give the impression that they were unaware of their sanitary responsibilities. Some, like Johnston, mistook their slowness for reluctance.\(^2\) The generally congratulatory tone of Ford when discussing the sanitary work of his Cleaning and Lighting Committee\(^3\) could appear strangely at variance with the vague but powerful sense of fear of the Old Town, generally felt by the informed public.

In practice, the Town Council could allow themselves to be swayed only by reasoned suggestions for practicable sanitary powers, not by the vague sense of fear of the Old Town. Counterbalancing the general fear of the masses of the Old Town was the fear of destruction of the Old Town bringing hidden hordes of the lost classes to infest the streets. On the other hand, fear demanded that the loathsome dwellings should be destroyed, on the other that they should be left standing. The growing literature about the loathsomeness of the Old Town was counterbalanced by the growing volumes of literature about the scarcity of housing.\(^4\) Only when some traumatic event took place that drew more than usual attention to the loathsomeness of housing were there liable to be loud and sustained demands that the Town Council perform widespread destruction of the Old Town. Such an event did not take place before November

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2. Scotsman, 4 April 1857, publishing letter from H. Johnston to Town Council, 28 January 1857.
3. ibid., 6 May 1857, reporting meeting of Town Council, 5 May 1857.
1861. Just as there would not have been such public demand for action on the part of the Town Council in the months following the fall of a tenement in the High St. if there had not been a latent sense of fear of the masses of the Old Town as currently housed in the 1850's, so there would not have been such a determined opposition to the Chambers Improvement Scheme in 1866-67 by many "sanitarians" if there had not been a sense of fear of the masses of the Old Town being turned out of their homes. Just as members of the public could share these twin fears, so could members of the Town Council. Therefore, when Ford told the Town Council in 1857 that some houses were so foul as to be declared uninhabitable but for the scarcity of alternative accommodation, it would be unfair to accuse him of naivete or of creating an excuse for no sanitary action by the Town Council. He was in fact summing up the position precisely. Moreover, the Edinburgh Town Council could scarcely be condemned for not taking on powers involving the destruction of whole areas of insanitary housing on a sanitary basis, when such precedents did not exist elsewhere. It would not be too much to suggest that the Edinburgh public were experiencing the same conflicting senses of fear as in other cities.

While there were emotions of fear involved in the question of large-scale destruction of slumdom, such emotions did not enter upon the question of appointing a M.O.H. While discussion on the question of the inchoate mass of insanitary could inevitably be pitched on a high key, what discussion there was on the question of appointing a M.O.H. was on a low key; and the meagre role which the Town Council appeared to assign the question as an item of public health importance corresponded

1. Scotsman, 1 August 1857, reporting meeting of Town Council, 29 July 1857.
to the lack of local public interest in the question. The public, and the Town Council could well feel that, with Dr. Littlejohn including among his duties of Police Surgeon since 1856 the superintending of lodging houses, the reporting upon nuisances, the inspection of food for sale that was suspected to be diseased, 1 the city had a virtual M.O.H. What was lacking was an officer to compile public health statistics so as to pinpoint what exactly was required in the way of remodelling the insanitary environment; however, Gairdner was the only local "sanitarian" to consistently draw attention to this omission and he did not commence his pressure till the late 1850's; anyway, Ford's motion (see p.45) aimed at partly rectifying this omission. That Edinburgh sanitary opinion should be so backward in the 1850's in urging the appointment of a M.O.H. can probably be traced to the fact that the voices of the medical pressure groups of the 1840's, who argued for a system of medical inspection of the dwellings of the poor under partly Poor Law and partly police auspices, had been stilled as a result of the sagging interest in the question of new Poor Laws, previous interest in the question having largely called their voices into being; the fact that there was no proper register of deaths in Scotland till 1856 (while there had been such a register in England since 1836) meant 7 that a knowledge of and interest in accurate and constant death rates had not yet really emerged. 2 Until such death tables were properly established and publicly recognised, the raison d'être for a M.O.H. in Scotland was limited and his statistics were liable to be treated with the same indifference as were Stark's during the 1840's.

From time to time in the 1850's, the Scotsman enthusiastically advocated the appointment of a M.O.H., but the editor's ignorance of the

1. ibid., 1 October 1862, reporting speech of Lord Provost to meeting of Town Council, 30 September 1862.
duties of an officer of health appears so obvious that this cannot be used as an illustration with which to condemn the Town Council for their lack of interest in the question. When McLaren, as Lord Provost, announced the appointment of a temporary Inspector of Nuisances with responsibility for paving and drainage, the Scotsman greeted this as the long-awaited appointment of an officer of health, though McLaren had not stated that his office bore any such title. Yet it is the force of these ill-informed pleas for the appointment of a M.O.H. that supply the clue for the fact that such a low key question could suddenly pitch itself into a high key during the great public agitation for a M.O.H. in the early months of 1862. The title of officer of health was a symbol of an efficient municipal system of sanitary inspection. That Liverpool enjoyed such an illustrious reputation for vigour in the sanitary field in the 1850's, that Liverpool also had been the first borough to appoint a M.O.H. meant that the appointment of an officer of health could easily be seen as a magic method of transforming the municipal sanitary system. That the Scotsman should believe that the entry of a M.O.H. would bring about an efficient system of sanitary work, little realising that a M.O.H. could hardly do anything until there was a rational municipal public health organisation, is hardly surprising. When the Scotsman complained that no officer of health had been appointed when the Inspectorship of Cleaning and Lighting fell conveniently vacant and then said nothing about what a M.O.H. should do, the Police Commissioners and Town Council were not so much guilty of failing to appoint a M.O.H. as of failing to understand the urgent need for a rational public health organisation.

1. Scotsman, 28 September 1853, reporting meeting of Police Commissioners, 26 September 1853.
2. ibid., 28 September 1853, editorial.
3. A M.O.H., Dr. Duncan, was appointed in Liverpool in 1846.
4. Scotsman, 7 December 1853, editorial.
Such indictments, whether implied or expressed, were infrequently made against the municipal bodies but, none the less, the lack of unitary system in municipal public health work appears as a most glaring gap to the historian. That hostility to Chadwick in Scotland prevented legislation on his lines reaching Edinburgh hardly mattered so far as the topics dealt with in the legislation were concerned; but it did matter when it meant that the institution of a thoroughly efficient system of sanitary bodies and officials was delayed. The greatest difference between sanitary administration in Edinburgh and in the London boroughs (served by M.O.H.'s since the passing of the Metropolis Management Act in 1855) was that the performance of sanitary duties and the arrangement of sanitary officials ran as a unitary system in the latter, not in the former. 

The Town Council and the Police Commissioners were not unaware of the need to construct a proper administrative sanitary system; while Lord Provost McLaren often complained of this very lack of system, the municipal bodies through the 1850's constantly felt that they were rationalising what system there was and were constantly re-arranging the duties of sanitary officials. The Town Council sincerely felt that their amalgamation with the Police Commissioners was a step in the right direction.

During Littlejohn's tenure of the Police Surgeon's Office, he was given charge of several exclusively public health matters which had hitherto been either in the hands of an overworked Inspector of Cleaning and Lighting with multifarious duties or put in the hands of officials such as the Inspector of Fire Engines whose primary interests could scarcely be described as sanitary. Attempts were made to confine the duties of the Inspector of Cleaning and Lighting to the sanitary work of cleaning.

1. Though Chadwick had fallen from grace, as the supreme figure in general public health administration, by 1855; London remained subject to the systematising tendencies he had initiated, even if the particular system that evolved was not Chadwick's system, it was indubitably a system. (E. Lankester, 'Notes on recent Sanitary Legislation in the Metropolis,' Transactions of the National Association for the Promotion of Social Science (1860), 666-675).

2. Scotsman, 16 November 1853, reporting meeting of Police Commissioners, 14 November 1853.
However, despite these efforts, an efficient system of sanitary administration was hardly any nearer in 1861 as compared with 1850. When McLaren complained of the lack of a head among the sanitary officials, the indictment is not that he failed to appoint a M.O.H. as head but that neither during his Lord Provostship nor that of his immediate successors was any head appointed at all. Though he tried to push ahead sanitary improvement with vigour by the temporary appointment of an Inspector of Nuisances, the very fact that the appointment was temporary illustrates how closed the minds of the Town Councillors and Police Commissioners were to the essentials of a permanent administrative sanitary system. At the beginning of the 1860's responsibility for drains was not a matter for the Inspector of Cleaning and Lighting (whose duties more closely approached an exclusively sanitary responsibility than any of the other municipal officials), but for the Superintendent of Streets and Buildings whose primary interest was in the state of repair of roads. The amalgamation of the Town Council and the Police Commissioners neither made for any dramatic improvement in sanitary administration. The continuation of the same sanitary officials, and the overlapping which there had been between the two bodies, meant that little change could be expected. A unitary administrative sanitary system could scarcely be expected when the responsibility for sanitary matters was shared between the Cleaning and Lighting Committee, the Streets and Buildings Committee, the Lord Provost's Committee.

With the Town Council at the start of the 1860's as with the Police Commissioners previously, what was most glaringly lacking in the sanitary administration was direction. The sum of the legislation which local and general Acts had provided, added to the legislation which the Town Council were contemplating by 1861, were together quite considerable and included most sanitary provisions which could be considered reasonable, but far too

1. Scotsman, 16 November 1853, reporting meeting of Police Commissioners, 14 November 1853.
little legislation was executed effectively. The more important sections of sanitary legislation tended to be executed only periodically, not constantly. The daily collection of refuse worked to a system under the direction of the Inspector of Cleaning and Lighting, but little else in the way of sanitary work did so.

In the 1830's, and for most of the 1840's, the Town Council and the Police Commissioners could scarcely have been expected to make far-reaching appraisals of the need for drastic action to mitigate the foul environment that the "hidden masses" inhabited, for the whole ethos of progressive Scottish thought allotted the task to the Poor Law authorities. This however was sufficient to make people far more aware than hitherto of the grime of the environment of the poor; when, gradually, this came to be looked on as a matter requiring corrective sanitary treatment rather than corrective destitution relief. The lasting achievement of Alison and his followers had been to make the condition of the poor so massive a question that when it was applied to sanitary conditions, public health ceased to be the minor topic that it was at the opening of this story; it was a major topic to be applied to major problems. In the circumstances, the Edinburgh Town Council and Police Commissioners could scarcely be expected to tackle the problem head-on and carry out the logical solution of wholesale destruction of the insanitary environment; their programme had to lie somewhere in between that and doing nothing. Their programme was creditable enough, but it was regrettable that it did not include a drastic re-fashioning of their own body in the programme. Yet, if Edinburgh Town Council had failed in this respect, it had the company at this date of the Councils of many distinguished English boroughs. If one applies the appointment of a M.O.H. to English boroughs as a yardstick of mature sanitary administration, Leeds was not to appoint one till 1866, Manchester not till 1868, Birmingham not till 1872, Newcastle-upon-Tyne not till 1873. 1

Even if the evidence would suggest that there was little opportunity for a M.O.H. at this date in Edinburgh to achieve much, the appointed man, Dr. Littlejohn, was to write the 1865 Report on the sanitary conditions of Edinburgh, 1 which was to be regarded as the supreme document and reference point of sanitary conditions. It is therefore of interest to examine the circumstances leading to his appointment with a view to assessing what various groups expected of him. The 1860's were in Edinburgh a series of sanitary debates and discussions; and this was the first instalment.

Those who have written on the above have said that the collapse of a High St. tenement caused such an outcry that the Town Council were forced to make the appointment; 2 and have made the connection between the two events seem extremely simple even though the two events, the collapse of a tenement and the appointment of a M.O.H., appear so inherently different. He looked after the public health of the citizens, not their physical safety.

The first half of the title conveys something sudden; as a branch of sanitary reform, the second half conveys something gradual. In fact the question of the appointment of a M.O.H. cannot be considered as relevant only after the traumatic event of the fall of the High St. tenement had taken place. An official scheme of supervision over the public health under the direction of Dr. Littlejohn had been approved

2. H.P. Tait, 'Sir Henry Duncan Littlejohn, great Scottish sanitarian and medical jurist.' The Medical Officer CVIII (1962), 183-190.
in principle by the Town Council. (see Chapter 2, p. 45) In this, as in other branches of sanitary reform, the Town Council had been undramatically but conscientiously working within certain limits for a better sanitary environment and considering what extra sanitary legislation was desirable. (see Chapter 2, p.46).

The collapse of a tenement in the High St. in the early hours of the Sabbath morning of November 24th. 1861, killing thirty five people, and making a hundred people homeless, was an event of such a nature as to upset the pattern by which the Town Council legislated or contemplated legislation. Limits had been set by the balance between the public fear of the vast hidden masses and their woeful environment, inciting them to demolish vigorously, and the fear of the masses being ejected from their homes and turned loose on the streets, desisting them from acting. (see Chapter 2, p. 47). The event meant that this mental balance was sufficiently upset to make the Town Council no longer necessarily free from criticism for their failure to come to grips at all with the real work of modifying the essentially hellish environment of the Old Town. The former concept of fear assumed an emphatic prominence, so emphatic as to modify the moral to be drawn from the latter concept of fear. Instead of being used mainly as an argument against action by the Town Council in demolishing insanitary dwellings, the result was an intensification of discussion about schemes for building artisans' dwellings. The Rev. Dr. Begg and the Rev. Dr. Nisbet, though not lacking in verbiage to describe the horrors that the poor lived amongst, regarded the provision of improved dwellings as the principal answer to the problem.

2. ibid., 28 November 1861, reporting public address by Dr. Begg on High St. calamity, 27 November 1861.
3. ibid., 30 November 1861, reporting meeting of Co-Operative Building Movement, 29 November 1861.
Such a view was not allowed to go unchallenged, even by some, like William Chambers, who were equally enthusiastic advocates of building improved artisans' dwellings. He and Cousin (the City Superintendent) could say that, no matter how many improved houses were built, the fever dens in the Old Town would always find occupants, and so matters would go on deteriorating. The Scotsman editorial echoed this sentiment with the words, Prevent people inhabiting unsuitable houses, leave to the natural course of things their providing themselves with suitable ones. That demand, coupled with Chambers' idea of a general renovation of the Old Town, showed that the fall of the tenement was having its effect in precipitating demands for action based upon fear of the environment generally. Nevertheless, to the end of 1861, there was no effort to coerce the Town Council to appoint a M.O.H.; in fact little attempt at coercion took place at all. They were not directly confronted with the challenge to take action based upon the prototype of Chambers' Improvement Act of 1867; in fact this question of a renovation of the Old Town very quickly died out, despite an elaboration of the theme by Cousin and an enthusiastic but short-lived adoption of the theme by the Scotsman editorial. Despite the forcefulness with which the closure of slumdom was urged, the duty was understood to be the responsibility of the community generally; it was not as yet pointedly set out as an imperative duty of the Town Council. To the end of 1861 there was no more responsibility laid upon the Town Council for vigorous corrective sanitary work than there was for building artisans' dwellings.

1. ibid., 9 December 1861, publishing letter by William Chambers on "House Accommodation in Edinburgh".
2. ibid., 18 December 1861, reporting meeting of Architectural Institute of Scotland, 17 December 1861.
3. ibid., 11 December 1861.
4. ibid., 21 December 1861.
At this stage, it could not be claimed that public sanitary opinion, failed to be more pressing upon the Town Council because there was no need. Even if the responsible committee had agreed to some small improvements in their contemplated legislation, they were not on such a scale as to allay the powerful manifestations of the concept of fear, triggered off by the spectacular disaster of the fallen tenement. In fact, the deliberations of the Lord Provost's Committee merely represented a continuation of the sanitary legislative policy they had been pursuing for some time (see p.46), not a new policy in the face of the disaster of the fallen tenement.

However, the immunity of the Town Council from public criticism was not to long survive the close of the year 1861; for, in the early weeks of 1862, the currently massive concept of fear of the Old Town was producing its logical result with the Town Council subjected to the loudest and most savage assault to date for their shortcomings in sanitary work. The commencement of the assault can be attributed to a powerful speech by Dr. Alexander Wood, a sanitarian of a naturally aggressive temperament, to a meeting of the Architectural Institute of Scotland, where he urged that his main suggestion (the peremptory closure of all houses which could not be duly lit and ventilated) should be carried out by a Royal Commission, so great was his disillusionment with the Town Council; such an idea being later repeated by Henry

1. The Lord Provost's Committee decided that, in any new sanitary legislation being applied for, the clauses should include the enforcement of the introduction of water supply, water-closets, sinks and soil-pipes into existing houses of an annual rent of £8 and over, not £10 and over (except where the Town Council considered it impracticable). This clause would apply to new houses of an annual rent of £6 and over, instead of £8 and over. As well as spending 1/4d./£ of the police rental (about £600 a year) on acquiring ruinous property etc. for sanitary improvement, this proposed clause might also be applied to the removal of upper storeys of tenements of excessive height. A new clause also provided that, when 2/3 of the Town Council were agreeable, they would be able to spend 3/4d./£ of the police rental each year on such improvements (ibid., 25 December 1861, reporting meeting of Town Council, 24 December 1861).

2. ibid., 14 January 1862, reporting meeting of Architectural Institute of Scotland, 13 January 1862.
Johnston.  

The powerful emotional content of Wood's call to action: Let it be remembered that while we are talking and writing and deliberating, the dark tide is flowing noiselessly, it may be, but uninterruptedly, onward, was well designed to reinforce still further the mental concepts of fear of and pity for the mass of the inhabitants of the Old Town. The concepts were so reinforced that complaints as to the inadequacy of the Town Council were the necessary corollary. Besides, now that Dr. Wood had savagely attacked the Town Council, other sanitarians were not likely to be too timid to do so. The climax of the sanitary agitation of the early weeks of 1862 came with a public meeting in late February, the result of which was a memorial presented by a deputation from that meeting to the Town Council, in which the principal demand was for an inspector of buildings and M.O.H. to make house inspections and report, point out remedies for various things, and see them enforced. This demand, coupled with the allied demand for a specialised sanitary committee, was a commentary on the lack of system under which the Town Council had been operating in the sanitary field in the years before the tenement disaster and represented a sincere attempt to apply more progressive methods to the sanitary administration of Edinburgh, the London vestries being the principal exemplar for the framers of the memorial.

That the demand for a M.O.H. came as the climax of sanitary agitation following upon the fall of the High St. tenement, and that Dr. Littlejohn was appointed as Edinburgh's first M.O.H. in the same year, might suggest that the two events were logically connected. That was far from being the case. The prominence of the appointment of a M.O.H.

1. ibid., 5 February 1862, publishing letter by Henry Johnston on "Sanitary Reform".
2. ibid., 14 January 1862, reporting meeting of Architectural Institute of Scotland, 13 January 1862.
3. ibid., 26 February 1862, reporting public meeting, 25 February 1862.
4. ibid., 5 March 1862, reporting meeting of Town Council, 4 March 1862.
as a sanitary issue happened more by chance than as a logical result of the general sanitary conscience in the wake of the fall of the tenement. Public sanitary opinion, after all, tended to urge a miscellany of solutions, not to concentrate their efforts in urging a single one. Taking the sum total of expressed public sanitary opinion, the appointment of a M.O.H. did not figure prominently. At the public meeting in February 1862, the Revd. Dr. Candlish, speaking in a revivalist tone, spoke of the great movement which we are now, I trust, inaugurating and went on to scarcely mention the word, M.O.H.¹ Even if much criticism was made of the Town Council's apparent inertia, failure to appoint a M.O.H. was not generally cited as a major failing in that respect.

That the demand for a M.O.H. figured so prominently in the memorial, presented by a deputation from that public meeting owed far more to the presence of one man, Dr. Alexander Wood, as convener of the deputation committee, than to the general tone of opinion expressed at the meeting. Though Wood forcefully put forward the idea of a vigilant M.O.H. ensuring that the Town Council vigorously set about their sanitary duties (a far more extensive concept of a M.O.H. than had hitherto been preached in Edinburgh), few others appeared so enthusiastic about this method of controlling the Town Council's inertia. While Wood, as a medical man, was interested in drawing examples of sanitary administration from other cities, the strong contingent of ministers at the public meeting were of a more parochial outlook.¹

The emergence of the idea of a M.O.H. for Edinburgh in Wood's mind did not come about in a straightforward fashion either. Even though his speech to the Architectural Institute of Scotland was the signal for the loudest pleas for sanitary reform heard during the span of this chapter, his speech did not include demands for the appointment of a M.O.H. The latter idea was suggested by a Scotsman editorial, not in an attempt to expand on Wood's and Johnston's idea of a Royal Commission.

¹. ibid., 26 February 1862, reporting public meeting, 25 February 1862.
to replace the Town Council as an administrative sanitary body, but
in an attempt to suggest an alternative. The editorial attempted to
reach a compromise between its agreement with Wood's and Johnston's
accusations of the inadequacies of the Town Council on the one hand
and its feeling, on the other hand, that their enthusiasm for a Royal
Commission represented too great an encroachment on the right of local
self-government.

In describing the deficiencies of sanitary administration, the
editorial read: One is the want of any sanitary engineer or officer of
the public health ------- It is the duty of such officer to spy into
abuses, to enforce the law mercilessly against these, to report period¬
ically to the municipality ------- pointing out the deficiencies of
existing ---- laws, and insisting on their extension and amendment.-------
he is their master so far as the public good seems likely to be thwarted
by their inertness or narrow-mindedness. In the latter case, when he has
shown them the evil and its cure, he presses upon them the responsi¬
bility of tolerating such evil.------- But he is so far a master that
civic bodies do not care to have such an officer.------- A competent
sanitary officer,-------- could effect all the good that could be done
by a Royal Commission in a much shorter period, and at a much cheaper
rate.------- Under an officer of the public health, we might hope to see
inaugurated some such periodical local inspection as has been found as
requisite as salutary in all towns in which a true sanitary system has
been brought into operation.¹

This was a far more detailed and better-informed conception of the
duties of a M.O.H. than had hitherto been urged by Scotsman editorials;
evidence would suggest that it was decisive in letting Wood forget about
his idea of a Royal Commission, so vividly did it remind him of the

¹ ibid., 5 February 1862, editorial.
example being set by the work of the recently appointed M.O.H.'s in the London vestries, the topic of papers at nearly every annual meeting of the National Association for the Promotion of Social Science. ¹

By such a devious path, did demands for a watchdog M.O.H. in Edinburgh attain prominence.

The fact that, less than a month after the presentation of the memorial pleading for the appointment of a M.O.H., Lord Provost Brown-Douglas included the appointment of a M.O.H. among the items which he wished remitted to his Committee for consideration for inclusion in any new sanitary legislation which might be introduced, ² might suggest that Wood's skilful direction of public sanitary pressure into that channel had earned early results. The Town Council could not possibly have been unaffected by the sanitary agitation in the early months of 1862, but evidence shows it had no real bearing on the subsequent action of the Town Council with regard to the appointment of Dr. Littlejohn as M.O.H. The evangelical tone of the sanitary agitation was not reflected in the Lord Provost's motion; his Committee (the real governing body of the Town Council) appeared to regard it as yet another addition to the additions and amendments they had been suggesting to their proposals for new sanitary legislation for the past twelve months. The basis they were working on appeared to be Councillor Ford's motion for a loose scheme of supervision over public health (see Chapter 2, pp.45,49) ³ rather than any ideas expressed by Dr. Alexander Wood.

1. E. Lankester, 'Notes on recent Sanitary legislation in the metropolis', Transactions of the National Association for the Promotion of Social Science (1860), 666-675.
   E. Ballard, 'The work of the metropolitan Medical Officers of Health - their success and their difficulties', Transactions of the National Association for the Promotion of Social Science (1862), 657-666.
2. Scotsman, 2 April 1862, reporting meeting of Town Council, 1 April 1862.
3. ibid., 9 October 1861, reporting meeting of Town Council, 8 October 1861.
In fact, individual Town Councillors, who attempted to take steps to have a M.O.H. appointed on the lines urged by Dr. Wood or the *Scotsman* editorials, were vigorously resisted. When Councillor Curror tried to adapt the system of sanitary management current in London under the vestries and the Metropolitan Board of Works to Edinburgh by moving a resolution for a three-tier system of sanitary management and for a M.O.H. who could be removed only by the Board of Supervision, his motion failed to find a seconder. ¹ Councillor Miller proposed a less involved motion but one which largely reflected the public sanitary pressure, namely that an additional inspector be appointed to look after the sanitary condition of the city, but this motion also was vigorously resisted and quashed. ¹

There was a great difference between the Lord Provost's Committee's and Wood's conception of the position of a M.O.H. While Wood could champion Curror's idea of a M.O.H. as a watchdog over the execution of sanitary regulations by the Town Council, ² Ford, on whose "vision" the Lord Provost's Committee relied for working out the idea of a M.O.H., protested against Curror's proposals *in the name of liberty and common sense.* ³ Though the Lord Provost's Committee had yet to announce what precisely the duties of the M.O.H. would entail, it was obvious they were going to ensure that the Town Council had control over him, not that he would have control over them.

In the next month, the issue by the Lord Provost's Committee of their suggestions, as to what the duties and position of the M.O.H. should be, bore out their fundamental conception of a M.O.H. even if it was overlaid by wordy detail.

¹. *ibid.*, 19 March 1862, reporting meeting of Town Council, 18 March 1862.
². *ibid.*, 22 March 1862, publishing letter by Dr. Alexander Wood on "Sanitary Reform - the Town Council on Tuesday".
³. *ibid.*, 19 February 1862, reporting meeting of Town Council, 18 February 1862.
On the one hand, they could salve their consciences by allocating the M.O.H. duties that theoretically were quite considerable, but which were not precise enough to offend. The references, to reporting on the Registrar's returns, co-operating with Parochial Boards and the medical profession as to discovering local causes of disease and the approach of any epidemic, were simply an elaboration of Ford's motion. However, partly for the honest purpose of leaving nothing undone that could safely be done, there were stipulations as to co-operating with inspectors of nuisances as to removing such nuisances, the improvement of cleanliness and ventilation, and of the general health especially in the poorer localities, to inspect and report from time to time, to submit suggestions with a view to the greater efficiency of his department, and to the better framing of suitable legislative provisions. Though, for example, there was no specific mention of house-to-house visitation, the duties assigned were fairly complete: that was little to be wondered at, since the duties were those laid down in section 111 of Lindsay's Act, and had just been slightly tailored for Edinburgh's requirements. On the other hand, the importance of the Committee's report lay in the fact that section 111 itself was not going to be adopted; this laid down that the M.O.H. be removable only with the approval of one of the Secretaries of State. The determination of the Committee not to do so was shown by the way they went to pains to discover they could appoint a M.O.H. under the 1848 Local Police Act to do duties laid down in Lindsay's Act! The report might plead that the appointment was but an experiment to see what better legislation he might suggest, but he was scarcely likely to recommend that he himself be put out of office! This was a blatant challenge to the public demands made earlier for a M.O.H. as a control over the Town Council.  

1. ibid., 21 May 1862, reporting meeting of Town Council, 20 May 1862.
When, three months later, the Town Council announced their choice of M.O.H. for Edinburgh, their idea of having a M.O.H. as their servant, not as their master, was equally obvious, their choice being Dr. Littlejohn who had been their Police Surgeon for six years and who intended to continue in that post even after being appointed M.O.H. also. 1

In some ways, their choice had a lot to commend it. As police surgeon, he had thoroughly proved himself as to competence and skill. In fact, he was already a virtual M.O.H. in some fields and so had an excellent local knowledge; a distinguished local medical sanitarian like Gairdner thought highly of him; 2 for a Lord Provost's Committee which wanted to be sure of the limits of where they were going in appointing a M.O.H., they could not do better than appoint someone they were thoroughly familiar with. Besides, the "governing" group on the Town Council could claim that, the appointment being experimental, they were only seeing how the duties of the M.O.H. developed. The Presidents of the Royal Colleges of Physicians and Surgeons felt that, so long as he relinquished private practice, there was no reason why the same man should not hold the two posts of Police Surgeon and M.O.H. as an experiment, though of course a time would come when the duties would have to be separate. 3

However, the opposition to the appointment from people who could be termed progressive "sanitarians", and the reasons for their opposition demonstrate paradoxically that, however great Dr. Littlejohn's

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1. ibid., 22 August 1862, reporting meeting of Town Council, 21 August 1862.
2. Gairdner had more than once suggested an improved sanitary organisation for supervision of epidemic disease; almost always his thoughts had turned to Dr. Littlejohn as a suitable officer to administer such an organisation (ibid., 30 December 1857, reporting meeting of Town Council, 29 December 1857).
3. ibid., 1 October 1862, reporting meeting of Town Council, 30 September 1862.

* For biographical sketch of Dr. Littlejohn see Vol. 2, H. 18-30, Appendix XXIV.
contribution to the advancement of Edinburgh's public health was to be in the next forty six years, the decision to appoint him as M.O.H. reflects little credit upon the Town Council for far-sightedness. That the Town Council took the steps they did take in the matter of appointing a M.O.H. following upon the direction of public sanitary agitation into that channel; that there was little public sanitary agitation in evidence to question the Lord Provost Committee's conception of a Medical Officership of Health when the duties of such an officer were outlined, might suggest that public sanitary opinion was satisfied by the conduct. Considering the discrepancy between Wood's vision and the Town Council's vision of a M.O.H., such opinion could not possibly be so. The silence of public opinion is not to be explained by any confidence in the Town Council's actions; rather is it to be explained by the fact that the memory of the fall of the tenement was receding into the past, bringing with it a diminution in expressed public concern. Despite the general silence, the decision to appoint Dr. Littlejohn as M.O.H. represented so great a challenge to earlier public demands that there were some progressive sanitarians prepared to let their views be known. Their numbers may have been few, but their voices were loud. A Scotsman editorial summed up the standpoint of this school of thought by accusing the Town Council of trying to ignore the requirements of Parliament that a M.O.H. be independent of the caprice of local authorities. While the conservative sanitarians looked on the two duties as broadly similar, the dissentients complained that Dr. Littlejohn would not have the time to attend to the two duties adequately. Apart from the Scotsman, the only dissentient voices came from Town Councillors, whose views on the need for a new type of sanitary administration, could be described as dangerously progressive. Most prominent in this group

1. ibid., 22 September 1862.
were the triumvirate of Councillors Miller, Alexander and Curror who, as Miller put it, wanted a new system of an independent M.O.H. rather than an extension of the old system. Nothing could be seen as more indicative of extending the old system than that of extending the Police Surgeon's duties to embrace that of M.O.H. The main grievance was that Dr. Littlejohn's position would prejudice any independence he might have, as M.O.H., from the Town Council; also, there was little guarantee that he would have the time to attend adequately to the duties of both his posts. The opposition to Dr. Littlejohn's appointment, confined as it was to a group of the Town Council (apart from Scotsman editorials) might have been few in numbers, but it was in a position to be of maximum effectiveness. So determined were they to stop Dr. Littlejohn's appointment that they were prepared to ally with a handful of extreme economists on the Town Council who wished to stop his appointment on the grounds of expense, the result being that his appointment was carried in the Town Council by only 17 votes to 16. 1

Even after this meeting the sanitarians (but not the economists) made various attempts to cancel the appointment, 2 but the impetus diminished as they forgot their objections to the circumstances of his appointment, and became increasingly impressed by how he was coping with a smallpox epidemic. 3

They had never objected to his qualifications as a M.O.H.; rather did they object to his remaining on as Police Surgeon. As he was to do

1. ibid., 1 October 1862, reporting meeting of Town Council, 30 September 1862.

2. ibid., 15 October 1862, reporting meeting of Town Council, 14 October 1862.

3. ibid., 29 October 1862, reporting meeting of Town Council, 28 October 1862.

4. ibid., 19 November 1862, reporting meeting of Town Council, 18 October 1862.
many times in his career, he kept out of the controversy as much as possible, being naturally reserved; however, he was genuinely in favour of the conjunction of posts. It would be too cynical to say that this would solve his private financial problems; however, as he saw it, if he could do both posts there was no reason why he should not. He could claim that he knew far better than anyone else whether he would have enough time for both posts, and he claimed the support of three medical men, whose outlook on sanitary reform was progressive. However, Dr. Littlejohn and these medical men were looking at sanitary reform only in its medical aspects; as medical men, they ignored the political aspects of a M.O.H. being also Police Surgeon.

In assessing the contribution of Dr. Littlejohn as M.O.H. to the public health of Edinburgh, credit must go to the man appointed for the use he made of the job, not to any foresight by the Council for appointing him. In appointing him, the Council were scarcely aware of there that would lead; the conjunction of the two posts was meant to be temporary and experimental; in fact it lasted for the next forty six years, till his eventual retirement. The conjunction was seen in 1862 as a method of securing the subordination of the M.O.H. to the Council; they could scarcely visualise the power the M.O.H. would be wielding in forty years time, still as Police Surgeon also. The 1862 Town Council deserve little credit for what a Medical Officership of Health was later to mean to Edinburgh.

1. *ibid.*, 29 September 1862, editorial.

2. Earlier in the year Dr. Littlejohn had submitted an application for an increase of salary as Police Surgeon to £250/year, which was declined by the Town Council (*ibid.*, 30 July 1862, reporting meeting of Town Council, 29 July 1862). The Town Council were now prepared to grant him an annual salary of £500 for the combined posts of M.O.H. and Police Surgeon (*ibid.*, 10 September 1862, reporting meeting of Town Council, 9 September 1862).
While public opinion had taken devious paths towards their pleas for a M.O.H., the Town Council appeared to have reached their conception of a M.O.H. by paths laid down as part of their general sanitary programme since the 1850's (see Chapter 2, p. 45) and acted accordingly in detailing his duties and choosing whom to appoint; it was as if the fall of the tenement and the subsequent public agitation had never taken place. While the fall of the tenement was an event of such a nature as to aggravate the concept of the fear of the unknown, the appointment of Dr. Littlejohn as M.O.H. was not an event of such a nature as to automatically reduce it.
While Dr. Littlejohn's appointment as M.O.H. in 1862 demonstrated more than anything else how circumscribed the Town Council were in vision (see Chapter 3, p. 65), it is generally acknowledged by historians that he was to play a decisive role in promoting improvements in the sanitary administration of and conditions in Edinburgh.

Primarily associated with the contribution of Dr. Littlejohn to the advancement of Edinburgh's public health is his celebrated work issued in 1865, Report on the sanitary condition of Edinburgh. The fact that it was issued at such an early stage in his career of M.O.H. makes it fair to assume that, despite the conduct of the Town Council at the time of his appointment (see Chapter 3, p. 63) there was a steady upsurge in his activities and influence in his early years.

This was not so at all. The effective contribution of Dr. Littlejohn to any improvements in the general sanitary conditions of Edinburgh reflected the terms under which he was appointed only too well. The general story of developments in the sanitary field in the early years of the Medical Officership of Health shows a great uniformity with the story in the later 1850's. From the point of view of continuity of the general sanitary story in Edinburgh, Dr. Littlejohn's appointment was, in many respects, incidental, not fundamental.

His role in the adoption or hastening towards the statute book of new sanitary legislation was practically negligible. Though the M.O.H. was the municipal officer; first and foremost, interested in sanitary legislation; though, under the terms of his appointment, he was conceded the right to suggest new sanitary legislation; the body

1. *Scotsman*, 21 May 1862, reporting meeting of Town Council, 20 May 1862.
responsible for operating the machinery to secure the adoption of sanitary legislative clauses was still the well-meaning, but leisurely, Lord Provost's Committee. Just as the momentum of the Committee, in deciding what clauses of Lindsay's General Police Act to adopt for Edinburgh, was largely unaffected by the trauma following the fall of the tenement in 1861, so it was unaffected by the appointment of a M.O.H. A measure of his effectiveness was the fact that the desired clauses for Edinburgh of that Act were not fully incorporated in the Edinburgh Provisional Order Act till 1867. In fact, an important clause of the Act, adopted in the interim, did not meet with his approval at all. This was clause 210 of the General Police Act which enforced what was now becoming considered the traditional remedy for the disgracefully insanitary condition of the slum dwellings: the introduction of water-closets. Though a number of sanitarians loudly supported it, Littlejohn was not alone amongst another party of sanitarians who pointed out how impracticable water-closets were, when not fed by an adequate water supply and when the inmates of the slums had not been trained to use the appliances properly.

Not only were the terms of Littlejohn's appointment (see Chapter 3, p. 63) being negatived by his impotence with regard to the promotion of environmental sanitary legislation; but also, his day by day work was producing little improvement in the execution of existing sanitary legislation. In Glasgow, the new M.O.H. was a pivot in the machinery of "ticketing" small insanitary dwellings under the provisions of the 1862 Glasgow Police Act (so as to limit overcrowding of dwellings); 2

1. ibid., 9 August 1865, publishing letter by George Girle on "Water-closets in Working-men's Houses".
2. ibid., 7 August 1865, publishing letter by James Stark on "Water-closets in the Houses of the Working-classes".
annual meetings of the National Association for the Promotion of Social Science were being treated to papers by M.O.H.'s of the London districts of the work they did (in conjunction with inspectors of nuisances) in applying the lessons of public health returns to the environment by making thorough visitations of houses in notorious areas, and keeping down nuisances, whether of drainage, of dirt, of want of repair, of dampness, or of the all-important and pervading nuisance of overcrowding of houses. 1

Meanwhile Littlejohn's staff consisted of one policeman and one clerk; he was responsible to the Lord Provost's Committee whose allotted duties were multifarious and whose attitude to effective sanitary improvement was leisurely; 2 other sanitary duties were carried out by the Superintendent of Streets and Buildings and the Inspector of Cleaning and Lighting as part of their more general duties under the same system (or lack of system) as they had been carried out before Dr. Littlejohn's appointment (see Chapter 2, p. 52). No attempt had been made to integrate the sanitary functions of the various sanitary officers; the absence in Edinburgh of a unitary municipal sanitary system persisted after the appointment of a M.O.H., as a striking contrast to the processes at work in London (see p. 51). Though references to his recommendations for cleaning of insanitary dwellings 3 demonstrate that he could do useful work which did not impinge upon that of other sanitary officers; though he was anything but an idle man, with his tiny staff, the amount of work he could overtake in making house-to-house visitations was negligible.

The terms of Dr. Littlejohn's appointment were so unfavourable to him that it was vain to expect any burst of fresh civic vigour in

1. E. Ballard, 'The work of the metropolitan Medical Officers of Health - their success and their difficulties', Transactions of the National Association for the Promotion of Social Science, (1862), 657-666.
3. Scotsman, 11 May 1863, publishing article on "Sanitary Measures".
tackling the enormous problem, steadily growing more urgent, of modifying the hellish environment of the Old Town. The negligible results of Dr. Littlejohn's appointment in this respect are illustrated by the fact that Dr. James Cowan, more than two years after Dr. Littlejohn's appointment, was provoked into writing a series of letters in 1864 and in 1865, pointing out the beastly conditions that so many of the poor were forced to live amongst. He remarked that it might be well to restrain our indignation at American slavery so long as this disgraceful neglect is permitted within 5 minutes' walk of our own dwellings, and pointed out the need for comprehensive measures of sanitary improvement, including the need to sweep away houses in closes where there was no light or air. His letters being entitled "Social and Sanitary Improvement", his chief concern was with the degraded condition of the inhabitants of such areas and pity for them, after the style of Alison or Bell; even if he did not directly complain of the negligible results of the appointment of Littlejohn as M.O.H., and though his attitude to the backwardness of the Town Council was very restrained; the fact that he named the giant evil of housing conditions of the Old Town as overcrowding of dwellings, not as destitution or pauperism like Alison or Bell, (as an item of direct municipal concern rather than general social concern), was a sweeping indictment of the municipal sanitary machinery, in that it did not provide for a M.O.H. to take charge of putting down overcrowded dwellings as in Glasgow or London. Also, though Dr. Cowan's letters on the festering sore of the Old Town were the fullest written during the span of this

1. Scotsman, 19 October 1864, 21 October 1864, 14 November 1864, 18 March 1865, publishing letters by Dr. James Moffat Cowan on "Social and Sanitary Improvements."

2. ibid., 14 November 1864.

3. ibid., 18 October 1864.
chapter, they were by no means the only ones. 1

A M.O.H. seen to be armed with full powers to tackle the problem of the hellish environment of the poor might be sufficient to modify the concept of fear of the unknown; the presence of a powerless M.O.H. could not. The problem may have remained so immense as to discourage any active efforts, but that does not excuse the Town Council for not having made more use of their M.O.H., as was being done in other cities like London and Glasgow. There, attempts at least were made, by use of the respective M.O.H.'s, to attend to the problem as well as possible, by daily and systematic action. 2

While Dr. Littlejohn's appointment failed to produce any upsurge in the formulation of heroic measures to drastically alter the environment of the Old Town, it also failed to produce any lowering in the temperature of the question of improving the drainage of the Water of Leith. This was a question which, though by no means of negligible sanitary importance, was not of fundamental importance to the general question of sanitary improvement (see Chapter 2, p. 43). Discussion on the question reached its head in 1864. Indignation meetings of ratepayers by the side of the Water of Leith, 3 an angry resignation by one of their considerable number of spokesmen on the Town Council, 4 opposition in the Select Committees of Parliament to the Water of Leith

1. ibid., 21 April 1864, publishing letter by "X" on "Sanitary condition of Edinburgh".
2. ibid., 14 September 1872, publishing article on history of sanitary organisation in Glasgow; Dr. E. Ballard, 'The work of the metropolitan Medical Officers of Health - their success and their difficulties', Transactions of the National Association for the Promotion of Social Science, (1862), 657-666.
3. Scotsman, 14 May 1864, reporting public meeting on Water of Leith Sewerage Bill, 13 May 1864.
4. ibid., 30 March 1864, reporting meeting of Town Council, 29 March 1864.
Sewerage Bill 1 made the irate opposition to the Bill the most memorable episode in the sanitary annals of the city in the years 1862-65. Besides, the dominating impulse behind the attitude of the opposition was their objection to the proposed mode of assessment rather than any questioning of the sanitary wisdom of the Bill. Dr. Littlejohn's appointment had failed to produce any basic change in the attitude of ratepayers towards sanitary improvement when it came to the test, as it had failed to produce any greater sense of urgency upon the Town Council towards the question.

Furthermore, the presence of Dr. Littlejohn as M.O.H. failed to accelerate the momentum of the Town Council in bringing this legislation towards the statute book. As with the proposed police legislation, the Lord Provost's Committee had set the machinery in cumbersome motion for promoting legislation concerning the Water of Leith drainage before Dr. Littlejohn's appointment; after his appointment the machinery proceeded at an equally sedate rate. He certainly approved of the eventual legislation formulated (even if seeing it as a matter of less urgency than more fundamental sanitary matters), 2 but there is no evidence to suggest that the legislation owed its eventual form principally to any successful pressure on his part on the Lord Provost's Committee.

Such a picture of Dr. Littlejohn's powerless position as M.O.H. ill accords with a judgment by Dr. Alexander Wood on his role in promoting the Smallpox Vaccination Act of 1863 in his earliest months as M.O.H., when he said: When the Town Council decided to appoint a M.O.H., -------------- (the Town Council) hardly knew the new duties that Dr. Littlejohn was voluntarily to assume, and that he was

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1. ibid., 15 June 1864, reporting evidence on Water of Leith Sewerage Bill to Select Committee of House of Lords, 13 June 1864.

to constitute himself chief legislator for Scotland and the medical profession. * With his very limited experience in legislation, Dr. Littlejohn ought to listen to the advice of those who are more familiar in such matters.*

1 The vanity and jealousy of Dr. Wood must be taken into account; Littlejohn had succeeded in 1863 where Wood had failed in 1860. 2 Also, it was unfair to accuse him of having deliberately overriden the sensibilities of the medical profession; for he and the Town Clerk had consulted the local professional medical bodies while legislation was being prepared; 3 he was much less to blame for the original faults in the Bill, harmful to the interests of the medical profession, than the medical profession were prepared to admit. If Dr. Littlejohn was more scrupulous in promoting public health legislation than Wood was prepared to admit; on the other hand, Dr. Littlejohn's position as M.O.H., in promoting legislation of this type, had been shown by events to be as strong as Wood implied. Legislation was set in motion through the sole initiative of Dr. Littlejohn less than three months after his appointment as M.O.H.; he and the Town Clerk were given full powers by the Town Council to prepare the heads of a Bill. 3 His position as a M.O.H., working from within the Town Council, meant the difference between his success and Wood's failure 2 to secure fresh smallpox legislation for Scotland on the statute book.

Dr. Littlejohn had certainly enjoyed an early and a spectacular triumph as M.O.H. Its earliness might have tempted observers to believe that the Town Council were ready to give Dr. Littlejohn carte blanche to hurriedly promote doses of public health legislation

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1. *Scotsman*, 30 June 1863, reporting speech of Dr. Alexander Wood to meeting of medical profession on Smallpox Vaccination Bill, 29 June 1863.


of which this was the first. However, this legislation cannot be represented as a premeditated item in a programme of legislation; its promulgation at this stage of Dr. Littlejohn's career came about by chance rather than design. That chance was the fact that a smallpox epidemic greeted him upon his appointment, during which he bitterly felt the want of legislation to enforce smallpox vaccination.¹ Neither was it any accident that he enjoyed a dominant role in promoting this piece of legislation while he did not have an opportunity to enjoy anything like the same influence over other pieces of legislation. The Smallpox Vaccination Act represented legislation of a specific type; it concerned the administration of public health alone, the question of the general sanitary environment not being involved at all. Smallpox vaccination could help in cutting the death-rate, but not all infectious diseases were so amenable to vaccination as smallpox; instead, a steady improvement in the sanitary standard of the environment, particularly in the poorer areas, was required before a steady fall in the incidence of infectious disease could reasonably be expected. To 1865 any effective role by Dr. Littlejohn over matters, where an improved sanitary environment could thus effectively improve public health returns, had yet to be seen.

The only constant record of Dr. Littlejohn's routine activities in his early years as M.O.H., his weekly mortality tables, could scarcely be expected to effect much improvement in this respect. The tables began appearing in mid-1863, ² and were certainly a more fruitful result of Dr. Littlejohn's appointment; they were reasonably full

¹. This smallpox epidemic really began in August 1862, and had reached its peak by early November 1862. By 1 December there had been 102 deaths from smallpox and about 600 cases (ibid., 10 December 1862, printing report by Dr. Littlejohn on "Health of the town", 2 December 1862).

². The first such table was for the week ended 20 June 1863 (ibid., 24 June 1863, reporting meeting of Town Council, 23 June 1863).
in that they broke down both the number of total deaths, and the
number of deaths from infectious diseases, into various registration
districts, and gave the number of deaths from individual infectious
diseases, and gave the child mortality. ¹ Their usefulness as a
basic index of public health conditions cannot be doubted. However,
such periodical tables in Edinburgh were not new, Stark having
published monthly mortality tables from 1845 to 1849. Even if Stark
did not break down his figures into districts, Littlejohn's enforced
choice of districts was not very revealing as to differential death
rates. Nevertheless, Littlejohn's appointment meant that the Edinburgh
public were assured of a permanent guide to current mortality, unlike
the case with Stark who had been acting unofficially, and who had had
to rely upon burial records, while Littlejohn had access to the
Registrar General's mortality returns.

Furthermore, these weekly tables made the Edinburgh public aware
that there was such an officer as a M.O.H. Even the economy-minded
ratepayers by the side of the Water of Leith appear to have been
perusing Dr. Littlejohn's figures. Otherwise, the opponents of the
Water of Leith Drainage Bill would not have felt bound to put, as an
argument against its necessity from a sanitary point of view, the fact
that the registration district concerned, St. George's, enjoyed a
relatively favourable standard of health. ² However, they had
completely misread the significance of these figures in their anger
over the financial burdens about to be imposed over them. ³ In

¹Scotsman, 20 April 1864, printing report by Dr. Littlejohn on the health
of the city for week ended 16 April 1864. For specimen of Dr. Little¬
john's weekly mortality reports, see Appendix I. ² 278.
²Ibid., 16 June 1864, reporting evidence of H. Lees to Select Committee of
House of Lords on Water of Leith Sewerage Bill, 14 June 1864.
³Dr. Littlejohn's whole point was that one was far less likely to meet
high death rates in areas where the principal sanitary drawback was a
foul open sewer than where there was bad overcrowding and destitution.
That did not necessarily mean that the sewer should not be remedied in
the manner sought by the Water of Leith Sewerage Bill (Ibid., 15 June
1864, reporting evidence of Dr. Henry D. Littlejohn to Select Committee
of House of Lords on Water of Leith Sewerage Bill, 13 June 1864).
addition, they were adopting a viewpoint quite at variance with that of the compiler of the figures. They might have known of the existence of a M.O.H., but so far as the effectiveness of his expressed opinions, as against their own inflamed opinions was concerned, he could equally well be an industrious clerk. That was rather an extreme instance of the perverse manner in which his figures could be treated, but it remains true that simple compilation of public health statistics on their own could not of itself lead to improvement in the same statistics; there had to be action based upon them.

To 1865, precious little had been done. When Dr. Begg said in 1863: "We rejoice that we now have in Edinburgh a most intelligent medical man, whose whole business it is to attend to the sanitary state of the city," 1 so far as real sanitary improvement was concerned, the words represented an optimistic hope, not any acknowledgment of results achieved. Dr. Littlejohn's terms of appointment were so unfavourable to him that, in order to achieve any lasting results himself, he had to use his personal characteristics rather than any powers he held. To date he had not really exercised them conspicuously, except perhaps in the case of the Smallpox Vaccination Act.

However, these personal characteristics were seen in their most intense form in his presentation of his 1865 Report on the Sanitary Condition of Edinburgh, his most notable contribution to such sanitary improvement. This most comprehensive, and yet most simple, most statistical report is described by a biographer of Dr. Littlejohn in the following terms: It is not too much to say that this Report, 2

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1. Ibid., 24 September 1863, reporting speech of Dr. Begg to meeting held under the auspices of Edinburgh Co-operative Building Company, 23 September 1863.

Though, in retrospect, there appears to be a dichotomy between the fame Dr. Littlejohn achieved by the presentation of this Report in 1865, and the fact that to 1865 his achievements had been so limited (except for his role in promoting the Smallpox Vaccination Act), it is wrong to look on the Report as something that suddenly burst upon the scene in 1865. Ever since his appointment it was known that the Report was going to be prepared; in the early part of 1864 the Report was completed and some of the Water of Leith drainage area ratepayers were liberally quoting its figures. A "sanitarian" on the Town Council, Miller, was so impressed by the lessons of Dr. Littlejohn's pre-publication Report that he gave a notice of motion for a remit to the Streets and Buildings Committee to consider the sanitary renovation of the Old Town; despite the wishes of his colleagues that he exercise patience till the Report was finally published, he persisted with the motion. These were also the wishes of Littlejohn himself; having already issued the section of the Report to the Town Council which surveyed byres (since he was conscious that their condition was exciting a great deal of attention), he attempted unsuccessfully to quell Miller's impatience by presenting a printed list of suggestions for the sanitary improvement of the Old Town. Even if these were but a summary of what was to appear in the final published report, none of the main suggestions were omitted. Thus, the public now had access to Dr. Littlejohn's most important suggestions. The public presentation of the "trailers" to his illustrious Report was not ignored by public opinion and Cowan wrote a letter to the Scotsman which showed how closely he had been

1. Scotsman, 30 November 1864, reporting meeting of Town Council, 29 November 1864.
2. ibid., 21 December 1864, reporting meeting of Town Council, 20 December 1864.
3. ibid., 21 December 1864, publishing "Suggestions by Medical Officer of Health for the sanitary Improvement of the Closes and Wynds of the Old Town".
studying Littlejohn's report on the condition of byres and where he
developed Littlejohn's suggestion that dairymen be more energetic in
developing byres in the country; 1 Girle (writing under a pseudonym)
was not slow to take Littlejohn to task for his attitude towards the
introduction of water-closets into working-class tenements (see p.70 ),
Cowan wrote a later letter, part of which expressed confidence that the
professed willingness of the Town Council to take Dr. Littlejohn's
Report into consideration would herald a new era in social and sanitary
conditions. 3

Yet, considering that a report to be regarded by students of
Victorian Edinburgh as the standard textbook on local sanitary condi-
tions, was approaching its date of public presentation, and considering
that some of its vital statistics were generally known, and that sec-
tions of it had been officially presented; there was not the volume of
dramatic excitement that might be expected. After his report on the
state of the byres had been issued in late 1864, well might a corres-
donent write: I am astonished that no one has thanked Dr. Littlejohn
for his admirable report on the state of the byres in Edinburgh. 4

However, contemporaries were certainly not being given their first
revelations of the sanitary shortcomings of their city. That there
was a higher death rate in the Old Town than elsewhere was regarded as
a truism; none tried to question the validity of the corollary of there
being a substantial number of preventible deaths. The fact that, from
the earliest point of this story, bodies set up to deal with recurrent
fever epidemics concentrated their attention on the Old Town (as did

1. ibid., 24 December 1864, publishing letter by Dr. James Moffat Cowan
on "Social and Sanitary Improvements."
2. ibid., 27 December 1864, publishing letter by "G." on "Dr. Littlejohn's
Sanitary Improvements."
3. ibid., 18 March 1865, publishing letter by Dr. James Moffat Cowan on
"Social and Sanitary Improvements."
4. ibid., 11 December 1864, publishing letter by "M.D." on "Our Town
Byres."
dispensaries at all times), was a tacit admission of a higher mortality there. There had been statistics produced to demonstrate it, whether the grouping of mortality into different social classes by Stark, or the disproportionate recorded number of admissions to the Royal Infirmary during fever epidemics from the notorious parts of the Old Town.

Nor was it difficult for contemporaries to seek the basic causes. Stark, Wood, Johnston had all given reasonably exhaustive lists of the basic sanitary defects of the dwellings of the poor and suggested equally comprehensive remedies; Bell and Wood had written or spoken in such impressionistic manner as to ensure that the full import of the conditions could not fail to be driven home to the reader or listener. It was only in the past few months that Cowan had depicted the horrors of life in the Old Town. Nor were all the accounts of such living conditions simply general accounts; Bell had made his message all the more powerful by alluding to the social and sanitary conditions in a specimen wynd, Blackfriars' Wynd, household by household. Johnston had made a less impassioned, but remarkably comprehensive survey of the physical conditions of each close in the line of the Royal Mile.

4. Scotsman, 14 January 1862, reporting speech by Dr. Alexander Wood to meeting of Architectural Institute of Scotland, 13 January 1862.
7. G. Bell, Blackfriars' Wynd Analyzed (Edinburgh, 1850).
Nor were death rates the only statistics that were public knowledge; other statistics had been published which served to demonstrate the full horror of such conditions, even if the statistics were not overall but specimen. Speeches not so long ago by Cousin ¹ and Wood ² contained statistics of horrific overcrowding in certain tenements; Bell's statistics, drawn from his visit to Blackfriars' Wynd, showed, among other things, that there was an average of 188.5 cubic feet of room space/head for the denizens of that wynd. ³

As for sanitary shortcomings, not confined to the Old Town, like the presence of offensive trades, overcrowded cemeteries, offensive byres, foul cesspools, pestilential streams; it did not need Dr. Littlejohn to produce a report including such matters for a middle-class public to be made aware of them; when their senses made them disproportionately interested in these nuisances lying about them.

Even if the tasting of unsound meat was not so perceptible to the sense of taste as other nuisances were to the sense of smell or sight, the existence of trade in unsound meat was known and frowned upon; trading in it was a punishable offence from the earliest point of this story, ⁴ and was an item of general public agitation at as early a date as 1828: ⁵

Since the general Edinburgh public had either had their attention drawn towards, or had been concerned with, almost all aspects of Edinburgh sanitary conditions, Dr. Littlejohn's Report could not claim to have broken new ground. Besides, his forerunners to the Report

1. Scotsman, 18 December 1861, reporting speech by George Cousin to meeting of Architectural Institute of Scotland, 17 December 1861.
2. ibid., 14 January 1862, reporting speech by Dr. Alexander Wood to meeting of Architectural Institute of Scotland, 13 January 1862.
3. G. Bell, Blackfriars' Wynd Analyzed (Edinburgh, 1850), p.15.
4. Scotsman, 14 June 1828, reporting legal case concerning the exposure for sale of unsound meat.
5. ibid., 21 January 1829.
were singularly undramatic. His analysis of the defects of Edinburgh byres was full but did not reveal anything new; his main suggestions— that byres should be registered, and that the number of cows to be allowed within them be determined by an Inspector—were sensible but not novel. ¹

Though Littlejohn's suggestions for the improvement of the sanitary condition of the Old Town are rightly regarded as a principal section of the Report, and though they are faithfully repeated in all works with the remotest connection with the 19th. century Edinburgh sanitary conditions, they likewise cannot be termed novel. Though the suggestion as to imitating the "ticketing" clause against overcrowding of houses in the Glasgow Police Act ² had not been previously made in any local sanitary pamphlet, the clause had been operative in Glasgow, as an example to other cities, only since 1862; the need to stop overcrowding had been proclaimed repeatedly and Littlejohn was explaining the obvious method of attaining an acknowledged desideratum. His suggestions that the closes be paved and drained, and that the number of public conveniences be increased, that common stairs be lit and cleansed ³ were all obvious, and had been previously made by almost every writer on the sanitary conditions of the Old Town; none of these involved the use of any novel legislative powers. What was to come to be regarded as his decisive suggestion in the advancement of the sanitary conditions of the Old Town: his suggestion, that light and air be introduced into the

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1. Littlejohn, Report pp.50-56.
2. The clause set out that anyone appointed by the Police Board could enter a dwelling-house of not more than 3 rooms and take measurements of these rooms. If the total cubic space of the dwelling did not exceed 2,000 cubic feet, a ticket was affixed to the door specifying the number of people who could sleep therein, so as each person had at least 300 cubic feet of space. If, on a subsequent inspection, the number of inhabitants was found to be excessive, each person allowing this was fined. (ibid., p.110)
worst section of the Old Town by cutting a new street from the centre of Middry St. to the centre of St. Mary's Wynd, certainly could not be performed under existing legislative powers. However, the idea of new streets in the Old Town was not a new one: Cowan had advocated it in general form less than a year before, Johnston's main suggestion involved something on these lines; 'Scotsman' editorials had been consistently advocating the principle; the idea of a new street from George IV Bridge to South Bridge was being seriously, if slowly, considered by the Town Council.

However, when the entire Report was presented in the summer of 1865, consisting of 192 pages and a map, it certainly merited the verdict of a classic in the literature of public health. With commentaries on every single item of sanitary import and liberal appendices, every subject was dealt with thoroughly, but also concisely. Though all sections of the Report were regarded as important, it is not difficult to pick out the most important sections; namely, the beginning of the text where he divided the city into 19 sanitary districts (each being of as uniform sanitary character as possible), and gave, inter alia, the death rates and density of population for each in addition to a short commentary; his list of areas most densely populated; his selection

1. Littlejohn, Report pp.112-114.
2. Scotsman, 19 October 1864, publishing letter by Dr. James Moffat Cowan on "Social and Sanitary Improvements."
4. Scotsman, 29 February 1864, leading article.
5. ibid., 17 August 1864, reporting meeting of Town Council, 16 August 1864.
6. Littlejohn, Report pp.8-120. For list of subjects dealt with in text of Dr. Littlejohn's Report, see Appendix II.
7. ibid., pp.8-19. For list of death rates and densities of population in each sanitary district, see Appendix III.
8. ibid., pp.28-31. For list of areas most densely overcrowded, and mortality within each (and comparison with such areas in London), see Appendix IV.
of notoriously overcrowded buildings, and the end of the text where he summarised the main sanitary defects in each of the three major areas (Old Town, New Town, Southern Districts) and suggested appropriate remedies and followed by summing up for Edinburgh as a whole.

However, the tone of the Report as a whole was no different from the tone of the extracts he had previously issued. No information was given which could have really surprised anyone who had read previous accounts of various aspects of the local sanitary conditions; the suggestions were similarly uncontroversial. Any novelty inherent in the suggestions was so lacking that one main suggestion portrayed him as a man looking backwards, not forwards: namely that the three Parochial Boards combine to set aside a building as a hospital.

Even if the tone of the Report as a whole was not radical; precisely the fact that it was a whole was one of the factors in allowing this Report to be rightly set in a different class from previous and later accounts of the sanitary conditions of Edinburgh. With not an item of sanitary import omitted, but with the importance of topic vis-a-vis topic so finely demonstrated by the relative attentions he paid to each (so that it was easily understood which were the most important); readers needed only study the one work to obtain a complete and balanced picture of sanitary conditions. Previously, to get such a picture, it had been necessary to learn about different sections of the sanitary picture from different works, and to balance the optimistic picture of, for example, Stark, against the pessimistic picture of, for example, Bell.

1. ibid., pp.31-36. For list of buildings worst for overcrowding (and other details), see Appendix V.
2. ibid., pp.100-120.
3. While Glasgow, among other cities, was providing for the municipal treatment of infectious disease in municipal hospitals, Dr. Littlejohn, even if challenging the traditional reluctance of Parochial Boards to combine, was looking to the traditional idea of parochial treatment of disease rather than the modern one of municipal treatment (ibid., p.74).

* For map of Dr. Littlejohn's sanitary districts, of areas he selected for density of population, of divisions between Old Town, New Town, Southern Districts, see ibid., p.31.
Littlejohn was certainly not a pioneer in drawing up statistics as a measure of the state of various sanitary items. However, never before had there been anything remotely approaching the volume of the statistics which Littlejohn employed; never before had almost every sanitary item, which was capable of being quantified, been so quantified; though Johnston may have given a minute physical description of every single close in the line of the Royal Mile,\(^1\) never before had statistics been given of every street, crescent, close and wynd in Edinburgh which included the population, the mortality above and below the age of 5 in a certain year, the number of these deaths attributable to fever and other infectious diseases, the record of each street in furnishing victims in recent cholera and fever epidemics, even the number of paupers and the number of street cesspools in each street.\(^2\)

The statistics gave an unprecedentedly thorough picture of all sanitary items (as did his written commentaries and suggestions for remedies). With the statistics, as with the written commentaries, Littlejohn had succeeded in conveying an easy impression as to which were the most significant ones. The revelations of density of population and death rates of the four worst districts (Tron, Grassmarket, Canongate, St. Giles') might have been as expected;\(^3\) the public might previously have

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Though Abbey's death rate of 36.65/1000/annum represented the second highest rate in the 19 sanitary districts, the nearby presence of the Craigentinny irrigated meadows was blamed rightly or wrongly. Furthermore, it is misleading to deduce that it was a deplorably insanitary district; the population was so small that the death rate figure was not a reliable guide as to its sanitary condition. Though West End's death rate of 31.88/1000/annum was higher than that of Canongate or St. Giles', that was because a poorhouse accounted for a sizeable section of the population. Similarly, the fact that the death rate was highest of all in George Square and Lauriston was accounted for by the presence of a poorhouse.
had a good idea of which were the worst areas and buildings for overcrowding. However, the fact that Littlejohn had now produced appropriate statistics of all these places, (the authoritativeness of which was assured by the very completeness of the statistics in the Report generally), meant that the damming statistics of the overcrowding of the Tron area,¹ the grossly excessive death rate statistics of the sanitary districts in the Old Town, the statistics of overcrowding of places like Birtley Buildings and Crombie's Land² were to be liberally quoted in after years as no sanitary statistics had ever been before. Whereas, previously, "sanitarians" had been content to state truisms, now they were stating figures from the Bible of Edinburgh sanitary conditions.

Not only did the Report appear authoritative because of its completeness (surveying every sanitary item and every part of Edinburgh); it also did so because of its obvious lack of bias. There was no need for him to express himself in the impassioned style of Bell or the vitriolic style of Wood in order to point out the need for sanitary renovation of the Old Town, for the need was tacitly acknowledged. Furthermore, he was not specifically writing to demonstrate a certain point, as was Bell when he argued mainly for the suppression of public houses, the exclusion of Irish and less lenient Poor Laws,³ or Stark when he demonstrated how the main cause for the blot on the allegedly excellent public health statistics for Edinburgh was allegedly the presence of the filthy Irish.⁴ Littlejohn's Report was not presented as an argument or a supercharged advertisement of the horrors of life

1. ibid., p.30.
2. ibid., p.32.
in the Old Town; it was a survey. As such, he was not slow to point out the sanitary advantages of Edinburgh as against other cities. As such, he was not slow to point out the sanitary advantages of Edinburgh as against other cities. Thus, revelations of bad conditions appeared all the more intolerable and the remedies for them all the more imperative. Similarly, when he very occasionally abandoned his temperate, not emotional, manner of writing and displayed wrath at landlords of specially created slums, built as such to yield maximum profit, like Crombie's Land, the need to suppress such places was not so easily forgotten, unlike places mentioned by previous writers or speakers on the state of the slums. It was no coincidence that Crombie's Land is remembered as a byword for Victorian Edinburgh slums.

Not only was the Report regarded as on a class of its own because of its contents and presentation; the fact that he was writing an official report as M.O.H. lent it extra authority. Despite the limitations of his achievements so far, the public were very much aware of his existence; the title "officer of health" carried great prestige, having come into being nationally only within the past twenty years. Though public health statistics about the Water of Leith might not convey the desired lesson to prejudiced minds, the lessons were obvious to those reading the Report in calmer moments and about parts of the town which did not concern them so directly. Also, as part of such a complete and unbiased Report, the figures were bound to appear more authoritative than as a table shunted to the side of a newspaper column. Such effects might have been psychological, but they were real.

1. Littlejohn stressed the good medical services provided by the Royal Infirmary and the public dispensaries, the good quality of the water in the wells, the good system of cleansing streets and closes so as to minimised accumulations of filth in houses and courts, the salutary effects of the lime-washing of closes and the cleansing of surface-drains (Dr. Henry D. Littlejohn, Report p.117.)

2. ibid., pp.33-34.
The best analogy one can make of Dr. Littlejohn's Report is to liken it to the complete picture of a jig-saw puzzle; while previous reports, though they might have given an idea of what the picture looked like, did not include all the pieces. With all the pieces in place, it was much simpler to know how to go on from there, especially with the remedies not set out as terrifyingly general and far-reaching, but precise and simple.

In addition, the Report's comprehensiveness, as well as lending it authority, was such as to modify the psychological phenomenon of fear of the unknown amidst the dense jungle of the Old Town. General horrific accounts of life in the Old Town, such as Cowan's, could only reinforce the fear; and, being general, meant that the parts, which went to make up the whole of the Old Town, remained unknown. Accounts, written with no statistics or simply a few sample and terrifying figures, could not make the unknown much less unknown, for statistics issued about fearful overcrowding on one stair or in one street served only to show the reader the multitude of unwritten but obviously horrific statistics that were capable of being drawn up about housing and disease in other streets or other stairs which remained unknown. Littlejohn's statistics, ranging through every single close and street in Edinburgh, could not dispel this nameless fear, especially when it was shown incontrovertibly that there were masses of humanity huddled in closes lying so geographically near to the New Town residents. However, they now had a far clearer idea of what they were fearing; the numbers which made up these masses of humanity could be counted, these numbers could be broken down into the number living in each close; the relative badness of certain areas could be easily read about; they now had a systematic knowledge of what were really the worst tenements.

Dr. Littlejohn's Report became famous for the effect it had on the public mind (considering its nature, it could not fail to do so); but
it was not written as a public handbook on Edinburgh sanitary conditions; as a terse report, it was written for the Town Council, and at the request of the Town Council on his appointment. Littlejohn meant his Report to be the means of inducing the Town Council to be more enlightened in their sanitary outlook. He was working from within, not appealing to the multitude.

However, his objects, if any, of criticism in this respect were not the Town Council but the parochial boards. His most obvious desideratum: the provision of a sanitary committee of the Town Council: was not mentioned at all. The Report was concerned with the sanitary conditions of Edinburgh, not the sanitary administration of Edinburgh.

Moreover, it is unlikely that he was going to allow the sanitary administration of Edinburgh to remain as it was (if he could possibly help it) after having produced such a Report (despite the terms of reference of the Report). Though he might have achieved so little to 1865, chiefly because of the nature of his appointment, he was not a lazy man; though, as a servant of the Town Council, he took pains to make the Report as presentable and informative as possible, he did not mean the compilation of the Report to have served its purpose once it was available for them to read. Though a retiring man in public, his energies to get himself appointed show he was a forceful and persuasive man in private; and such a man was not likely to allow the Report to go unheeded.

The fact that the launching of the Chambers Improvement Scheme so shortly followed, might suggest that his purpose was simply that. However, the launching of the Scheme was peculiarly Chamber's work; and Littlejohn could have had no idea Chambers was shortly going to be Lord Provost. More direct results of the Report came immediately afterwards

1. Scotsman, 21 May 1862, reporting meeting of Town Council, 20 May 1862.
when the Town Council, even if in a laggard fashion, decided to incorporate Littlejohn's suggestions in the Provisional Order. These were his short-term purposes, but more was needed than simply new sanitary legislation; there had to be an improved sanitary organisation to effectively work it.

Though it was not written down, the Report was meant to influence sanitary administration in the long-term, as well as to influence specifically suggested legislation in the short-term. He hoped that the Report would be the means of influencing the Town Council to view improved sanitary administration more urgently and give himself a more powerful influence for improving the sanitary environment; he trusted that private pressure on individual Councillors to work in these directions would have more effect, if they were armed with the Report. Even if he would have to wait for a long time, he had done his chances, in this respect, no harm by the Report. For instance, he must have hoped that it would be easier for him to use his energy in persuading individual Councillors to take an initiative in getting a sanitary Committee of the Town Council formed; even though he had to wait till 1872, it can be reasonably assumed that he privately influenced its mover, Councillor David Lewis, a man who was profoundly affected by the 1865 Report (see Chapter 8, p. 185).

Also, he clearly envisaged that, in ten or twenty years to come, the then statistics would be provided with a suitable reference point in the shape of the 1865 Report. There would be a clear basis by which to judge how good or bad a picture was revealed by statistics at any future period of time, and assess areas of public health where there had been much or little progress. Littlejohn's plea for the death rates of the

1. Scotsman, 1 November 1865, reporting meeting of Town Council, 31 October 1865.
sanitary districts in the Old Town to be reduced to 25/1000/annum \(^1\)
was well recalled by the public in the 1880's (see Chapter 7, p. 159) when they were assessing the results of the Chambers Improvement Scheme by means of Dr. Littlejohn's comparison of the current death rates in his sanitary districts with the death rates as written in the 1865 Report. \(^\star\)

Littlejohn's methods, of making an unprecedentedly lengthy and thorough Report (never to be repeated in such form) the sheet-anchor of his work, may have been unique; but so also were the terms of his appointment.

\(^1\) Littlejohn, Report p. 117.

\(^\star\) For vital health statistics during Dr. Littlejohn's term of office, and for graphs of death rates in Old Town, New Town, Southern Districts and of deaths from various infectious diseases, see Vol. 2, Hyp. 1-17, Appendix XXIII.
CHAPTER 5

INTRODUCTION BY SIR WILLIAM CHAMBERS OF CHAMBERS IMPROVEMENT SCHEME, AS FIRST FRUITS OF DR. LITTLEJOHN'S REPORT

The contribution of the Chambers Improvement Scheme to the sanitary improvement of the then most notorious spots of Edinburgh was so obvious to later generations as to suggest that it was an automatic step for the Town Council to take if they were to assume any responsibility for sanitary conditions at all. In point of fact, this was anything but an automatic step. The destruction of vast areas of slumdom, even if regarded as desirable, was, in practical terms, still generally regarded as a job too massive and as a job too creative of other problems to be expected of municipal bodies (see Chapter 2, p. 47). Had the Edinburgh Town Council never set out doing anything on the lines of the Chambers Improvement Scheme, there is no reason for supposing they would have stood to be consistently condemned for their failure. Since Improvement Schemes on this scale were carried out only in Edinburgh and Glasgow at this time, their respective introductions cannot be viewed as being simply another logical step in the evolution of sanitary administration; special circumstances must account for their respective introductions. In Glasgow the need for one had been obvious for a long time but the special circumstances which turned an Improvement Scheme from a dream to a reality was the peculiar state negotiations had reached between the municipality and a Railway Company regarding the demolition of some property.1 As for Edinburgh, the issue of Dr. Littlejohn's Report on the Sanitary Condition of Edinburgh and the setting in motion of machinery designed to produce an Improvement Scheme in the

1. Scotsman, 6 December 1869, publishing report on progress of Glasgow Improvement Scheme.
same half-year suggest an obvious causal link. Furthermore, the ideas of an Improvement Scheme appeared to be the logical result of his suggestion that a new street be driven through the worst section of the Old Town, that suggestion being one of the best remembered sections of his Report (see Chapter 4, pp. 83-4). It is tempting to adduce an obvious link between the two events; it is also deceptive. The issue of Dr. Littlejohn's Report made the practical necessity of the Improvement Scheme all the more obvious to its architect, but it did not of itself automatically lead to the setting in motion of machinery to produce such a Scheme.

In fact, despite the almost unqualified approval of the Report, there was very little discussion on it in the two months following its issue. What discussion there was, was confined to editorials and newspaper correspondence; there were no public meetings or meetings of specifically sanitary bodies, to consider the Report. The Town Council accepted Dr. Littlejohn's Report and briefly praised it: but, even as Dr. Littlejohn's employer, had little serious discussion on it. They were not indifferent to its implications; but, in their leisurely manner, they felt there was plenty time to go about acting upon it. Dr. Littlejohn may have felt that his Report could have beneficial results on the general sanitary outlook of the Town Council in the long-term (see Chapter 4, p. 91); at this stage, he could have had little hope of any such results in the short-term!

Even when there was serious discussion about Dr. Littlejohn's Report, no effort was made to link it with the necessity for an Improvement Scheme. When Councillor Hope, impatient at the delay in acting upon the Report, brought a very long and comprehensive

1. Scotsman, 17 August 1865, reporting meeting of Town Council, 16 August 1865.
list of motions forward, they did not include any notion of an Improvement Scheme.¹ A Scotsman editorial at this time issued a very comprehensive list of sanitary improvements which it felt were required; they included items which came near enough to suggesting an Improvement Scheme: namely, the need to stop overcrowding of houses, to abolish typhus from the closes, to open up the most dense centres of population, but it did not mention an Improvement Scheme by name and obviously did not understand its essence as an expensive system of demolition and reconstruction.² That essence was not grasped and advocated by the Scotsman until the Glasgow Town Council had decided to embark on an Improvement Scheme on a gigantic scale. The reasons for Glasgow doing so were unconnected with anything happening in Edinburgh, but they were sufficient for the Scotsman editor to display a sense of civic jealousy. In fact this was the first instance of a connection being placed between Dr. Littlejohn's Report and the concept of an Improvement Scheme (as meaning what was envisaged in Glasgow), even if the editor felt that only one new street was required under it.³ However, despite having stumbled on the concept, he did not maintain pressure for it; he pressed vigorously for general sanitary improvement (involving a variety of items) in the midst of the Municipal Elections campaign in the hope that electors would put pressure on their representatives, but did not mention an Improvement Scheme by name.⁴ Mention of the launching of the Glasgow Improvement Scheme moved a correspondent to urge a large-scale scheme of reconstruction and demolition (a far grander concept than the Scotsman had advocated); he hoped that his letter

¹. Scotsman, 30 September 1865, reporting meeting of Town Council, 29 September 1865.
². ibid., 2 October 1865.
³. ibid., 21 October 1865.
⁴. ibid., 1 November 1865.
would release a flood-tide of public demand for one. However, the fact that his letter was to be the only one on these lines at this stage is sufficient commentary on the state of public opinion. The initiation of measures to obtain an Improvement Scheme in Glasgow meant that an Improvement Scheme on such lines in Edinburgh would not be unprecedented, but the contribution of the activities in Glasgow to the initiation of an Improvement Scheme in Edinburgh was negligible.

At any rate, the Town Council in Edinburgh did not appear anxious at this stage to copy what their municipal counterparts in the west were doing. They were contemplating action on Dr. Littlejohn's Report but in a slow and not very dramatic manner. They intended to prepare a Provisional Order to carry out any suggestions in Dr. Littlejohn's Report which could not be given effect to by existing legislation. The preparation of this piece of legislation cannot be described solely as an early product of Dr. Littlejohn's suggestion. Such legislation had been under consideration by the Town Council for years. Also, it does not seem certain that the Lord Provost's Committee brought forward this amendment spontaneously; rather does it look as if they brought it forward earlier than they really intended, so as to have an answer for any accusations Hope might make of the Council being tardy. Thus, his motions were either withdrawn or negatived except for the one concerning the introduction of water closets into dwelling houses (which was adopted). As the motion stood, it did not overturn Littlejohn's strong objections to water closets in houses which were not suited for them because of an insufficient water supply (or for other reasons), since

2. ibid., 1 November 1865, reporting meeting of Town Council, 31 October 1865.
the motion was applicable only to certain named streets.\textsuperscript{1}

The attitude of Dr. Littlejohn towards the introduction of water closets in working-class tenements was an issue which caused the greatest amount of argument over a purely sanitary point among the Town Councillors in the weeks following the issue of his Report. Dr. Littlejohn's realistic point of view was challenged by some sanitarians on the Town Council who felt emotionally roused by the need for such facilities in the dwellings of the poor (see Chapter 4, p. 80). Councillor Girle said: I am sorry that Dr. Littlejohn has brought forward a groundless and puerile charge against water-closets in his report.\textsuperscript{1} That emotional argument in the Town Council should be centred round such an unemotional subject of public health lay in the fact that the introduction of water closets, like the laying of drains, the cleaning of streets, the provision of sinks, was felt to lie within the sphere of activities which the Town Council could practicably regulate by legislation. To date, it was irrelevant for the Town Council to indulge in emotional arguments about the necessity of an Improvement Scheme, because such a massive undertaking was not seriously thought of as a practicable sphere of municipal activity. The issue of Dr. Littlejohn's Report, containing limited suggestions on these lines, had so far made hardly any difference.

With the Municipal Elections campaign in full swing at this time, mention of Dr. Littlejohn's Report was made at almost all the Ward meetings, but very few candidates referred to it at any length, few constructive suggestions were made, far less anything amounting to the notion of an Improvement Scheme. Dr. Littlejohn's Report

\textsuperscript{1} Scotsman, 7 November 1865, reporting meeting of Town Council, 6 November 1865.
had obviously captured the attention of many, but since it appeared as a Bible of sanitary reform, it was not a controversial issue.

The question of Dr. Littlejohn's attitude to the introduction of water-closets generated scarcely any heat outside the Town Council. Dr. Littlejohn's Report may have been a Bible of sanitary reform, but since no traumatic event accompanied the issue of the Report, there was little likelihood of loud cries upon the Town Council to show more urgent an attitude towards sanitary improvement than they were currently showing. The lack of urgency shown by the municipal electors towards the need to apply the lessons of Dr. Littlejohn's Report meant that their candidates showed little anxiety to bring it to the prominent attention of their meetings.

The excuse could be made that the electors were distracted by their grievances over the political and fiscal aspects of the Water of Leith Sewerage Act. Though discussion on this topic had been at its height in 1864 (see Chapter 4, p. 73), the wounds were still proving very difficult to heal. Though the question of the Act, from a political and fiscal angle, generated the most heat in the Wards close to the Water of Leith,¹ this question was discussed at length at almost all the Ward meetings. Candidates, naturally, looked on a vitriolic condemnation of the Town Council in its piloting of this particular piece of legislation as an easy way of obtaining votes.

¹. For example, in the Ward of St. Bernard's by the banks of the Water of Leith, the question of the Sewerage Act was, to all intents and purposes, the only topic seriously discussed and was argued with heated vigour and at great length (ibid., 20 October 1865, reporting meeting of St. Bernard's Ward, 19 October 1865; ibid., 25 October 1865, reporting meeting of St. Bernard's Ward, 24 October 1865).
The attitude of middle-class ratepayers towards sanitary improvement was also patently exhibited by their loud noises over the chronic Water of Leith drainage question. They were maybe distracted from absorbing the lessons of Dr. Littlejohn's Report more fully; it would be more true to say that the issue of his Report had failed to produce any more change in their attitude towards sanitary improvement than had his appointment. They were still more interested in their political and fiscal interests than in the general sanitary standing of their city. Furthermore, the political feelings aroused by discussion over this question meant that the ratepayers were liable to view anything on the lines of an Improvement Scheme, if promoted by the same governing body of the Town Council, as equally suspect. Also, in the months following the issue of Dr. Littlejohn's Report there was very little of an outburst of opinion from sanitarians to counter the attitude of the bulk of middle-class ratepayers. The latter seemed to be having matters all their own way. The chances of anything like an Improvement Scheme being promulgated seemed at this stage to be as far away as ever: The Town Council were not interested, there was no public opinion to press them or, at least, to initiate discussion on the desirability of a Scheme.

The only positive factor at this time helping to bring an Improvement Scheme to reality was William Chambers, who was quietly edging his way towards the vacant Lord Provostship by having agreed to stand in St. Andrew's Ward (where he was returned without opposition). However, at this time, there was little to suggest that this was to be such a positive factor.

In later years the connection between Dr. Littlejohn's Report and Chambers' launching of the Improvement Scheme was made to
appear so direct as almost to suggest that Dr. Littlejohn was
trying to put him in the Civic Chair. However, Littlejohn's
personality does not suggest that he would work privately to get
men into various posts, unless he was working within his own
embryonic department. He might have been ready to influence
individual Town Councillors as to how they should press for sanitary
desiderata (see Chapter 8, p.185), but there is nothing to suggest
that he was ready to interfere in the processes of election to Town
Council positions.

Even this question of Chambers' Lord Provostship failed to
generate much heat. Furthermore, it was not a question which
appeared to be of great sanitary significance. The contents of
the requisition made to him (Chambers), inviting him to stand for
St. Andrew's Ward, and remarks made at other Ward Meetings, fail to
suggest that it was a movement of a sanitary pressure group.¹

At the Ward meetings there was no sign of any division over the
suitability of Chambers as Lord Provost, and the question was
treated in the same way as was Dr. Littlejohn's Report, namely,
b briefly and respectfully, though some might make fleeting criticisms

¹. An examination of the 210 names appearing in the requisition to
Chambers hardly suggests that it was a "sanitary party" that was
primarily responsible for persuading him to be appointed to the
Town Council. Names of noted sanitary advocates like Robert
Christison, Henry Johnston, James Young Simpson do not appear.
There is a large proportion of lawyers in the requisition list,
the legal profession being one whose members were often assoc¬
iated with opposition to costly doses of sanitary reform. Some
names appear in the requisition who were to be a thorn in
Chamber's flesh when he was attempting to promote the Improve¬
ment Scheme. In this category can be included Adam Morison,
John Richardson, C. Home Douglas, Robert Johnston. (ibid., 21
October 1865, publishing notice by Committee for promoting the
Election of William Chambers as Lord Provost).
of the way Chambers was prevailed upon to become Lord Provost.\(^1\) There were no direct criticisms of him as a person. That was because on the one hand he was a well-known elderly citizen of Edinburgh, respected for his industry and for the fame of Chambers’ Journal, and on the other hand he had not been in any prominent sense a public man\(^2\) and had not taken a line on any question that might provoke too many.

Some might have reason to suppose that it was known beforehand that he intended to take far-reaching measures to forward sanitary improvement, and that everyone took it so much for granted that they did not feel Chambers’ intentions worth a mention. At the time of his death in 1883 an obituary noted that he had only acceded to the general wish for him to become Lord Provost because of his hope that he might carry out certain measures of local improvement.\(^3\) That however, is a case of betrayal by hindsight. There were certainly rumours at the time that he intended to carry out a full dose of sanitary reform, but those rumours were based on chance remarks he may have let pass in casual conversation rather than on any deliberate public utterance. He certainly voiced publicly general platitudes about the necessity for sanitary improvement (which any Lord Provost elect would feel worthy of a mention) but not anything specific like an Improvement Scheme. Even those Councillors who had signed the Requisition to Chambers hardly mentioned him at all; they certainly did not display the enthusiasm one would have expected had they known that a turning point in the scope of sanitary activity was to be the direct result.

1. Scotsman, 1 November 1865, reporting speech of Councillor Lewis to meeting of St. Leonard’s Ward, 31 October 1865.
2. ibid., 11 November 1865, editorial.
3. ibid., 21 May 1883.
Nevertheless, some might yet have reason to suppose that he passionately desired to do something big in the way of sanitary improvement, but did not reveal his intentions lest it prejudice his chances of the Lord Provostship. That theory is unlikely; his reply to the requisition inviting him to become Lord Provost was vague and platitudinous in its remarks about sanitary reform. He was undoubtedly gratified by the thought of the high honour of the Lord Provostship of Edinburgh, but he had to be prodded to take the high honour upon himself. This lack of eagerness for the Civic Chair scarcely suggests an irresistible passion to do something about sanitary reform at the time.

Having his name constantly before the public, Chambers' intentions, should he become Lord Provost, could be reasonably gauged on the basis of his past career. Since Chambers had a civic interest in Edinburgh, it was to be expected that his interest would include questions of a sanitary and social nature; having risen to so elevated a position in the literary and business world by his own efforts he was likely to encourage the poorer classes to better themselves, or at least to remove obstacles in their way, the most obvious one being close and insanitary housing. He had made himself well acquainted with all corners of the city, and was bound to be familiar with the grime among which so many had to live. At any rate, having to pass the residences of the poor on his way to his daily work must have horrified him, as it did many doctors, missionaries, philanthropists who also had to come in contact with the living conditions of the slum dwellers.

1. Scotsman, 21 October 1865.
Documentary evidence of his interest in sanitary reform is given in the pamphlet he was commissioned to write in 1840 entitled Report on the Sanitary Conditions of the Residences of the Poorer Classes in the Old Town of Edinburgh, which condemned the entire sanitary environment of the Old Town. However, the suggestions he outlined in that Report scarcely amounted to anything like an Improvement Scheme (see Chapter 2, p.26).

He had also for long been known as an advocate of artisans becoming the owners of new and improved dwellings, as a means of improving morality and health. During the public outcry following the fall of the tenement in High St. in 1861 he had been prominent in this movement, and also made his mark by calling for a general scheme of renovation in the Old Town, but his ideas of what it entailed were very indefinite, and he was by no means the only advocate of such an idea.

All in all, it was to be expected that he would do something to implement the recommendations of Dr. Littlejohn. However, in the weeks immediately preceding his inauguration as Lord Provost, he was extremely taciturn about any particular method of reform he may have had in mind. He was certainly knowledgeable about sanitary reform, but had rarely been noticeably active (in a political sense anyway). Sanitary reformers, like Dr. Alexander Wood who got himself put on the Police Commissioners, tried to be in a position to grasp the levers of sanitary powers. Chambers was on the Town Council only for a brief spell from 1833 to 1834; at that time the Council took little, if any, part in sanitary affairs. It was hoped rather than known that he would do something big in the way of sanitary reform.

1. Chambers compiled this report in reply to a request by J. Hill Burton who was conducting the Scottish section of Chadwick’s inquiry into the sanitary conditions of the labouring classes (see Chapter 2, p.26)

2. Scotsman, 9 December 1861, publishing letter by William Chambers on "House Accommodation in Edinburgh."
The chances of an Improvement Scheme being seriously aired were transformed when, in his inaugural address, after having mentioned that various projects had been mooted for embellishing the town, Chambers made the following statement.

But it appears to me that all, or mostly all, of those designs must give place for a time to some distinct measures of sanitary improvement. On this subject, as you know, there has been a most valuable report made by Dr. Littlejohn, an indefatigable public officer whom Edinburgh is very fortunate in possessing, and some of whose views, as respects opening up the Old Town by cross and diagonal streets through the more dense and confined masses, cannot be too soon carried out.

He condemned the Old Town tenements as being fountains of epidemics, and so overcrowded that moral agencies were useless. He alluded to what had been done in other cities, and like current Scotsman editorials, pointed out that Glasgow had set an example. Despite condemning it for its indifferent management, he commended the previous Improvement Scheme for having improved communications. He alluded to Dr. Littlejohn’s suggestion, not in platitudinous terms but as something which had to be immediately effected, and saw other suggestions as subsidiary to this one (the opening up of several new streets). An Improvement Scheme was now a serious proposal, not simply a pious hope.

His important pronouncement, of course, was included with various other topics; but these were either a method of working up to or following on from it. His introduction to the topic, however, demonstrates his attitude. He spent much time discussing the work which previous Lord Provosts had done for the town, and intimated a wish to join those ranks. A sense of duty, more than

1. Scotsman, 11 November 1865, reporting meeting of Town Council, 10 November 1865.
anything else, impelled him to do something, so as he could keep in the best traditions of the working Lord Provosts. It was natural he should turn to Dr. Littlejohn's Report, since this was the subject of respectful attention at the time.

It appears strange that he did not publicly advocate this policy when replying to his requisitionists, or at his Ward meeting. Most likely it was because he felt that, only as a Lord Provost, not as a private citizen, did he feel it his duty to put forward such a scheme. If he had felt more strongly that he should do something to promote one, he would have been writing on it to the newspapers, or he would have actively sought the Lord Provostship. Only when he reluctantly emerged from his retirement to become Lord Provost, did he see sanitary improvement as falling within his province. His sense of civic pride manifested itself in seeing civic welfare as welfare socially, sanitarily, culturally, economically. At this point in time, sanitary welfare appeared to him to be the most pressing type of welfare required.

After this dramatic and scarcely expected introduction of what obviously was going to amount to an Improvement Scheme, the Lord Provost's Committee of the Town Council was set to work by its energetic convener to put his ideas into some shape, while correspondence columns of the local Press were singularly lacking in any discussion as to his intended work. Would-be correspondents were aware of the course he said he would follow, but as yet he had not announced the potentially explosive points of details of the scheme and costs. Still, in his mind, there could be no going back.

1. Lord Provost's Committee, Minutes, 22 January 1866.
There were only three months from the issue of Dr. Littlejohn's Report to the announcement by Chambers of his intentions. Never in the sanitary history of Edinburgh had there been or were there to be two such important sanitary events in such a short time. The former outlined what had to be done, the latter what was going to be done. The connection of the two events is thus worth a chapter on its own.

It was Dr. Littlejohn's Report which caused Chambers to be so prompt in putting the idea of an Improvement Scheme forward. However, one cannot say that Chambers' inspiration arose solely from the suggestions in the Report; such ideas had been raised quite a number of times in recent years. Whatever the relative importance of Dr. Littlejohn's Report may have been in influencing Chambers, there can be no doubt that Dr. Littlejohn's Report could not have resulted in the rapid introduction of an Improvement Scheme, had it not been for the rather coincidental accession to the Lord Provostship of William Chambers three months later.

At a public meeting shortly after Chambers had made his intentions clear, Treasurer Callender said, The Report of Dr. Littlejohn had created a movement in the proper direction with regard to the sanitary condition of the city, which has been eagerly responded to, as we are well aware, by the Lord Provost. The movement would have come, sooner or later, after Dr. Littlejohn's Report. But this was a case, where with the course mapped out, it was easy to be betrayed by hindsight.

1. Scotsman, 1 December 1865, reporting meeting called to promote "Sanitary Improvement of West Port," 30 November 1865.
When there was no obvious movement for something big to be done either out of distraction with other affairs or out of lack of vision, it could only be done if an individual with sufficient vision and understanding could come to the head of the body which alone could prosecute local sanitary improvement, and which had the required financial and engineering expertise available. He could then morally compel his colleagues to follow him, for the ideas of a personage so renowned in the city had to be respected. Also this person could persuade his colleagues that their concern for sanitary improvement should mean something more than installing water closets into houses; it should mean doing something big.

This was a very big and fearful step for the municipality to take; massive difficulties were certain to arise, but the standing and position of Chambers were such as to make the difficulties appear less insuperable than would otherwise have been the case.
Preparation of Improvement Scheme Plans & Chambers' Struggle To Pilot Plans to Legislative Stage.

Bold it was for Chambers to make a breakthrough in the concept of serious municipal sanitary activities by intimating his intentions of initiating a comprehensive plan of sanitary improvement (which obviously meant an Improvement Scheme): bolder by far was it for him see such a plan transformed into legislation by June 1867, when he could triumphantly say:

I cannot help thinking that through the efficacy of the Improvement Act, a brighter day is about to dawn on the social condition of this ancient city.¹

As compared with the speed with which the previous Improvement Scheme² of the recent Water of Leith drainage Scheme progressed from ideas to legislation, or as the Scheme for an increased water supply in the 1870's was to progress; the passage of seventeen months from declaration of intent to statutory provision was very impressive.

Nor did the eventual legislation draw back from the original intentions and represent a miniature version of what was originally intended.³ Taking, as the starting point, the suggestion in Dr. Littlejohn's Report for a new street to be driven from Middry St. eastwards to St. Mary's Wynd,⁴ this particular suggestion was made

1. Scotsman, 5 June 1867, reporting meeting of Town Council, 4 June 1867.
2. Concrete plans for the Scheme were under consideration as early as 1824, but the Improvement Act did not receive the Royal Assent till 1827. (ibid., 4 April 1866, reporting address by Miller to meeting of Architectural Institute of Scotland, 2 April 1866).
3. For operations sanctioned under 1867 Improvement Act, see Appendix VI. (D. Cousin and J. Lessels, Plan of Sanitary Improvements of the City of Edinburgh (Edinburgh, 1866)). The operations under the Improvement Act generally followed the suggestions in the plans of Cousin and Lessels, except for a small section in the St. Mary's Wynd Block (Block 3) which was altered as a result of a majority vote at a later Town Council meeting. (ibid., 13 December 1866, reporting meeting of Town Council, 12 December 1866).
4. Littlejohn, Report, pp. 112-114.
to appear very limited by comparison with the eventual scope of the City Improvement Act which granted powers for not merely one Block to be opened up, but thirteen, at a cost of upwards of £½ million.¹ Chambers, who in his Inaugural Address as Lord Provost, had generally advocated the opening up of the Old Town by cross and diagonal streets,² ought to have been immensely gratified by the thoroughness of the powers which the Improvement Trust held for performing this work of opening up. The terms of the Act naturally devoted major attention to the Tron sanitary area which Dr. Littlejohn, in his Report, had pointed out as being most in need of such attention. Nearly £40,000 was to be spent on the purchase of property alone in the area between Blackfriar's Wynd and St. Mary's Wynd south of High St.³ where Dr. Littlejohn had suggested his solitary new street in his 1865 Report. With several noisome closes in this area to be extirpated, and a new cross-street to be built from a much widened Blackfriar's Wynd to a much widened St. Mary's Wynd,⁴ his suggestion for the improvement of this area had certainly not been ignored. Similarly, in the Tron area

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1. Scotsman, 22 November 1866, publishing estimates of City Accountant.
2. ibid., 11 November 1865, reporting meeting of Town Council, 10 November 1865.
3. For cost of purchasing property in each Block, as finally estimated by Cousin and Lessels, see Appendix VII. (D. Cousin and J. Lessels, Additional Statement of Cousin and Lessels, (Edinburgh, 1866)).
4. For operations sanctioned under 1867 Improvement Act, see Appendix VI. (D. Cousin and J. Lessels, Plan of Sanitary Improvements of the City of Edinburgh (Edinburgh, 1866)). The operations under the Improvement Act generally followed the suggestions in the plans of Cousin and Lessels, except for a small section in the St. Mary's Wynd Block (Block 3) which was altered as a result of a majority vote at a later Town Council meeting. (Scotsman, 13 December 1866, reporting meeting of Town Council, 12 December 1866).

For map of plan of Cousin and Lessels, see Vol. 3, Map C.
on the north side of High St., there was to be a new diagonal street to run from Leith Wynd in a north westerly direction to Market St., cutting more than a dozen closes in its path,\(^1\) and nearly £35,000 was to be spent in this area on the purchase of property alone.\(^2\)

The areas bordering the Tron area in the line of the Royal Mile: the New St. and St. Mary's Wynd areas, the areas south of High Street between South Bridge and George IV Bridge (which Dr. Littlejohn had shown to be but slightly sanitarily superior to the Tron area)\(^3\) were to be operated upon at a cost of £90,000 (including only the purchase price of the property);\(^2\) Sanitary clearances were also projected for areas outside this special zone in the line of the Royal Mile, some in fact only bordering the recognised confines of the Old Town which areas it was felt it would be unwise to omit from the benefits of such an Improvement Scheme.

Though the impulse behind Chambers' launching of the Improvement Scheme was undoubtedly a sanitary one, the Scheme was intended by its author to improve communications also. In this respect, he was copying the philosophy behind the launching of the much-maligned 1827 Improvement Scheme, and was following the advice frequently given in Scotsman editorials and leaders when discussing means for improving

1. For operations sanctioned under 1867 Improvement Act, see Appendix VI. (D. Cousin and J. Lessels, Plan of Sanitary Improvements of the City of Edinburgh (Edinburgh, 1866)). The operations under the Improvement Act generally followed the suggestions in the plans of Cousin and Lessels, except for a small section in the St. Mary's Wynd Block (Block 3) which was altered as a result of a majority vote at a later Town Council meeting. (Scotsman, 13 December 1866 reporting meeting of Town Council, 12 December 1866).

2. For cost of purchasing property in each Block, as finally estimated by Cousin and Lessels, see Appendix VII. (D. Cousin and J. Lessels, Additional Statement of Cousin and Lessels, (Edinburgh, 1866)).

the Old Town. However, it would be wrong to suggest that he had two separate concepts in mind. When his idea of sanitary improvement involved large-scale clearances and new streets, the question of communications was necessarily involved also. From improved communications, it was an easy step towards stumbling upon the concept of aesthetically impressive communications.

Such a linkage of ideas could work in the other direction. The most expensive single item in the Improvement Scheme involved operations in the Block between Cowgate and North College St. where the principal intention was to construct a broad new street for the purpose of improving the facades of the University and the partially completed Industrial Museum. Chambers brought matters to a head by incorporating this project, which had been subject to very leisurely consideration for the past few years, into the Improvement Scheme, not simply since he saw an Improvement Bill as a convenient method of providing a legislative channel for a civic project, but since he saw that the idea of sanitary improvement was necessarily involved with this civic project. In the neighbourhood of this envisaged new street, there were to be several noisome closes widened or extirpated which could scarcely be ignored by an Improvement Scheme; in fact, one could hardly be done without the other.

From whatever point of view the City Improvement Act is considered, its provisions were certainly thorough. Scarcely any major area of the Old Town was unaffected; seven major new streets were to be built:

1. Scotsman, 27 November 1865, editorial; ibid., 6 December 1865, editorial.
2. For cost of purchasing property in each Block, as finally estimated by Cousin and Lessels, see Appendix VII. (D. Cousin and J. Lessels, Additional Statement of Cousin and Lessels, (Edinburgh, 1866).)
3. Scotsman, 4 February 1866, reporting meeting of Town Council, 13 February 1866.
4. These streets consisted of those later to be named Blackfriars St., St. Mary's St., Jeffrey St., Chambers St., Lady Lawson St., Marshall St., Howden St. See Appendix VI.
Edinburgh after all was taking a step in sanitary improvement which had been foreshadowed only by Glasgow. Furthermore, though the provisions for Edinburgh were not as extensive as those for Glasgow, Edinburgh's needs were not as great. Although, strictly speaking, it was the Improvement Trustees, not the Town Council, that were to administer the Scheme; the Improvement Trustees were composed of the entire body of the Town Council as was the case in Glasgow; the Improvement Scheme activities constituted a decisive new dimension to municipal activities in the sanitary field (bringing, as it did, a recognition of the massiveness of the housing problem within its wing); that their official title was the City Improvement Trust held the potential advantage that entire meetings would be devoted to Improvement Scheme business.

Nevertheless, to study the events between November 1865 and June 1867 simply with reference to the final plans (as outlined in the Improvement Act) would be incomplete. These physical plans form the essential background for such a study, but an understanding of the issues involved is fundamental for gauging the general public attitudes to major sanitary legislation when it came to the test. It may have been a short period between November 1865 and June 1867, but much happened within that period. Within a period of twelve months the future of the Improvement Scheme (which, in retrospect, seems essential) lay in the balance on at least five occasions during crucial

1. While the estimated cost of the Edinburgh Improvement Scheme was £½ million, the estimated cost of the Glasgow Improvement Scheme was £1 million. (Scotsman, editorial, 21 October 1865).
2. In Edinburgh, the worst recognisable area for density of population and death rate was the Niddry St. - St. Mary's Wynd block, with a density of population of 646 persons/acre and a death rate of 39.26/1000/annum. (Littlejohn, Report p.30).
In Glasgow, some parts of the Saltmarket and Trongate showed a density of population of 2,500/acre; death-rates upward of 40/1000/annum were a commonplace; one district showed a death rate of 52/1000/annum. (Scotsman, 6 December 1869, publishing article on Glasgow Improvement Scheme).
debates at the Town Council; William Chambers, who usually spoke in lofty tones, accused his opponents on one occasion of being brothel-owners; a comprehensive scheme for sanitary improvement (for so long felt wanting) was bitterly-opposed by some whom the past had shown, or whom the future was to show, as genuine sanitary reformers.  

The drama in 19th. century Edinburgh sanitary history of the rapid putting into legislation of a massive Improvement Scheme contained innumerable shorter dramas; this massive step provided, not surprisingly, one of the major periods of acute sanitary debate in Edinburgh during the 19th. century.

As if to show that the passage of the Improvement Scheme to legislation was not automatic, it is only necessary to show the number of plans for an Improvement Scheme that were officially produced at various times and the contrasts in estimated costs (quite apart from the plans drawn up by individuals and professional bodies). Of course, all plans provided for drastic renovation of the notoriously insanitary areas of the Royal Mile, but there were vast variations between the projected forms of such renovation. Some plans devoted their principal attention to new communications; some plans simply provided for the removal of every other close; the official ones tended to be a

1. Scotsman, 10 April 1866, reporting meeting of Town Council, 9 April 1866; ibid., 9 October 1866, reporting meeting of Town Council, 8 October 1866; ibid., 28 November 1866, reporting meeting of Town Council, 27 November 1866; ibid., 13 December 1866, reporting meeting of Town Council, 12 December 1866; ibid., 13 March 1867 reporting meeting of Town Council, 12 March 1867.

2. ibid., 30 January 1867, reporting meeting of Town Council, 29 January 1867.

3. An example of a "sanitarian" in this category was Dr. James Syme who figured prominently in the belated and potentially dangerous rate-payers' opposition to the City Improvement Bill in the early months of 1867. (ibid., 13 February 1867, publishing letter by James Syme).

4. For example the plans prepared under the auspices of the Architectural Institute of Scotland, (ibid., 26 March 1866, reporting meeting of Architectural Institute of Scotland, 23 March,1866).

5. For example, the plans prepared by Bailie Peter Miller. (P. Miller, Suggestions for the Sanitary Improvement of the Old Town of Edinburgh, (Edinburgh, 1866).)
compromise between these extremes. Outside the area of the Royal Mile, there were many different permutations and combinations of Blocks which different planners felt should be dealt with.

This was the confusing background against which the various official plans were produced. The estimates for the plans underwent drastic changes also. While Chambers initially forecast that the Improvement Scheme would mean a rate of a few pence in the £ for six or seven years, the eventual legislation provided for a rate of 4d. in the £ for twenty years. Even though so many different plans were to follow it, Chambers' original plan included operations on eleven of the fourteen Blocks eventually to be included in the 1867 City Improvement Act and the estimated charge on the rates was about 4d. in the £ for 20 years, this being almost identical with the eventual charge. Though so much was said about diagonal streets cutting through closes being the essential part of it, only three out of the eleven Blocks were to be so treated, albeit vitally important Blocks. However, Chambers felt bound to reject this plan within the confines of the Lord Provost's Sub Committee on the grounds

1. Scotsman, 6 December 1865, reporting speech of Chambers to Town Council, 5 December 1865.
2. ibid., 28 November 1866, reporting meeting of Town Council, 27 November 1866.
3. ibid., 14 February 1866, reporting speech of Chambers to meeting of Town Council, 13 February 1866. For outline of Chambers' original plans, assessed rental of property to be demolished in each Block, and estimated cost of purchase, see Appendix VIII.
4. ibid., 28 February 1866, reporting meeting of Architectural Institute of Scotland, 27 February 1866.
of expense, and went on to present to the Town Council a plan which included operations only within the Blocks lying in the line of the Royal Mile, its net loss being estimated at £120,000, and substantial changes being made in the mode of planned operations within some of the Blocks. At this stage, it was obvious that Chambers felt unsure of where to strike the balance between the need for economy which he conscientiously recognised, and the need to take the opportunity to plan a comprehensive Improvement Scheme worthy of the name. This doubt was illustrated by the emphasis he put on the fact that the plans were tentative. Even though evidence would suggest that he himself had deliberately chosen to prune his own plans, he strongly recommended to the Town Council the merits of his original plan, particularly with reference to the need for a new street from George IV Bridge to South Bridge. His invitation to public and professional bodies for constructive suggestions was not destined to make his task of deliberation any easier. For the invitation was taken up

1. Though the minutes of the relevant meeting of the Sub Committee of the Lord Provost's Committee state baldly that Chambers showed his original plans and that the Sub Committee then felt that the plans were too expensive and consequently asked Cousin to modify them, it is most unlikely that the Sub Committee members combined to force Chambers to modify his plans. All members of the Sub Committee were known to be interested in sanitary improvement and, furthermore, to be willing to spend the necessary public funds for that cause. What is more probable is that some members expressed doubts as to what public reaction to the expense of the Scheme would be, and that Chambers, with his traditional reverence for economy, reacted precipitately to such doubts and decided to modify his plans, hoping however that he would have the option to revert to his original plans at a later date. (Sub Committee of Lord Provost's Committee, Minutes, 22 January 1866).

2. Scotsman, 14 February 1866, reporting meeting of Town Council, 13 February 1866. For outline of Chambers' modified plans, net estimated cost of operations in each Block, see Appendix IX.

† For map of both Chamber's original and modified plans, see Vol. 3, Map B.
not only by these bodies but also by economy-minded Ward meetings. None questioned the now-hallowed motive of sanitary improvement which led Chambers to launch an Improvement Scheme; but there were so many different qualifications from so many different bodies that the finalisation of plans was set backwards instead of forwards.

The Architectural Institute of Scotland may have been constructive in suggesting additions even to Chambers' larger plan, urging cross-streets instead of diagonal streets, and presenting a reasonably well prepared alternative plan to Chambers, though not pressing it. However, such a response to Chambers' invitation was the exception rather than the rule. Other public bodies tended to confuse rather than clarify the way towards a fully matured plan. Some of the early meetings of the public and professional bodies may have been of help in confining their criticisms to details of the plan and declaring they would support whatever plans were ultimately adopted, but they made little contribution towards such ultimate adoption. Their contribution consisted of neutral rather than constructive criticism.

Neutral criticism very quickly changed into destructive criticism, the most prominent line of critics being that amenity improvement (represented in the building of new streets) was being confused with sanitary improvement. Unhelpful suggestions as, for example, that the alternative was the adoption of Miller's plan of rooting out every other close, showed a failure to comprehend the complete purpose of Chambers' improvements.

1. Scotsman, 9 April 1866, reporting conference between Lord Provost and Deputation from Architectural Institute of Scotland, 7 April 1866.
2. ibid., 10 March 1866, reporting meeting of Chamber of Commerce, 8 March 1866.
3. ibid., 27 March 1866, reporting meeting of St. Cuthbert's Parochial Board, 26 March 1866.
plan. This made it all the easier for Ward meetings to complain of the heavy expense inherent in the working out of an allegedly oversized plan. Chambers' response to this confusing situation was itself confusing. His motion, passed narrowly by the Town Council, attempted to combine a recognition of the need to press the plans forward, the need for re-examination, and the need for economy. A motion, which remitted to the Lord Provost's Committee to get Parliamentary authority for plans as finally developed by professional architects, and which limited the assessment for carrying out these plans to 2d. in the £ for 20 years, was itself a guarantee of increased confusion in the future. Chambers' plan to end confusion was admirable, but hopeless. Nearly a half-year was to pass while the hired architects, Cousin and Lessels, made substantial modifications on the existing parts of Chambers' plan and added on three new Blocks to the plan, though the essential locations and methods of Chambers's plan were endorsed. Though it was with reference to this final plan of the architects that the Improvement Scheme endured successive attempts to have it abandoned or delayed at Town Council meetings in the last months of 1866, the actual details of the plan did not come severely under fire. In fact there was singularly little comment on it in the month after it was publicly released despite Chambers' expressed anxiety for discussion; adverse comment did not arise until, predictably, grave doubts arose as to whether a 2d. in the £ assessment could pay for the execution of the plan and later when these doubts were confirmed as the testing by the City Accountant

1. Scotsman, 10 April 1866, reporting meeting of Town Council, 9 April 1866.
2. D. Cousin, and J. Lessels, Plan of Sanitary Improvements of the City of Edinburgh, August 17, 1866. (Edinburgh, 1866).
3. Scotsman, 8 October 1866, editorial.
of Cousin's and Lessels' financial estimates caused the estimated outlay to suddenly rise from a little over £300,000 to £550,000 and the assessment to double.¹ Again, Chambers and his party mishandled the piloting of the Improvement Scheme through the Town Council. Chambers' reversal of his earlier decision, in permitting Cousin's and Lessels' plans to be voted upon by the Town Council before Parliamentary authority was obtained, was calculated to allay doubts; but he made matters worse by asking for a vote of approval for Cousin's and Lessels' plans before Town Councillors could be certain that a 2d. in the £ assessment could finance the execution of the plan, doubts being raised by various members of the Town Council.² In the next month, when the Town Council were asked to vote approval for a 4d. in the £ assessment for twenty years, it was unconvincing for Chambers to point out that they were bound to approve of an assessment to pay for plans of which they had approved; strictly speaking, it was not the Town Councillors opposing the Improvement Scheme that were inconsistent;³ it was Chambers, for he had reversed his earlier standpoint. Despite such confusion over the plans and their costs, largely of Chambers' making, the plans of Cousin and Lessels remained intact to be passed by Parliament, except for a small change of street plan which frustrated Town Council opponents secured on a section of the plan⁴ shortly after Chambers felt he had finally secured the Town Council's approval of the plans and the expenditure required to execute them.

Undoubtedly, the complex story of the reception of the various plans, both as regards their contents and their costs, forms the

¹. Scotsman, 22 November 1866, publishing Additional Statement by Cousin and Lessels and Statement by City Accountant.
². ibid., 9 October 1866, reporting meeting of Town Council, 8 October 1866.
³. ibid., 28 November 1866, reporting meeting of Town Council 27 November 1866.
⁴. ibid., 13 November 1866, reporting meeting of Town Council, 12 December 1866.
centrepiece to a study of the events between November 1865 and June 1867. However, the issues which gave rise to the opposition towards the plans are more complex. Opposition was not caused merely because errors were discovered in the estimates, or because the details of the Improvement Scheme plans were not considered perfect.

Many issues might appear simple when viewed either in isolation or against the current political background. Even excluding the circumstances of steadily escalating estimated costs, grounds for opposition to the heavy expense of the Scheme are obvious. The fact that twelve of the thirteen Ward meetings held after Chambers' invitation to public and professional bodies to make suggestions about the plans, opposed the Improvement Scheme on the grounds of expense (even if disguising that reason under the camouflage of lengthy resolutions) speaks for itself.

Furthermore, such objections on the grounds of an extra assessment were politically, as well as economically, based. Though small tradesmen in St. Giles' and St. Leonard's Wards maybe had obvious financial reasons for opposing an extra assessment, the same did not apply to wealthy lawyers in St. Luke's and St. Andrew's Wards in the New Town. Emotional feelings over assessments could run high. For the preceding half-century many of the battles between ratepayers and the Town Council had been fought over issues of local taxation, and such battles inevitably meant that the question of any new assessment assumed an exaggerated importance. Such irrational importance was given to the question of local assessments that the passage of any sanitary legislation was made difficult; Chambers felt he could not carry the Provisional Order Bill through in 1866 because of opposition from a section of the ratepayers mainly as to the proposed
working of the rating system. This Bill did, however, become law in 1867. The Water of Leith Sewerage Bill endured a noisy reception on the grounds of its rating system, while it was nearing becoming legislation (see Chapter 4, p. 74) and bitter feelings afterwards (see Chapter 5, p. 98); and the feelings aroused by that issue added fuel to the fire of the complaints of the vocal ratepayers in the New Town Wards when faced with another imposition in the form of the Improvement Scheme.

As with all types of projected legislation, political feeling against it was further fomented by suggestions that it was being pushed through in an irregular manner behind closed doors and that the wishes of the ratepayers were being deliberately ignored. In their turn, such suggestions were nearly always made more on the basis of political feeling than on the basis of fact. The vocal mid-Victorian middle-class ratepayers felt that the ideals of economy and of the right to be consulted by one's representatives were ideals to be held dear; in Edinburgh such feelings were more, not less, noticeable than in the average British city at this time. The two ideals were felt to be so inter-linked that, when advanced ideas of what constituted adequate sanitary legislation meant that public authorities had to pay less attention to economy, the vocal rate-paying public felt that their democratic rights were being brutally assailed. This was especially so when a Lord Provost responded to their voices by an unreal attempt to please everyone, thus forcing himself to carry plans through the Town Council in what was, in truth, an irregular manner (see p. 118).

1. Scotsman, 25 July 1866, reporting meeting of Town Council, 24 July 1866.
2. ibid., 27 March 1866, reporting meeting of St. Bernard's Ward, 26 March 1866.
3. ibid., 9 October 1866, reporting speech of Councillor Fyfe at meeting of Town Council, 8 October 1866.
Though Chambers felt that vested interests were very much at the heart of the opposition to the Improvement Scheme,\(^1\) the vested interests consisted of those who had to pay for the Scheme, not those who were going to have their unwholesome property destroyed. There may have been some landlords who were pleased to witness whole-hearted opposition to the Scheme; however, most of them would have been quite satisfied by the amount of compensation they were bound to receive. Some lawyers, as factors for slum property, might have complained about interference with property rights\(^2\) and so aroused Chambers' worst suspicions, but they were speaking in abstract terms about the dangers of the enormous powers the local authority were taking on; they were not really alarmed about their own interests.

Thus, a large part of the opposition to the Improvement Scheme was a ratepayers' opposition, not a landlords' opposition; in many respects, they were opposing the Scheme for the same automatic reasons as they opposed the Provisional Order.

There were other issues, which, though taken up by ratepayers, originated from meetings of professional bodies and informed sanitarians. While the ratepayers opposed the Scheme for reasons which they would adduce for any projected legislation, the reasons for the opposition of other bodies had relevance merely to this particular piece of legislation. Of such a nature was the objection that the Improvement Scheme demolitions would cause many poor people to be driven from their homes, and that thus the problem of overcrowding of houses (bringing with it a perpetuation of social degradation) would be aggravated.\(^3\) A considerable minority of Town Councillors, many of

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1. Scotsman, 30 January 1867, reporting meeting of Town Council, 29 January, 1867.

2. ibid., 27 March 1866, reporting speech by A. MacKnight to meeting of St. Bernard's Ward, 26 March 1866.

3. ibid., 10 March 1866, reporting meeting of heads of public bodies, 9 March 1866.
whom were actively interested in sanitary improvement, were disturbed by this thought,\(^1\) when Chambers invited constructive suggestions for his Improvement Scheme in February 1866, awareness of this problem was the principal basis for reservations towards the Scheme on the part of public and professional bodies. The emergence of this problem as an issue was, no doubt, inevitable when sanitary action on such a massive scale as the Improvement Scheme was under consideration. The problem was real enough, considering that promoters of the Improvement Scheme never pretended that their comforting supply and demand theory would mean the construction of houses at rents on a par with those of the slums to be demolished.\(^2\) It might have been equally convincing for Chambers and his supporters to conversely declare that the only way of making a break in the perpetuation of social wretchedness was to remove the dens which perpetuated it; there might have been powerful emotional and humanitarian impulses behind their anxiety to see a start being made in breaking into the dens amidst the jungle of the masses, but there were equally powerful impulses behind the fears of many of seeing the masses being turned out of their homes and running loose towards any apology of a house. The promoters partly shared these fears; Chambers was always very sincere when he assured his critics (either real or potential) from the very beginning that the demolition operations would be gradual.\(^3\) From a very early stage he did not forget the need for legislation to provide for a maximum number to be ejected within a certain time.\(^4\)

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1. Scotsman, 1 November 1866, reporting meeting of Town Council, 31 October 1866.
2. ibid., 3 November 1866, editorial.
3. ibid., 6 December 1865, reporting meeting of Town Council, 5 December, 1865.
4. The relevant legislation eventually set out that not more than 500 of the labouring classes could be ejected from their homes within 6 months without a certificate from the Sheriff that other suitable accommodation was available. (ibid., 15 March 1867, reporting passage of Improvement Bill through Select Committee of House of Commons, 14 March 1867).
Such assurances might have satisfied the anxieties of some genuine doubters of the Improvement Scheme, but could not satisfy those of all of them. However, being temperamentally in favour of some lasting efforts at real sanitary improvement, it was scarcely possible for them to suggest merely that there should be no Improvement Scheme. Their natural position was to feel that sanitary legislation, though extended in scale, should and could follow only known traditional lines. Miller, though he had, during his four years as a Town Councillor, displayed determination to see a thorough sanitary improvement, was not enough of a legislative innovator to feel that an Improvement Scheme on Chambers' massive scale was what was required.\(^1\)

David Lewis, who was converted in a few months from evangelical support\(^2\) to uncompromising opposition to the Improvement Scheme, and declared with sincerity at all seasons that he was determined to see major sanitary improvement, was latterly advocating fuller use of existing sanitary legislation.\(^3\)

Not only were some of the objections to this legislation special; the pattern of opposition to this legislation was very special, all things considered. Quite apart from the seemingly strange changing of sides by opponents and supporters alike, the tactics of the assorted opposition, if viewed as a means of halting the Improvement Scheme, at many times were as strange as the tactics of the chief promoter. Though Chambers had at the end of 1865 made it clear what he meant the Improvement Scheme to consist of, and though some Town

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2. Ibid., 10 April 1866, reporting meeting of Town Council, 9 April 1866.
3. Ibid., 28 November 1866, reporting meeting of Town Council, 27 November 1866.
Councillors had voiced reservations, no attempt was made to discourage Chambers either within or without the Town Council while he prepared his plans in the early months of 1866. After Chambers had invited suggestions from the public bodies in February 1866; even though all the wards, with one exception, found it necessary to meet and express substantial reservations, they were rather slow in doing so. Even though the success of Chambers' motion at the Town Council meeting in April 1866 meant that the Ward interests had little guarantee of their expressed wishes being upheld; scarcely a murmur was heard from them for about a half-year. The Ward meetings, which met on their own initiative in March 1866, met again automatically in October 1866 for their annual adoption of Town Council candidates and again showed general disaffection towards the Improvement Scheme, but generally their opposition was much less aggressive than in the spring time and Ward interests were backward in supporting their spokesmen on the Town Council who were then giving the Scheme its most severe test for survival. When some of the Ward interests did combine with conscientiously objecting sanitarians to make a determined effort to stop the progress of the Bill, the proportion was small, they had chosen an extremely late hour, and despite their avowed determination they did not take the obvious step of even token opposition before the Select Committees of Parliament.

The initial silence of the opposition was not unique; opposing interests to legislation were long in the habit of opposing only when the piloting of legislation had reached a fairly advanced stage; however, it was usual for opposition thence to escalate, not to waver in fits and starts. To attempt to explain the procedure of the opponents, it is best to separate the attitudes of the typical
ratepaying interests from those of the typical sanitarian interests, even if many individuals spoke for both. For the sanitarian interests, the Scheme was not only a giant step forward in sanitary improvement, but also a novelty as a legislative essay in sanitary improvement. The former generated enthusiasm; the latter doubt and hesitancy as when many Councillors, usually of an independent turn of mind, felt obliged to respect the opinions of the springtime Ward meetings despite the fact that their verdicts could not be classed as authoritative. The desirability of an Improvement Scheme was much lessened when, as it neared the legislative stage, its side-effects appeared all the more real and problematic.

The twin emotions (of enthusiasm and doubt) were reflected in a generally evenly matched argument on the Improvement Scheme. If one feared the addition to the rates as a result of the Improvement Scheme, one might also be enthusiastic about the likelihood of reduced poor rates. If one doubted the necessity for the scope of such sanitary improvement when it appeared to be combined with amenity improvement, or when it appeared that traditional sanitary legislation on the lines of the Provisional Order was the best means of starting to answer sanitary needs, one might also enthuse over the fact that it was realised that there had to be a novel and comprehensive remedy for comprehensive social and sanitary ills. Over the argument as to the accommodation problems likely as a result of the Improvement Scheme (see p. 122), both sceptics and supporters of the Scheme agreed that it would be beneficial to some degree; both sides likewise generally agreed that there would be at least some social dislocation as a result of accommodation problems. With the arguments so evenly matched, it was easy for individuals, with genuine social and sanitary interests as heart, to waver between rave enthusiasm for grand sanitary improve-
ment and fear of the intangible problems likely to be set in motion by this novel essay in sanitary legislation. The Destitute Sick Society could declare itself emotionally enthusiastic about the need for an Improvement Scheme, and also make solemn warnings as to the imperative need to provide houses for the ejected at rents low enough for them to afford. In a similar fashion, the general trend of opposition to and support of the Scheme was largely a matter of fits and starts. This wavering effect can explain at least some of Chambers' seemingly inexplicable moves. Though he initiated the breakthrough in the concept of serious municipal sanitary action, he was not unaffected by the general sense of doubt of the eventual results of such a move. Not only could individuals waver through consideration of arguments over individual points, like Councillor Colston over the question of accommodation problems, Lewis latterly opposed the Scheme just as strongly on the grounds of expense as on the grounds of the accommodation position of the poor; Lewis was considering all the arguments for and against the Scheme as a whole; the contrary emotions aroused by the Scheme had a most marked savering effect on him.

While, in the face of conflicting emotions and well-matched arguments, sanitarians were divided and, in some notable cases, wavering; the general attitudes of the ratepaying interests at their Ward meetings were a modification of the attitudes of the sanitarian interests. The indecisiveness of their opposition to the Improvement Scheme (as

1. Scotsman, 1 November 1866, reporting meeting of Town Council, 31 October 1866.
2. ibid., 1 November 1866, reporting meeting of Town Council, 31 October 1866.
3. ibid., 28 November 1866, reporting meeting of Town Council, 27 November 1866.
compared with their opposition to many other pieces of sanitary legislation) was not because their alternating moods were extreme enthusiasm and extreme distaste for the Improvement Scheme; their alternating moods were fear of the effects of the novelty of the Improvement Scheme and a recognition of the disinterested sanitary motives of Chambers. At the outset, the Ward meetings expressed an extraordinarily spontaneous and full opposition to the Improvement Scheme on the traditional politico-economic grounds of expense as if by instinct; such a political feeling was aided by the fact that, at many of the Ward meetings, the ratepayers had met to discuss a fundamentally unimportant but politically explosive issue of the salary of the Police Tax Collector.1 However, though this political consciousness over-assessments and allied principles remained evident amongst ratepayers throughout the whole span of this chapter, and could not be eliminated; despite the unorthodox handling of the Improvement Scheme plans by Chambers, the political sensibilities of ratepayers were not so liable to unbalance their judgments when the name of Chambers had not been associated with any burning political issue and when the sanitary legislation was of a politically neutral kind.

This unconscious playing down of the political implications of the Improvement Scheme, calculated to inspire an acceptance of the Scheme despite the assessments, was also such as to overcome the initial fear of the ratepayers of the generally novel features of the Scheme. That the Ward meetings provided such a full discussion over the Improvement Scheme within a short period of time was not only because they feared the likely cost; they feared something more than that, even if they

were most articulate in expressing their fear by complaining about the financial burdens. That they camouflaged their opposition on the grounds of expense by complaining that sanitary improvement was being confused with amenity improvement and that the Scheme was more gigantic than was necessary for sanitary improvement, does not mean that the latter judgments were dishonest. They represented some of the feelings which went to make up their collective fear of something so new, which they could not express. Fear and political grievances could exist side by side. Such fear was certain to arise when the Improvement Scheme plans first became publicly prominent but it was such a transitory feeling and so difficult to articulate by ratepayers interested in so many other issues of a more strictly political content, that it is no surprise that though this fear could erupt from time to time (so long as it was before the public), ratepayers felt resolutely opposed to the Improvement Scheme only when its political implications (real or imagined) were prominent.

In seeking to explain the vociferous sanitary debate and its paradoxes, the approach of the promoter-in-chief towards it is also important. His role was dominant; it was not for nothing that the Scheme was known as the Chambers Improvement Scheme, not the Town Council's Improvement Scheme. His role is to be compared with that of Chamberlain in Birmingham rather than with that of Blackie in Glasgow. There is no piece of major Edinburgh sanitary legislation in Victorian times that bears the impress of one man more than the City Improvement Act of 1867. As such, it is not surprising that the piloting of the legislation was relatively quick but also more tortuous than was generally the case. Being a man of action and vision but with little experience of the working of the machinery of the Town Council, its committees and officials; he drove the Lord Provost's Committee to
initially issue its official plans in record time\(^1\) at a speed that he wished, not the traditional speed of the Town Council machinery. On the other hand, his intense self-identification with the Improvement Scheme meant that he was more than usually anxious to actually seek the opinion of bodies outside the Town Council; while, in most cases of sanitary legislation, the Town Council's approach was to deliberate merely within its own body and pay attention to public opinion only when it was so outspoken or strong as to force itself on the attention of the Town Council and even then not to necessarily act upon it, if at all possible. Acting as a man with strong prejudices against closed governing bodies and against all the generally acknowledged bad features of the 1st Improvement Scheme, Chambers was putting himself not merely at the head of the Town Council but at the head of a public movement, albeit the educated and expert public. This was a laudable departure on the part of Chambers; but it had certain disadvantages, so far as the future of the intended legislation was concerned. As well as wanting to know what the outside public thought, he also took their thoughts very seriously even though they might not be in sympathy with his own. He sadly permitted the application for a Provisional Order to be postponed after an uninvited outburst from a small section of the public;\(^2\) he was liable to thunder in rage at what he regarded as dishonest or destructive criticism of the Improvement Scheme rather than ignore it. This over-reaction to public opinion was reflected in his decision over the treating of the Improvement Scheme plans in April 1866, when he moved a complicated resolution guaranteed to involve the plans in difficulties (see p. \(17\)).

1. It was remitted to the Lord Provost's Committee to prepare official plans on 5 December 1865. (ibid., 6 December 1865, reporting meeting of Town Council, 5 December 1865). A provisional plan (the greater of the two original plans) was got ready by 22 January 1866. (Lord Provost's Committee, Minutes, 22 January 1866).

2. Scotsman, 25 July 1866, reporting meeting of Town Council, 24 July 1866.
The legislation being of such a massive nature with so much scope for discussion over details and over general issues, and being legislation in which Edinburgh had been emulated only by Glasgow in promoting; it did not require Chambers' invitation for there to be some discussion. When Edinburgh Town Council in 1862 took the important step of appointing a M.O.H., when in 1872 they were to take the even more important step of appointing a Public Health Committee, they were belatedly following what had been done in most other cities. However, it would not be completely valid to account for the presence or absence of acute public agitation by differentiating between "recognised" and "special" sanitary legislation. The Provisional Order Bill covered more recognised aspects of sanitary legislation, but agitation over this Bill was certainly loud enough to make itself heard. Even though the Improvement Bill's details and issues were mighty enough to deserve intense discussion and though the Bill could not be classed as standard over the country as a whole, the same remarks apply to Glasgow's Improvement Bill - perhaps even more emphatically, for Glasgow led Edinburgh by a year in this project. Yet there was nothing like the same degree of public agitation there; and that cannot be accounted for wholly by the greater degree of militance among Edinburgh ratepayers. The main differentiating point was undoubtedly the greater scope given for discussion by Chambers as compared with Blackie, Glasgow's Lord Provost. The easily perceptible personal involvement of Chambers with the Improvement Scheme, his equally perceptible invitation for discussion, his serious attitude to public discussion were all calculated to magnify the importance of an admittedly important Improvement Scheme in

1. Scotsman, 13 July 1866; 17 July 1866 publishing articles on clauses in Provisional Order Bill.
public eyes and so guarantee an intense (even if not sustained) discussion, not merely some discussion. A new departure in the scope of environmental sanitary legislation was made to appear all the more novel.

By contrast, though a cholera epidemic hit Edinburgh (as it did almost every town in Britain) from late September to late November 1866 during which time there was heated discussion on the Improvement Scheme, no attempt was made to draw morals from the cholera epidemic to apply to the Improvement Scheme plans. What discussion there was on the cholera epidemic bore no relation to the Improvement Scheme; indeed the volume of discussion on the cholera epidemic was tiny, as compared with the more noticeable apprehension during the 1848-49 and 1853-54 epidemics and especially as compared with the staggering impact of the cholera epidemic in 1831-32.

This might not appear surprising considering the relatively light ravages of the epidemic in 1866. Upwards of 100 succumbed to the disease; about 75 died. Though the word cholera might still strike terror, this fear was counteracted by the fact that it was no longer a novel terror (as it was in the 1830's) and by a confidence that public authorities were taking elaborate measures to limit its ravages. In Edinburgh, the measures taken were better organised than in previous cholera epidemics; and the efforts of the various public authorities were much aided by the fact that the presence of Dr. Littlejohn as M.O.H. (fighting his first cholera epidemic) lent much-needed unity and direction. This was the first time, since his playing of a prominent role in the promotion of the Smallpox Vaccination

1. In the two months from 8 October to 4 December 1866, the Scotsman published regular returns as to the number of cases of cholera and the number of deaths from the disease. The statistics as to the averages are compiled by adding up the various returns.
Act, that his name was constantly before the public. However, nothing was attempted which had not been attempted in previous cholera epidemics, and the measures reflected no new thinking into the causes of cholera. The Royal College of Physicians still urged the public to be temperate\(^1\) - ten years after none less than Simon (by 1866 the Medical Officer of the General Board of Health) had shown a definite connection to exist between contaminated water and cholera.\(^2\) The emergency measures certainly helped to limit the spread of the disease, but the reasons for the vast decrease in the number of cases are more complex.

However, the measures, in addition to creating confidence, also created an acquiescence in the more arbitrary features of the municipal bodies' actions. Nevertheless, the municipal bodies were seen to be performing by now acknowledged functions, not to be embarking on an uncertain new venture; even if measures to control cholera were very much a matter of interest to ratepayers (as affecting their health), they were looked on as administrative tasks which it was the job of the municipal bodies to attend to. With cholera control measures never lasting for very long, ratepayers could not complain that they caused prolonged rating burdens, tinkered drastically with the environment, or set the municipal bodies off on an uncharted course of action. The Improvement Scheme did. Cholera control measures were established; the Improvement Scheme, as an essay in sanitary reform, was not. On the whole, sanitarians saw a less clear connection between the Improvement Scheme and the goal of sanitary improvement than between the ways of controlling cholera and the limitation of cholera.

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1. *Scotsman*, 20 August 1866, publishing suggestions made by Royal College of Physicians with regard to cholera.

Acute discussion on the old sanitary question of the control of cholera was not to be expected; acute discussion on the new sanitary question of Improvement Scheme legislation was to be expected.

There was one important sanitary official whose Report was claimed by the Improvement Scheme's founder to have laid bare this exciting necessity,¹ who was conspicuously silent during the months of discussion on the Improvement Bill, despite the fact that the accomplishment of the Scheme was necessary before he, as M.O.H., could achieve any real reduction in death rates. Nevertheless, Dr. Littlejohn was, as a rule, extremely reticent over sanitary questions which caused differences of opinion (his silence is to be accounted for by the nature of his personality rather than by the nature of the question at issue); also, even if the Improvement Scheme obviously did concern him, he had little part to play in the envisaged operation of the Scheme.

Considering the importance of both the Improvement Scheme and the Medical Officership of Health under Dr. Littlejohn in promoting the improvement of public health returns in Edinburgh in the later part of the 19th. century, this might appear paradoxical. Even if the Improvement Scheme was calculated to enormously help Dr. Littlejohn's aim, the fact that the work to be done was concisely set out in the legislation and was to be done within a fixed period, meant that there was no need for him to intervene in work which was properly left to demolition agents, builders, architects. The only possible scope for his activities after the passing of the projected Act lay in privately influencing Town Councillors to execute

¹ Scotsman, 14 December 1866, reporting address of Lord Provost Chambers to meeting of Architectural Institute of Scotland, 12 December 1866.
as many sections of the Scheme as possible. Where there was official scope for Dr. Littlejohn to act (when he was not attending to epidemics) was in influencing committees specially constituted, for example, to attend to the deliberative work involved in continuously inspecting houses anywhere, but the implementation of such legislation in Edinburgh and the constitution of such committees lay in the future as yet.

In addition, the means by which Dr. Littlejohn could deal with public health matters directly was through the possession of direct powers for dealing with disease, knowing about the prevalence of disease and having such committees to work through—after the groundwork of course had been laid by the means of an Improvement Scheme. The former, being administrative operations (even if important from a public health point of view), created little public discussion. What mattered in sanitary legislation in determining whether there would be public agitation or not, was principally whether it was administrative (seen to be mainly dealing with the arrangement of Committees) or whether it was seen as directly impinging upon the sensibilities of ratepayers. Within the latter framework, it mattered whether the legislation dealt with matters well-established or novel.

Novel legislation over matters, seen to have general public significance rather than simply administrative significance, made ratepayers conscious about their politico-economic interests, made 'sanitarians' either wildly enthusiastic or forced them to mentally draw back from the unknown new frontiers of sanitary legislation
(as distinct from sanitary thought). Such feelings, the latter to a very great degree, multiplied in volume when the Lord Provost in charge of the new essay in legislation both complicated the working out of the legislation, and abetted, rather than stifled, discussion.

However, that an amateurish and public-spirited Lord Provost, speaking from the heart, not the head, could be so dominant in the debate; that his political eccentricities could add so much fuel to the fire of the debate; that a professional M.O.H. could be so silent speaks volumes for the apparent public and novel nature of the legislation. Fear of the consequences had to date meant that there was little chance of such Schemes as the Improvement Scheme being seriously promoted. Chambers forced a confrontation between the minds fearful of the consequences of an Improvement Scheme and the minds fearful of the consequences of doing nothing on these lines. In many ways, the narrow majorities at the Town Council meetings over the question mirror the contrasting general attitudes and their relative strength.
CHAPTER 7

REVIEW OF CHAMBERS IMPROVEMENT SCHEME IN PROGRESS, AND ASSESSMENT OF RESULTS

The Edinburgh and Glasgow Improvement Schemes were both promoted at about the same time;\(^1\) even if Glasgow's was much greater in scale, both had the same purposes, namely, to bring light and air to incorrigibly overcrowded and insanitary areas by large-scale demolition. Edinburgh could boast of having attained its desired end much earlier: 36 years were required to complete Glasgow's, 22 years to officially complete Edinburgh's. The impact of Edinburgh's more limited Scheme came much sooner; while the Edinburgh Improvement Trust was being wound up in 1889, nearly half of the condemned slums in Glasgow were still standing.\(^2\) The last meeting of the Edinburgh Improvement Trust may have been in 1889, but observers felt that the Scheme had been completed much earlier. In the mid-1870's, the retiring architect of the Improvement Trust

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1. The Edinburgh Improvement Act was passed in 1867; Glasgow's counterpart in 1866.

2. C.M. Allan 'Genesis of British urban development with reference to Glasgow,' *Economic History Review* XVIII No.3 (December 1965), 598-613.
spoke of the Improvement Scheme as approaching completion. Chambers enjoyed a hero's funeral in 1883 for what was regarded as the long since completed transformation of the Old Town by his Improvement Scheme. In fact, from about 1874 to 1883, the work of the Improvement Trust was looked on as that of tidying up completed work; from 1883 onwards the Improvement Scheme (as a currently existing body) was ignored by informed sanitary opinion. Even if the Scotsman took a detailed look at operations in Glasgow from time to time in the later 1870's, it appeared to have forgotten that some operations were still going on in its own city. Of course, the difference in the speed of the two Improvement Schemes did not necessarily mean that operations were carried out with comparative alacrity in Edinburgh and comparative sloth in Glasgow; the procedures were quite different. In Glasgow

1. Edinburgh Improvement Trust, Minutes, 18 October 1875, containing letter by David Cousin to Trustees, dated 9 October 1875.

At about the same time, the Convener of the Finance Committee, Councillor Durham, said he hoped to be able to wind up the Trust satisfactorily before long. (Scotsman, 23 September 1875 reporting meeting of Improvement Trust on 22 September 1875).

At this date, all sections of the Scheme (which were to be carried out eventually) had been authorised. Only the Blackfriars St. (Block 4) and St. Mary's St. (Block 3) sections were technically completed, even though the Chambers St. (Block 6) section was all but complete, and the Jeffrey St. (Block I) section was well on the way to completion. However, work had scarcely begun on the Marshall St. (Block 12) and Lady Lawson St. (Block 10) sections. Nevertheless, contemporaries looked on the first 4 sections mentioned as the essential ones: they were the ones which Chambers felt he had to press for (among others) in his pruned plans at the beginning of 1866 (see Chapter 6). Even if work was not 100% complete on the Chambers St. section, what contemporaries looked on as a complete section was one where the demolitions and the forming of the new streets had been done, and the erection of buildings had been begun. Though the disposal of all the building areas was essential for the financing of the Scheme and took so much of the time of the Trust and its Committees (almost exclusively in the last few years of the Trust's existence), this was something which the ordinary man in the street could scarcely be expected to be conscious of.
the purchase of all the areas to be operated on was completed before any demolition was begun anywhere; in Edinburgh the Trustees tended to work section by section and proceed to demolition of that particular section as soon as it had been purchased. Though, in Edinburgh, the lines may have been set for the completion of the Scheme by 1874, still operations were at that date far from complete; after 1883 even the tidying up operations (disposal of building areas, clearance of debts) were ignored by informed sanitary opinion; in these respects, the public attitudes did not correspond with reality.

As the 1870's passed into the 1880's, this steep sag in interest in the Improvement Scheme was followed by an attitude of unqualified congratulation at the results of the supposedly completed Scheme. Though it is noted in Chapter 10 that the short supply of working-class housing was a live issue in the 1880's, the Improvement Scheme did not yet get blamed despite its obvious aggravating effect. At a public meeting in 1885 held to consider and constructively meet this particular problem (see Chapter 10), not one speaker so much as mentioned the Improvement Scheme. The worship of the sacred Improvement Scheme was matched by the worship of its equally sacred founder. That the Scheme took on a much more sanctified form in Edinburgh than in Glasgow was not only because it was regarded as

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1. C.H. Allan, 'Genesis of British urban development with reference to Glasgow,' Economic History Review XVIII No.3 (December 1965), 598-613.

2. Though of course, the Edinburgh Improvement Trust did not delay starting on a new section till the previous one was completed, and though more than one section was often begun simultaneously, still a definite time scale can be discerned in the other operations from section to section.

3. Scotsman, 21 April 1885, reporting meeting to consider "Housing of poor", and to form an Association for providing improved dwellings with proper sanitary appliances, on 20 April 1885.
finished in Edinburgh while it was realised that a lot had still to be
done in Glasgow, but also because Chambers, a venerable figure in
his own right, was so much more associated by the public with the
Improvement Scheme than was Blackie in Glasgow. It is so much
easier to worship a living memorial of a man (as it appeared in
Edinburgh) than simply a piece of impersonal work (As it appeared in
Glasgow). At his death at the venerable age of 82, the Scotsman
editor wrote:

Much of the success of the (Improvement) Act has been due to the
energy and zeal with which he directed it while Lord Provost, and with
which he inspired those who have since carried on the good work.
Probably no Lord Provost of Edinburgh since the famous Thomas Drummond
----------- has effected greater changes on the face of Edinburgh
than those that are associated with the civic reign of William Chambers.

However, his role in the execution of the Scheme was short-lived,

1. Though the Edinburgh Improvement Scheme was much quicker in attain¬
ing its target, the scale of the Glasgow Improvement Scheme was so
much more massive that, at any one time, much more had in fact been
done in Glasgow.
A total of 2,721 separate dwellings had been removed during the whole
course of the Improvement Scheme in Edinburgh. (Royal Commission on
As early as 1872, 1891 houses had been demolished under the Glasgow
Improvement Scheme. (Scotsman, 15 November 1872, reporting meeting
of Improvement Trust on 14 November 1872).
About £500,000 was spent on the Improvement Scheme in Edinburgh. (J.
'Pollard, Thirty Years' Sanitary Progress in Edinburgh (Edinburgh, 1895), p.8).
More than £1,500,000 was spent on the Glasgow Improvement Scheme.
(C.M. Allan, 'Genesis of British urban development with reference to
Glasgow', Economic History Review XVIII No.3 (December 1965), 598-613).

2. It is no coincidence that, in Edinburgh, people ceased to refer to
the Improvement Scheme as currently going on after (see above) 1883,
that being the year of Chambers' demise.

3. Scotsman, 21 May 1883, publishing tribute to Chambers.
and by no means triumphant. He presided over it for but two years, even though these were the years when it was set on foot and its future momentum was assured. However, though the execution of the Scheme was set on foot in these critical years, this was despite the fact he was defeated on a number of important points. At the outset of the Scheme, even though he, as the founder of the Scheme, had expressed a strong wish to begin on the Market St. (Block I) and North College St. (Block 6) blocks immediately, he had to accept a resolution that the Trust start on the most insanitary section of all - that lying between Blackfriars' Wynd and St. Mary's Wynd (Block 4) - and on the section involving the widening of St. Mary's Wynd and rooting out some closes to the east of it (Block 3). The block he specially favoured - the North College St. block (Block 6) - had to be delayed till the intentions of the Government and the University,

1. Edinburgh Improvement Trust, Minutes, 4 September 1867.
with regard to it, were known. Instead of witnessing his own fancies "rubber-stamped", Chambers had to witness utter confusion at the opening meetings of the Improvement Trust when they were deliberating upon which sections of the Scheme to begin with. With the merits and demerits of permutations and combinations of four different blocks being urged, it took two meetings before a compromise

1. Scotsman, 19 and 21 December 1867, reporting meetings of Improvement Trust on 18 and 20 December 1867, respectively.

The Government were involved since they had agreed to complete the construction of the Industrial Museum if the Town Council were to show some willingness to improve its approaches. That purpose, of course, would be achieved by driving a new street from George IV Bridge to South Bridge. The University were involved since they wished for room to expand, and since a wide new street on the north side of the old Quadrangle would improve its supply of light and air. They were thus very anxious for an assurance from the Improvement Trust that this particular block (Block 6) be proceeded with as quickly as possible. Some of the more cautious Improvement Trustees, however, wished for an assurance from the University that they would have the means and the intention to buy feus in the line of the new street. These Trustees also wished to wait for the Government to announce its intention of supplying funds for the completion of the Industrial Museum. So determined, however, was Chambers to go on with this block that he intended pressing on at the very earliest opportunity, without waiting for such assurances.

After speeches at some meetings of the Improvement Trust, Chambers realised that there was lukewarmness towards his proposal of commencing the Scheme by operating on the Market St. (Block I) section. Therefore, he gave way with unconcealed reluctance by pressing for restricted operations on Block 4. However, he had no wish to begin by operating on Block 3, and said so at a meeting of the Improvement Trust on 15 September 1868.

The reason that Block 3 was accepted for starting only by the Improvement Trust, was because it was advocated instead of proceeding immediately with the North College St. block. (Scotsman, 18 & 21 December 1867 reporting meetings of the Improvement Trust on 18 & 20 December 1867 respectively).

For official numbers and locations of various Blocks, see Appendix X.
resolution was worked out. Naturally this confusion was frustrating for Chambers to witness; for him it seemed ominously like a repetition of his struggles in 1866 and the early part of 1867 to render the Improvement Scheme acceptable for some sections of the Town Council. However, it was inevitable for various groups of the Improvement Trust to have their own ideas as to the basis by which to judge of the sections deserving priority in the Scheme, whether from the point of view of likely financial return, or of being likely to promote civic grandeur, or of necessity for sanitary improvement, or of being likely to cause least disruption so far as the housing of the poor was concerned. The Scheme itself was not being threatened. The eventual resolution reached was applauded by an earnest sanitarian like Dr. James Cowan.2

However, what did irritate Chambers was the fact that it was the group of Trustees who were loudest in urging economy on the part of the Trust that were equally loud in resolutely urging the priorities of the grossly insanitary areas. It was Councillor David Lewis who moved an amendment that the Trustees proceed with Blocks 3 and 4 at once, and urged in the same breath that the expenditure for the year 1868 be restricted to £50,000.3 Councillor Colston who, at this

1. The main part of the resolution read: That the recommendation with reference to the Market Street block be not approved meantime, but .............. (that the) Trustees hereby resolve to purchase the necessary property and commence operations on Block Number 4—namely, that lying on the south side of High St. from Niddry St. to St. Mary's Wynd, and also to widen St. Mary's Wynd on the east side, operating on Block Number 3 as far east as Gillon's Close; and further, in the event of the Government agreeing to complete the Industrial Museum, and the Senatus Academicus (of the University) being prepared to purchase feus in the line of road, the Trustees agree that Block Number 6 should be proceeded with immediately thereafter .............. (Edinburgh Improvement Trust, Minutes, 20 December 1867).

2. Scotsman, 27 December 1867, publishing letter by Dr. James Moffat Cowan on "Social and sanitary improvement."

3. ibid., 19 December 1867, reporting meeting of Improvement Trust on 18 December 1867.
stage, identified himself with the economy school made a most moving speech in favour of going ahead with Block 4, where he reminded Chambers as to his previously avowed intention of stamping out the insanitary plague spots of the city.  

Though the ideals of economy and of giving the necessary priorities to the most insanitary areas, were quite consistent, it was difficult for Chambers to forget that it was Councillors like David Lewis who had been the most determined in trying to stop the Improvement Scheme ever being started. The lengthy and sometimes bitter debate at that time had left its scars, chief among which was a personal loathing for Lewis on the part of Chambers and a distrust of any of his supporters. This debate had left Chambers, an ageing man, so exhausted and irritated that his impatience and sense of self-importance could at times be intolerable. His tirelessness, in conceiving of and pushing through the Scheme till it became law, was certainly so creditable as to explain how he was erroneously associated solely with the execution of the Scheme; however it was not only observers who were liable to make that confusing error, but also himself.

1. Scotsman, 21 December 1867, reporting meeting of Improvement Trust on 20 December 1867.

2. It is remarkable how David Lewis could make himself so odious to those who differed from him on any public question. The manner, in which personal identification of Lewis with the party supporting the St. Mary's Loch Scheme in 1871 helped considerably to whip up hysteria against the Scheme, is examined in Chapter 8.

3. Criticism of Chambers, for being so anxious to push on first with the sections which he believed were most important, might appear harsh. In the matter of originating the Scheme, Chambers certainly does merit the statue erected in his memory in Chambers St. - the street which he considered his most important brain-child. The initiative and public spirit required could come from only one man. However, the administration and execution of the Scheme, which he introduced, had obviously to be entrusted to a representative body, not to one man.
This exaggerated identification of Chambers with the execution of the Scheme explains the melodrama involving him in 1868. Not only the previous record of the objectors but also the fact that they were opposing the order in which he wished the sections of the Scheme carried out, was considered when it was felt that there were attempts being made to wreck the Scheme altogether. That was the inference he read from the reservations of a section of the Trustees, who were predominantly of the economy-minded group, as to going on with the North College St. Block (Block 6) immediately. Since this section were anxious to delay till they could judge of the results of the improvements in the Blackfriars' Wynd block (Block 4), both physically and financially, Chambers naturally became anxious lest this would mean the frittering away of the seven years (1868-1875) allowed for compulsory purchase of property, it was a deceptively easy step thence to believe that, in so doing, the dissident group were trying to stop the Scheme altogether. In fact, they were perfectly sincere in the reasons they advanced for their actions; they probably overlooked the implications of the position regarding purchase of property. At any rate, the personalities among the group combined with the fact their reservations were directed against his favoured Block, were sufficient to drive him towards declaring his intention of retiring from the Lord Provostship.

For me to continue to battle the thing inch by inch is totally out of the question. ——— I have no taste for party or argumentative conflict. ——— I cannot endure a policy which, at every proposed step in advance, brings about a fierce storm of invective,

1. Scotsman, 5 November 1868, reporting meeting of Improvement Trust on 4 November 1868.
the purport of which substantially is to do—nothing. I will not endure it; I have no right to endure it -------- I am sorry that my efforts have not been as successful as I could have wished. ¹

However, that he did eventually decide to carry on as Lord Provost was not only because the Improvement Trust made a timely and unanimous decision to go on with the North College St. block;² another reason was the extraordinarily spontaneous request from the public that he continue as Lord Provost.³ His multitude of supporters were obviously of the same mind as he was when considering the question of opposition to his specific ideas (and were also seemingly quite undisturbed by his authoritarian tendencies); Bailie Miller said publicly that the unanimity as to his re-elevation was for fear of the Improvement Scheme being entrusted to anyone other than him.⁴ Chambers agreed with that sentiment; that he had been anxious to resign was not so that the Scheme might be carried on more successfully by his successor, but because he could not continue to witness the outrage of opposition to himself and because he felt the Scheme was doomed in any case because of that.

1. Scotsman, 22 October 1868, reporting meeting of St. Andrew's Ward on 21 October 1868.

2. Edinburgh Improvement Trust, Minutes, 4 November 1868.

3. Thomas Knox, as Convener of the Committee for organising a memorial and requisition, so as to induce Chambers to continue as Lord Provost, said at the meeting, which presented the requisition to Chambers, that he had never known anything like the enthusiastic reception which was shown towards this memorial. 474 out of 800 voting electors in St. Andrew's Ward had to date signed the requisition. (Scotsman, 22 October 1868, reporting meeting of St. Andrew's Ward on 21 October 1868).

4. ibid., 5 December 1868, reporting meeting of Town Council (for formal election of Lord Provost) of 4 December 1868.
During the ordeal to get the Improvement Bill acceptable for the Town Council and the Edinburgh public, Chambers and his supporters had attempted to convince their critics that the Improvement Act would be permissive (i.e. the ratepayers, through their elected representatives, could decide just how much of the Improvement Scheme, as set out in the Improvement Act, should be proceeded with). These critics took him at his word and felt more secure against fears that this novel Scheme would be too gigantic altogether. When economy-minded Trustees like Lewis tried to limit the assessment and restrict the expenditure by entering on as few sections of the Scheme at the one time, they were not trying to sabotage the Scheme; their avowed intentions were to restrict the expenditure at any one time so as the Trustees would not be committed to do too much and thus leave the ratepayers with no means of stopping them if they wished.\(^1\) They were upholding Chambers' oft-repeated doctrine of "permissiveness" in executing the Improvement Scheme. Of course, they had their reasons for distrusting Chambers; for, though he never denied the permissive essence of the Scheme, from the moment the Improvement Act became law, he repeatedly said that he wished to carry out the Scheme to as great an extent as possible.\(^2\)

So reassured were the ratepaying interests on the Council by the permissiveness of the Act that there was no real danger of sabotage. In an attempt to uphold the doctrine of permissiveness, they may have made loud noises within the first year of operations, which drove Chambers to the point of despair, but this was really an expression of teething troubles.

1. Scotsman, 19 December 1867, reporting meeting of Improvement Trust on 18 December 1867 including speech of Councillor David Lewis.

2. At the very first meeting of the Improvement Trust, Chambers said: I may state, as regards my own feelings about this Act, that it is my wish that as it is an entire Act of Parliament, as regards the whole city, it should be carried out in its integrity. Yet I view it as a permissive Act.

(ibid., 5 September 1867, reporting meeting of Improvement Trust on 4 September 1867).
That the Scheme, with one exception,¹ was carried out in its entirety does not invalidate the importance of the stress on permissiveness at the outset. However, this permissiveness implied loud debates to decide from time to time which sections of the Scheme to operate on, and which to leave out – debates in which the self-righteous noises of an irascible Lord Provost, as well as a vague kind of distrust towards the Scheme on account of its seemingly intangible novelty, would add to the confusion. The efficient execution of the Scheme did not lend itself to public pressure groups, fierce debating, self-righteous moralising; it lent itself to careful financial management, a sound knowledge of property laws, expert surveying work, a careful choice of contractors. After the first year, public opinion was scarcely involved in discussing the administration of the Scheme; the administration appeared to be effectively performed behind the closed doors of specialised Committee rooms, especially the Works Committee.² Even in the years, 1869–72, when the question of the order, in which the sections of the Scheme should be executed, was still not conclusively adjusted, public opinion seemed unconcerned with that topic.³ Debates at the Improvement Trust became less frequent and less virulent; the economy-minded Trustees, who felt that the concept of permissiveness in the Scheme, and low expenditure were intertwined, became less and

¹. That exception was Block No. 5, lying on the south side of the High St. between Blair St. and George IV Bridge. Many parts of this block, however, were dealt with by executing the 1867 Provisional Order.

². The other two Committees were the Finance Committee and the Law Committee.

³. After 1869, the only instance of outside pressure on the Improvement Trust, as to the order in which they should proceed with the various Blocks, came in the form of a memorial from the Ratepayers of Canongate Ward, in 1873, asking the Trust to more energetically carry out demolitions in the Canongate Ward. (Edinburgh Improvement Trust, Minutes, 15 April 1873).
less insistent. Chambers'dream of unanimity among the Trustees had been achieved after his retirement, but not in the same way as he had been previously demanding. Permissiveness, implying individual deliberation, was giving way all the time to the momentum of the collective views of Committees. Progress reports on the working out of the Scheme were not to come from an emotionally involved Lord Provost, but from the impersonal and highly statistical annual reports of the Works Committee. Though, for a few years, the economy-minded Trustees used the annual meetings, held for laying on the assessment, as a forum for trying to uphold the Act's permissiveness by imposing as low an assessment as possible; the precise and professional financial data given by the Convener of the Finance Committee, so as to justify his proposed assessment, had more force as an argument with the other Trustees than any pleadings on the part of the economists for there to be permissiveness. This majority of the Trustees were always far more eager to follow the Convener of the Finance Committee's call to consider their creditors than calls to consider the ratepayers. Efficiency was to become a more apt watchword to describe the management of the Trust than permissiveness. In the early days of the Trust's existence, when its economy-minded group urged care with the outlay of funds, they were expressing their political ideals of economy; when in 1872 the Finance Committee's Convener submitted a resolution (unanimously passed) that the Works Committee prepare a detailed financial statement for the Finance Committee to report on,

1. The annual reports of the Works Committee set the scene for the attitude of self-congratulation at the results of the Improvement Scheme, as compared with the self-criticism so dominant in the first year of operations, and indulged in quite freely by a considerable minority of the Trustees for a few years to come. For details of the annual reports of the Works Committee, 1869-71 both inclusive, covering the amount of money spent and received with reference to individual Blocks, a summary of the work done year by year, see Appendix X.
before going on to any new section of the Scheme, this was an administrative expression of the need for efficiency.¹

Though the activities of the Improvement Trust took on such a changed aspect, no sudden event accounted for this metamorphosis. There was no decisive debate between economists and extravagants, or anything like that. This metamorphosis came gradually and imperceptibly; it arose as the Trust and its Committees evolved their machinery, and as membership of the Committees came to mean increasingly technical work, and as changes in the membership of the Trustees after municipal elections meant fewer survivors from the heroic phases of the 1866-67 debate over the feasibility of the Improvement Scheme. A settled procedure succeeded the teething troubles. The old "economists-cum-permissives", whatever their own views, soon had no outside public to perform to; despite the loudly voiced views of a good section of the public in 1866-67, they likewise soon appeared to be looking on the running of the Improvement Scheme as a technical exercise which did not concern them. After the Improvement Act had been passed, furthermore, the only possible way of making their feelings effectively known was by urging which sections of the Scheme to do, and when. However, they now seemingly felt that this was exclusively a matter for the Trustees to work out, as it suited their own technical convenience.

¹. The resolution in question was moved by Councillor Lees, when Baillie Marshall had moved that the Improvement Trust move on to the Block of the Scheme which was to bear his own name. Of course, the resolution submitted that the Finance Committee report on detailed financial statements which the Works Committee would have to prepare on the costs of any newly proposed section of the Improvement Scheme; the Finance Committee were not to have powers of veto. (Edinburgh Improvement Trust, Minutes, 6 August 1872).
This absence of public involvement meant that the inspiration for ideas, of going on to new sections of the Scheme, came from resolutions by individual Trustees (even if not as recommendations by entire Committees); however, after the major sections of the Scheme had been set going, the unanimity with which the motions to go on with more minor sections was received and the mechanical method in which the Committees went about administering them, suggests something in the nature of collective Committee momentum rather than individual ideas. The progenitor of the Scheme who had had a chequered record of presiding over it, Chambers, appeared totally unconcerned with its administration, for there is hardly any record of him making any comment on the administration of the Improvement Scheme after his retirement from the Civic Chair in 1869. It was not that he was indifferent: the nature of its administration meant that outside surveillance was not required, and also this administration was different from, and superior to, what Chambers had wished it to be: it represented the rule of experts, not the rule of the Lord Provost.

1. For dates on which the operations on various Blocks of the Improvement Scheme were authorised, see Appendix XI.
2. What could be classed as major sections were Block I (Jeffrey St.), Block 3 (St. Mary's St.), Block 4 (Blackfriars St.), Block 6 (Chambers St.).
3. A possible exception to that rule would be the Simon Square-Cross-causeway section of the Scheme (Block 13). Though the motion to proceed with it was received unanimously (Edinburgh Improvement Trust, Minutes, 23 January 1872); it deserves to be much more personally associated with Bailie David Lewis than any other sections of the Scheme.
4. Chambers retired from the Lord Provostship in the very year following the melodrama surrounding his threatened resignation; however, his reasons for retiring had nothing whatsoever to do with the administration of the Improvement Scheme.
Nevertheless, before this metamorphosis had been completed, two substantial issues had emerged and receded. The first was the question of the extent of sanitary arrangements provided for in the plans of houses to be built on the site of demolished buildings. At no less than five of the sixteen meetings in 1870, this was a subject of debate before the Trustees. In the period following on the confusion over determining with what Blocks to begin, and before meetings of Trustees could be completely described as "rubber-stamp" procedures, the debates (many of them resulting in extremely narrow majorities) on this subject (along with debates on another one) stand out like a beacon. The crux of the question lay in the amount of control the Trustees ought to have over private builders as to how they planned the interiors of their houses, the real issue where battle was joined between one section of the Trustees and their opponents was over the position of water closets. The series of

1. Edinburgh Improvement Trust, Minutes, 1870.

2. Before this arose as an issue, builders were left free to produce their own arrangements for houses built under the auspices of the Improvement Trust.

3. The sanitarian Trustees were most insistent that builders be forced to ventilate the water-closets, in the buildings they erected as part of the Improvement Scheme, to the open air. They revolted at the thought of water-closets being fixed in the traditional spot of the centre of the building. This was the one sanitary regulation which builders most vigorously opposed: they continually claimed rightly that water-closets on the outside walls of buildings were wasteful of space; the number of houses/flats was thus restricted, and the rentals were therefore prohibitively expensive for the ordinary working classes. The plans of houses involved in this controversy were confined to Blackfriars St. and St. Mary's St.; however, the state of operations as regards the Improvement Scheme meant that building areas were being disposed of in that area during this controversy in 1870 and part of 1871.
debates, however, had no lasting results, for the honours were fairly evenly divided between the one side and the other.

It is no accident that this arose as an issue almost as soon as Gowans had joined the Improvement Trustees, for he was constantly in the van of demands for sanitary supervision over the interior of all new buildings, and his disputatious nature was the surest means of delaying the meetings of the Trustees taking on their later "rubber-stamp" characteristics. However, Gowans could scarcely have had so much effect on the meetings of the Trustees had there not been so many to follow him. This was of course an issue principally in the year 1870, a year when sanitary concern, both inside and outside the Council, was on a high level and when fierce demands were made on the "powers-that-be" on the Town Council to shake itself out of its lethargy. Though this issue involved the implication of the Improvement Trust as an exemplar of improved housing, it never was a threat to the future of the Scheme, and, strictly speaking, did not seriously involve the administration of the Scheme.

This was, nevertheless, merely a branch of the sanitary concern so evident at this time. A more live issue was the recrudescence of fears of shortage of accommodation for working people as a result of the Improvement Trust's operations; and it assumed much more formidable dimensions. Unlike the former issue which really only showed itself at meetings of the Trustees, this provided the occasion for countless letters addressed to the Scotsman, stirred up great indignation, and was the occasion for an angry public meeting convened.

1. Many of the economist Trustees, like Lewis and Murray, supported Gowans in his demands despite the financial implications of what they advocated. Gowans was a member of the Improvement Trust until 1880; yet, in his later years, the rather dry minutes suggest that he was unable to stir up the Trustees as he had done in his earlier years, or as he was still stirring up the Town Council.

2. Fifteen letters on the subject appeared in the Scotsman between January and April (both months inclusive), 1870.
by the Trades Council. When the allegations, made by those concerned with this problem, were that the inhabitants of condemned dwellings had further cramped neighbouring ones which were already overcrowded, the raison d'être of the Trust was put very much in the balance. Some attitudes to the Improvement Scheme completely changed because of indignation at such results; for instance, Knox, an evangelical preacher of the Improvement Scheme in 1867 and in the van of the movement to keep Chambers at the helm in 1868 was now a most severe critic. At one meeting of the Improvement Trustees, Councillor Gowans said that unless something drastic was done, he would stop the Trustees from going on with the Scheme until they had provided proper housing for the evicted. The section of the Trustees that felt most concerned over this question were the most ardent sanitarians. The outcries (including many voices of the economy-minded Trustees) might have appeared ominous; however they were merely expressing honest doubts; there was no real wish, whatever the outspoken Gowans might have said on one occasion, to abandon the Scheme because of this complaint. Furthermore it also did not seriously involve the administration of the Scheme. Even if fear of this situation had been offered as a major reason for not going on with the Scheme during its introduction by Chambers, objectors on this account did not go so far as that when they witnessed the discouraging prophecies seemingly coming true.

1. Scotsman, 30 June 1870, reporting public meeting on "Overcrowding and city improvement", 20 June 1870.
2. ibid., 1 March 1870, publishing letter by Thomas Knox on "Eviction of the poor".
3. ibid., 7 December 1870, reporting meeting of the Improvement Trust on 6 December 1870.
4. Many of the economist Trustees, like Lewis and Murray, were identified with this pressure group, even though their suggestions that the Improvement Trust build cheap-rented houses for the evicted, meant extra expenditure and an interference with the free play of market forces.
Besides, there was no Chambers at the helm to regard these noises as sabotage. The most that was advocated was that the Scheme be carried out more gradually; the biggest question involved was whether the Trust should build houses at low rents.¹

Among the Improvement Trustees, the opinions expressed about the housing supply question were not all of the same point of view. There were minimisers of the housing supply problem as well as maximisers, some, like Bailie George Cousin, held true to the point of view adopted by Chambers during the launching of the Scheme and pointed out that the achievements of the Improvement Trust, in demolishing the most deplorable dens of housing coupled with the growing numbers of artisan dwellings being built, albeit at rents higher than the very poor could afford, held out the only hope of social and sanitary improvement.²

Nearly all the Trustees were affected by this debate, and were at length able to agree to some token provision to meet the complaint, by deciding to go on to build houses for the evicted in what was to

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1. The Improvement Trust were bound by clause 33 of their Act, which stated that they were not to displace more than 500 of the labouring classes within six months without a certificate from the Sheriff that there was other and suitable accommodation within the city or its immediate neighbourhood, or that such had been provided temporarily by the Trust. Whenever it was found necessary to eject more than 500 within six months, and there was no suitable accommodation in the city, the Trust could erect or lease buildings within the city for their temporary accommodation; and the Trust could thereafter let the premises to such people at such rents and upon such terms as the Trustees might from time to time think fit, provided always that the net sum to be spent by the Trust did not exceed £10,000.

After pressure had been put upon the Trust by Gowans and his supporters to do something about the accommodation problem; legal counsel, on consultation, informed the Trust that they could do nothing further than provide temporary accommodation. (Scotsman, 10 June 1870, reporting meeting of Improvement Trust, 9 June 1870).

2. ibid., 2 April 1870, reporting meeting of Improvement Trust on 1 April 1870.
become Guthrie Street, but the lessons were to attain significance in the future rather than the present. The work of the Improvement Trust went on seemingly unaffected; the limited victory of the maximisers of the housing problem only came after having sustained a number of defeats. The annual report of the Works Committee for 1870 dwelt on the problem, but concluded that there was no problem, many of the Trustees (who at the same time were, as Town Councillors, defending themselves against accusations of lethargy), in addition to minimising the problem by pointing out the number of empty houses, felt reassured by the conscientious way they had been operating Clause 33 of the Improvement Act which attempted to safeguard the housing supply position. Since a lot of this group were, or looked to, head members of Committees, they could make liberal use of statistics; even if these statistics concealed much, they claimed to speak with authority because of the mere possession of official statistics; they felt they were speaking as members of Committees, not as

1. The immediate occasion for the resolution, to build in Guthrie St. for the evicted, was the fact that the operations on Block No.1 (Jeffrey St.) were likely to mean the ejection of more than 500 in the following half-year. Though four resolutions were submitted at the debate before the Improvement Trustees, all of them acknowledged that something had to be done in this instance to accommodate the evicted. (ibid., 7 December 1870, reporting meeting of Improvement Trust on 6 December 1870).

These houses on Guthrie St. were, before many years had passed, sold off as artisan dwellings. (Edinburgh Improvement Trust, Minutes, 21 January 1873).

2. A typical extract from the report in question reads: The work of removing so many tenements in so short a time has been made easy by the extensive building for the working classes for some years past in the suburbs; these new buildings give accommodation for a large number of the more provident of the working classes who have been removed ...... ...... There has been no great difficulty in finding suitable accommodation in other parts of the city for those displaced from their homes by the operations of the Improvement Scheme. (Edinburgh Improvement Trust, Minutes, 6 December 1870).
Cries about shortage of housing may have suddenly arisen when the Trustees were about to evict 800 from North College Street, but the ebb and flow of discussion depended more upon the state of opinion on sanitary questions generally than on the state of operations of the Improvement Trust. The question of course subsided as quickly as it arose, and the problem was by no means solved; the limited answer could satisfy only the most naive. This discussion was roughly coincident with that of sanitary arrangements in new houses under the auspices of the Improvement Trust.

1. The Works Committee did, after all, try to examine the problem objectively. On the motion of Miller, Convener of Committee, it was remitted to the Committee to consider as to the alleged overcrowding consequent upon the Improvement Scheme (Edinburgh Improvement Trust, Minutes, 19 April 1870), and Miller obviously felt genuinely that the official statistics available would mean that the report would be the most authoritative verdict on the whole question. When the report did come up, it certainly gave grounds for complacency on the surface. The statistics, based on the authoritative returns of the City Assessor, revealed that there were 520 unlet houses in the city, with annual rents at or below £10; of these, 178 were under £6; of the latter 178, 72 were in St. Giles' Ward and 30 in Canongate Ward, these being the principal wards affected by the Improvement Scheme. (Scottsman, 7 December 1870, reporting meeting of Improvement Trust on 6 December 1870).

However, quite apart from the fact that many of these houses were quite possibly uninhabitable, a close survey would reveal that the average rent of the empty houses was substantially higher than that of the demolished houses. In the case of demolished houses, a graph would show a preponderance of low-rented houses and a general curve down to high-rented houses; in the case of empty houses, the graph curve would go in the opposite direction. Also, even though the Works Committee had access to precise statistics, those evicted from their homes did not have such access, there being nothing in the nature of accommodation bureaux in these days. When evicted, they only knew of empty houses which were in the immediate neighbourhood which they could see, with their own eyes, were empty. They were thus far more likely to move into an already overcrowded house beside them than to seek out an empty house in a completely different area of the Ward.

2. ibid., 17 February 1870, publishing letter by Thomas Knox on "Eviction of poor people".

3. When the Improvement Trust started to sell the houses they had erected in Guthrie St., they were perhaps rather sanguine when they unanimously accepted the Finance Committee's judgement that the tenants displaced by the improvements have been provided with accommodation elsewhere. (Edinburgh Improvement Trust, Minutes, 21 January 1873).
However, attitudes towards the work of the Improvement Trust were at least partly, a product of social attitudes towards public health measures generally. Conversely, it is suggested in Chapter 8 that the disillusionment (most prevalent in the year 1870) with the Town Council's sanitary record was stimulated by concern at the implications on the working class accommodation position of the activities of the Improvement Trust. The essential truth, however, is that both phenomena were expressions of a sensitiveness to social-and-sanitary\(^1\) conditions, the origins of which could be traced to ideas outside the compass of this chapter.

Sensitiveness to the problems of the shortage of working-class housing was no new thing. What was different in this case was that the culprits blamed for demolition of housing, who had previously been railway companies, or strictly civic schemes of improvement, or ordinary market forces, were now the operators of an Improvement Scheme the objects of which were to uplift the working classes. Such was the wrath of Knox that he compared the consequent evictions with the Sutherlandshire evictions.\(^2\) This kind of strident emotionalism was enough to produce a chorus of hate against the Improvement Trustees before their operations had had time to produce statistical evidence of public health improvement. However, in the next year (1871), people like Knox (see Chapter 8) were to be far too occupied in venting their hate upon the promoters of the St. Mary's Loch Water Scheme. The consequent lessening of interest in strictly sanitary affairs (see Chapter 8) was supplemented by an equal lack of discussion about the activities of the Improvement Trust.

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1. For examination of the significance of the words, social-and-sanitary, see Chapter 8.

2. Knox wrote: The city was once sentimental over the Sutherlandshire 'evictions', but what about the evictions presently taking place? (Scotsman, 22 February 1870, publishing letter by Thomas Knox on "Eviction of poor people").
When a general public attitude of confidence in the way that sanitary affairs were run predominated in the second half of the 1870's, (see Chapter 9), and when, moreover, the Improvement Trustees had moved on to minor sectors of their work, there was very little mention made of their activities. Informed sanitary opinion was quietly and complacently acknowledging the merits of their work. When a generally complacent attitude was replaced by a more critical questioning of sanitary progress in the 1880's, the Public Health Committee did not escape criticism, even if it was mild. (see Chapter 10). However, the gist of this attitude of sanitary re-examination was disappointment and astonishment at the lack of progress in the improvement of social habits, despite the unremitting vigilance of the Public Health Committee, and, most of all, despite the unanimously acknowledged achievements of the Improvement Scheme. This unanimity stood out in vivid relief when compared with the multifarious doubts expressed in 1866 and 1867, as to whether the Improvement Scheme could realise its objects. The fact that the execution of the Scheme was never actually in danger was remarkable considering the loudly expressed fears of excessive expense in 1866 and 1867.

This was not because it cost less than expected: it eventually cost over £500,000;\(^1\) it was because, with the passage of time, rate-payers accepted the cost of the Improvement Scheme as a fait accompli. Matters were different when it was presented as a fresh imposition. Fear of novelty could no longer exist when the operations of the Improvement Trust ceased to be novel. In Edinburgh, as in other large towns, society came gradually to accept in the 1870's that the improvement of sanitary conditions (and thus protection of life from disease)

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\(^1\)J. Pollard, Thirty Years' Sanitary Progress in Edinburgh (Edinburgh \&895), p.8.
was more than desirable: it had, moreover, to be entrusted to the
administrative powers of a public authority, and had to be paid for
in the same way as had the prevention of crime (and thus protection
of life from violence).

The results of course spoke for themselves; in common with Glasgow,
the most obvious ones were drastic changes in the lay-out of streets
in poorer quarters; though Edinburgh, unlike Glasgow, could boast a
worthy exhibition street, Chambers Street, the results in both cities
were similar in that the principal features were not exhibition streets
as in Birmingham, but a great number of clearances of insanitary areas
where new streets, as for example Blackfriars Street, performed,
firstly, the sanitary functions set down in the preamble of the res-
pective Acts, and, secondly, improved communications. The physical
clearances were so striking (resulting in a reduction of density of
population per acre in the Tron district, as defined in Dr. Little-
john's 1865 Report, from 314.5 in 1861 to 178.5 in 1881), that it was
difficult to avoid adducing the much improved death rates (a type of
statistics which Dr. Littlejohn's work had made to seem very important)
to the Improvement Scheme, principally if not exclusively. The work
of the Public Health Committee in closing insanitary dwellings in
scattered areas, and the largely clerical work of administering the
compulsory intimation of infectious diseases clause of the 1879
Police Act (see Chapter 9), were far less visible.

How much the improved death rates really were due to the Improve-
ment Scheme is difficult to gauge precisely, but the operations of the
Scheme, as the first really big sanitary enterprise in Edinburgh,¹

¹. The main clearances, under the Improvement Scheme, were almost
complete before the Public Health Committee commenced its activ-
ities in 1872.

* For physical effects of Improvement Scheme, a comparison between maps of Edinburgh in
the mid-1860’s and late 1880’s is instructive. See Vol. 2, Maps A & D.
likewise brought about the first really big breakthrough in the
reduction of death rates. From 1865 to 1872 the annual death
rate/1000 never fell below 26.3; from 1873 to 1879 the first break¬
through had been achieved in that no year saw a higher death rate/
1000 than 23.17, the rate falling to 19.62 in 1876 and 18.89 in 1879.
In every year from 1881 to 1884 the death rate was between 18 and
19/1000. In the sanitary district (defining sanitary districts as
divisions laid out in Dr. Littlejohn's 1865 Report) most affected by
the Improvement Scheme, Tron, the death rate had fallen from 34.55 in
1863 to 28.91 in 1883; the child death rate reduction was still more
striking, the respective figures being 152.18 and 106.13.

With the Improvement Act/>
the legislation was precisely
set out, not one where all depended on the method of enforcement3 (as,
for example, in the case of the Public Health (Scotland) Act, 1867),
the influence of Dr. Littlejohn was as negligible in its execution as
in the struggle of its progenitor to make it acceptable to sections
of the Edinburgh public in 1866 and 1867. However, the Improvement
Scheme was something which he obviously regarded as important, and
for which he was full of praise.4

1. Royal Commission on the Housing of the Working Classes, Vol. V.,
Minutes of Evidence, Appendix, and Index as to Scotland, P.Ps.1884-85,
XXXI, p.34. 
   By the later 1870's and the 1880's, the part played by the Public
Health Committee in reducing the death-rate was considerable. How¬
ever, in the middle 1870's, their activities had scarcely been
established for long enough, for any decisive statistical results
to be expected. Since, also, the decisive drop in the death rate
was from 26.7 in 1872 to 20.77 in 1873 the Improvement Trust deserves
the credit for the drop in the death rate by the middle 1870's,
as compared with the late 1860's and the early 1870's.

2. Of other sanitary districts affected by the Improvement Scheme, the
general death rate in Canongate fell (between 1861 and 1881) from
31.23 to 27.4, in St. Giles' from 26.8 to 22.44, in Grassmarket from
32.52 to 26.9. The i.child's death rate in Canongate fell from
111.84 to 84.73, in St. Giles' from 109 to 78.38, in Grassmarket
from 124.35 to 85.03 (ibid.).

3. Even if a considerable bit depended on the quantity of the authorised
Scheme that the Improvement Trust determined to operate upon.

4. In 1879 Dr. Littlejohn published a statement, advertised to by Bailie
Anderson at his Ward meeting, showing how the death rates had been
reduced since the completion of the major clearances of the Improve¬
ment Scheme (Scotsman, 25 October 1879, reporting meeting of Calton
Ward on 24 October 1879).
However, some obvious problems remained. There might have been a period of general complacency about the housing shortage after the clamour about it in 1870 had abated, but that did not necessarily mean that the problem was any the less present; even when complacency was replaced by concern, taking the form of blaming other agencies for causing the shortage (like the Public Health Committee), that did not mean that the Improvement Scheme was in fact blameless. On the contrary, it was a principal offender. 2,721 houses were removed by the Improvement Trust; only 340 were built under their auspices. In this respect, the fears of the group, which included Lewis in 1866-67 or Knox in 1870, were justified, even if the survivors of this group did not rush to vindicate their earlier judgments.

The intimate connection between the Improvement Scheme and shortage of working-class accommodation, proclaimed in 1870, was grasped at a time before any ideas of large-scale municipal building had been seriously thought of. In Glasgow the connection was grasped in the late 1880's, and the Improvement Trust, thenceforth went about tackling it in (for the standards of the time) a grand manner. Even if this did not suffice for the need, still it went further towards reducing the need than in Edinburgh where, even with these problems being constantly admitted at about the same time (see Chapter 10), the connection was made at the outset, not with the Improvement Scheme, but with the activities of the Town Council and the general operation of the economic law of supply and demand. That less specific reading of the problem might help to account for the fact that grandiose remedies were much slower in coming. The fact that the chronic question of housing shortage did not have much bearing on the Scheme during its actual execution did not mean that it did not have an important bearing on the results.


In Chapter 10, the problem of the need for the education of the poor in sanitary matters is dealt with. Of course, the Improvement Trust set a precedent for the Public Health Committee in applying the moral that, if one removed the most obvious breeding-grounds for debauchery, dirt and disease, the problem was at least reduced. In so doing, this could commence a process whereby improved housing removed the hindrances to improvement in social and moral habits. However, a generation reared in hideous squalor was liable to persist in hideous squalor (especially when forced to overcrowd in neighbouring houses by economic necessity). The process was a very long one — much longer than the official duration of the Improvement Trust for twenty-two years, and infinitely longer than the ten years acknowledged by contemporaries to be the effective working history of the Trust. Death rates may have been dramatically reduced in the areas affected, but child death rates, though even more dramatically reduced, were still scandalously high and public health experts took the difference between ordinary death rates and child death rates as an even more telling test of whether preventible deaths resulting from insanitary conditions were being satisfactorily prevented.

To render public health statistics more satisfactory, not only was there a place for the carefully defined work of the Improvement Trust, but also (and apart from the untiring voluntary work of the private societies for the poor — see Chapter 10) for coercive legislation to force people to take advantage of, and co-operate in maintaining, the improved sanitary environment created by public health legislation. This was a matter where the expert knowledge and flexibility of officials, such as Dr. Littlejohn and the Burgh Engineer, were much required. However, the extent of the essential governing factors:

* For tables of the most important health statistics during Dr. Littlejohn's term of office, see Vol. 2, No. 1-17, Appendix XXIII and accompanying graphs.
Improvement of the sanitary environment: was itself largely governed by the availability of housing; and this was an economic factor which, from time to time, philanthropists, sanitarians had felt they were on the point of solving until they had been sadly disappointed. This chronic problem was the means of checking any dramatic improvement in the standard of housing (even if there was some improvement). This vicious circle was the principal means in bringing about further, if less grandiose, Improvement Schemes in the 1890's, when the contribution of the Chambers Improvement Scheme was at last admitted, and the problem defied satisfactory solution till the days of large-scale municipal housing which lay well into the 20th century. The persistence of the problem was perceived all the more because of rising standards of what constituted sanitarily decent accommodation — always rising faster than the real standards — and the problem was to be very prominent in the 1890's.
CHAPTER 8

PROMINENCE OF SANITARY QUESTIONS IN PUBLIC OPINION, AND RESPONSE OF TOWN COUNCIL, 1867-74.

In the decade 1865-75, there happened the issue of Dr. Littlejohn's Report, the launching and working to maturity of the Improvement Scheme, the setting up of the Public Health Committee, the final decision to go to the Moorfoots for an increased water supply; as such, this period was a turning point in the history of sanitary administration in Edinburgh. This sanitary revolution could not be accomplished smoothly and automatically; revolutions never are; there were bound to be outbursts of public concern from time to time. The smooth manner, in which the Town Council dealt with sanitary matters through the Public Health Committee (a method drawn to their attention in earlier years) in later years, suggests a direct response to public opinion; however, the response was far more indirect than appears to be the case, and the story is laden with abundant paradoxes. In the case of water supply, public opinion was effective against the Town Council, and the story of the fight for a certain water supply lies only partly within the compass of this chapter.

SECTION I - FRUITLESS PRESSURE ON THE TOWN COUNCIL TO PURSUE SANITARY IMPROVEMENT (INCLUDING THE SETTING UP OF A PUBLIC HEALTH COMMITTEE) MORE VIGOROUSLY.

In response to Dr. Littlejohn's Report, mud to Chambers pressure, the Town Council seemed set on a more vigorous use of sanitary legislation with the passing of the Provisional Order in 1867.¹

¹. As from 1867, the Town Council also had the benefit of the Public Health (Scotland) Act, which of course applied to the whole of Scotland.
At last the Town Council had stopped deliberating over what new sanitary legislation to employ, and were implementing it. To the historian it is dwarfed in importance by the Improvement Act, but to contemporaries its importance was considerable. Provisions were made on the traditional lines for the introduction of water, sink, soil-pipes, water closets; an advance on previous legislation was evident in the regulation of the ventilation as well as the existence of water closets. There were the traditional regulations as to cleanliness of common stairs and passages; there was an important clause which, though weak and complicated, still made a start in regulating over crowding of houses, and there was another important clause which was an imitation of the Improvement Act on a very small scale (in that the Town Council could buy up property for the sake of sanitary improvement).

1. It was regarded as supplementary to the Improvement Scheme, but as a necessary supplement. In 1869 and 1870, sanitary pressure groups were not slow to point out the lot of use that could be made of the Provisional Order.

2. The owners of existing dwellings occupied by a separate family had, within one month after notice from the authorities, to provide water sink, soil pipes, water closets. In all existing houses, where water closets ventilated into the common stairs so as to be offensive and where the M.O.H. certified them as such, the owners were bound to adopt all practicable means to ventilate them by shaft or other means directly to the open air. In all houses to be built for two or more families, water closets were to be constructed so as to ventilate by shaft or otherwise to the open air. (Scotsman, 29 July, article)

3. The owners of all common stairs and passages were bound to have them properly ventilated and cleaned to the satisfaction of the Burgh Engineer and Inspector of Cleaning who, along with the M.O.H., could enter all premises where they had reason to believe they were not clean. (ibid.)

4. Whenever any inhabited house was unfit for human habitation because of overcrowding, the Sheriff, on application of the Town Council, could limit the number of separate dwellings into which the house could be divided, and the number of people who could be accommodated in common tenements or parts let for separate families. (ibid.)

5. In localities where buildings were too close to each other, waste and ruinous, or otherwise objectionable on sanitary grounds, the Council could acquire the properties so as to reserve them as open spaces, open up thoroughfares, improve buildings, or otherwise dispose of them, so as to improve the localities sanitarily. (ibid.)
The sanitary activities of the Town Council in the next three or four years, in partial response to their new legislative powers and sanitary agitation from within their ranks, were by no means negligible. Only three months after the passing of the Provisional Order, a motion by Bailie Miller, that the Council acquire property (for the sake of sanitary improvement) in Skinner's Close, Covenant Close, South Foulis Close, was passed unanimously.\(^1\) This was an area bounding areas affected by the Improvement Scheme but not affected itself and sorely in need of treatment by such a measure. Not much later, the Council decided to similarly work on the south side of Cowgate at the foot of High School Wynd,\(^2\) and on the south side of Grassmarket. A den of filth and iniquity, made famous by Dr. Littlejohn's Report, namely Crombie's Land, was also affected by the latter measure.\(^3\) The work of introducing water closets went on apace; from 1867 to 1870 1,858 water closets were introduced into existing dwellings, all new houses being provided with them automatically,\(^4\) even if the quality of water closets did not always meet with the approval of sanitary experts. External drainage works also progressed steadily, there being 21 such drainage schemes undertaken by the Streets and Buildings Committee between the years 1867-1870, inclusive.\(^5\) In those years also, 54 underground dwellings were closed as dwelling houses.\(^6\)

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1. Scotsman, 9 October 1867, reporting meeting of Town Council, 8 October 1867.
2. ibid., 1 April, 1869, reporting meeting of Town Council, 31 March 1869.
3. ibid., 24 June 1868, reporting meeting of Town Council, 23 June 1868.
4. ibid., 27 April 1870, reporting meeting of Town Council, 26 April 1870.
5. 3 such drainage schemes were undertaken in 1867, 7 in 1868, 2 in 1869, 8 in 1870. (Streets and Buildings Committee, Minutes.)
6. Scotsman, 27 April, 1870, reporting meeting of Town Council, 26 April 1870. This was not connected with the powers of the Provisional Order, but with the powers of the 1854 Police Act.
These activities however fell far short of the great efforts required for comprehensive sanitary improvement. The buying up of property for sanitary improvement was very limited and long drawn out, and could scarcely make a real impact on the festering sore of the Old Town (unlike the Improvement Scheme); the clause as to closing overcrowded dwellings, weak as it was, was scarcely ever used. The much stronger powers for dealing with insanitary dwellings under the Public Health (Scotland) Act were completely ignored, while in Glasgow the "ticketing" system was being vigorously applied. Though the Improvement Scheme was seen as the principal agency in modifying the festering sore of the Old Town, more powers were needed to deal with the festering sore of the parts of the Old Town unaffected by the Improvement Scheme; for this purpose continuous supervision required to be exercised over existing slumdom in addition to the destruction of the most notorious sections of slumdom by the Improvement Trustees.

Despite the not inconsiderable powers in new sanitary legislation, they were not matched by the most pressing desideratum of a change at local level in the system of sanitary organisation. The Town Council were not indifferent so much as distracted by the problems that, as Improvement Trustees, they were meeting. Also, so impressed were the established sanitary spokesmen on the Town Council by the achievements of the Improvement Trust that it was fatally easy for them to be deceived that all was well, so far as the sanitary work of the Town Council was concerned.

1. By section 16 of the Act, any house was a nuisance and so liable to closure if it was proved before a Court of Law that there was "any insufficiency in size, defect of structure, defect of ventilation, want of repair or suitable water closet or cesspool, or any other circumstance rendering any inhabited house injurious to the health of the inmates" (ibid., 29 July 1867, article).
While several cities in Britain had by now a specialised Sanitary Committee of the Town Council, Glasgow's sanitary organisation being the exemplar, Edinburgh's was still spread between three Committees in an ill-defined manner. The Convener of the Streets and Buildings Committee, and one of the chief members of the Lord Provost's Committee, was Bailie Peter Miller. As a new member of the Town Council, he had been anxious for a new deal in sanitary organisation; however, he was by now a comparatively long-serving member and, as the Council's official sanitary spokesman, he had a genuine dedication to sanitary improvement, but his views were somewhat limited, and his dedication also meant that he was the champion defender of the status quo of the sanitary organisation of the Town Council.

Not only did the impact of Dr. Littlejohn's Report have comparatively little effect on the sanitary activities of the Town Council; the Report had minimal effect on the position of Dr. Littlejohn himself within the sanitary framework of the Council. His prestige may have been vastly increased by his Report and it was the inspiration for Chambers' initiative as to an Improvement Scheme, but the Improvement Scheme did not directly concern the day by day work of Dr. Littlejohn. Till 1872 he still reported to the Lord Provost's Committee, no specialised sanitary committee being in existence; the powers allowed to him remained almost the same before and after 1865. It was still

1. In a speech, Dr. Alexander Wood referred to Glasgow's sanitary organisation in the following terms: For comprehensive organisation, their health department is unequalled in Europe. (ibid., 15 July 1870, reporting a speech by Dr. Alexander Wood to Acting Committee of Association for Improving the Condition of the Poor, 14 July 1870).

2. The Streets and Buildings Committee dealt with drainage, sewerage, unwholesome dwellings (very rarely), water supply, water closets, smoke nuisances, and sometimes with any large sanitary question that might be agitating the Town Council.

The Cleaning and Lighting Committee dealt with removal of refuse, cases of nuisances due to filth, accumulations of manure, dirty passages. The Lord Provost's Committee dealt usually with any large sanitary question that might be agitating the Town Council; as a virtual overlord, it prepared any sanitary legislation that might be pending; also, it was to this Committee that Dr. Littlejohn reported. Strictly sanitary work was the sole task of none of the above; hence the necessity of a specialised sanitary Committee to deal vigorously with sanitary problems.
the case that, apart from his much appreciated weekly statements as to the health of the city, the only time he could make a decisive impact on the public was during preparations to meet threatening cholera and smallpox epidemics (and during the actual progress of a smallpox epidemic in 1871-72). With a staff of two Sanitary Inspectors (themselves policemen), lodging houses and bakehouses were well inspected, and a reasonable check was kept on the habitats of patients admitted to the fever wards of the Royal Infirmary. However, his powers for looking after insanitary housing generally were very indirect and rarely indeed resulted in the closure of such houses. What was conspicuously lacking was a systematic and constant inspection of the interiors of houses, with minimum standards laid down. There were various other officials who had certain sanitary duties, like the Burgh Engineer and the Inspector of Cleaning and Lighting, but there was still a serious lack of co-ordination among them. While in Glasgow, a Sanitary Committee was ready-made for the first M.O.H. on his appointment, in Edinburgh Dr. Littlejohn still lacked the services of such a body nearly ten years after his appointment.

Dr. Littlejohn was not given to making public complaints; though he occasionally implied that he was not getting the co-operation required from the medical profession when he urged the importance of notification of infectious disease, this had not yet become an issue. Evidence, however, of dissatisfaction with the sanitary administration

1. Public Health Committee, Minutes, 7 January 1873, including Dr. Littlejohn's sketch of his duties. But, at this date, only a very few fever cases found their way to hospital treatment.

2. Public Health Committee, Minutes, 7 January 1873.


4. Scotsman, 30 June, 1871, reporting meeting of Association for Improving the Condition of the Poor, 29 June 1871.
of the Council was given by a report he quite spontaneously presented to the Council on a survey he had made of a district in the Old Town; the report was not severely worded but it was distinctly unflattering in tenor.¹

The conspicuous failings of the Town Council were brought to light all the more forcibly by the pressure of the Association for Improving the Condition of the Poor. The movement, calling this Association into being, was principally a product of the national anxiety for something to be done to make the administration of charity for the poor more uniform and systematic.² As a movement for dealing with voluntary charities; theoretically it had nothing to do with the local authority. The person who initiated the movement was none other than Chambers who was currently very much occupied with the battle to set his Improvement Scheme on foot.³ There were five other members of the Town Council on the responsible Committee, and Dr. Littlejohn was a constant supporter of the movement from the outset.

However, the emergence of an accelerated interest in the problem of poverty inevitably meant a loud clamour for vigorous sanitary reform as an accompaniment. While in the 1840's, discussion on the problem of poverty meant demands for increased public support of the destitute and a playing down of the responsibility incumbent upon municipal bodies for improving sanitary conditions, in the late 1860's such discussion meant demands for greater selectivity in distributing poor relief and emphasis upon the sanitary responsibility of the Town Council. In the intervening period sanitary squalor had so supplanted

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1. Scotsman, 27 April 1870, reporting meeting of Town Council, 26 April 1870.
3. ibid., Introduction, p.xi.
poverty as the alleged prime cause of environmental wretchedness (see Chapter 2), that, when interest in poverty revived with a different emphasis, commentators could hardly avoid discussing fundamental sanitary problems. When they referred to social-and-sanitary problems, they were succinctly stating their view of the situation.

The close connection between social and sanitary conditions was seen in its most comprehensive form in the Report which Dr. Alexander Wood, as Convener of the Sub Committee for Looking into the sources and extent of destitution, wrote. As a report written for a charitable body its main conclusion was an outline of recommendations for the methods of distribution of charity to be employed by the responsible organisations.

However, the report could not in the circumstances fail to have sanitary content especially with Wood being a sanitary reformer of long standing. Thus, much of the report, particularly on individual notorious tenements, was a recapitulation of that of Dr. Littlejohn in 1865, who gave valuable help in the inquiry. Wood's Report, however, was presented in more expressive style, and paid more attention to the interiors of dwellings.

1. Symptomatic of the high degree of sensitivity among "sanitarians" at this time to the living conditions of the poor was the horrific manner in which Miss Bird, a member of the Association for Improving the Condition of the Poor, chose to describe the general environment. Such treatment was reminiscent of the treatment of Dr. George Bell almost 20 years earlier. (I.L. Bird, Notes on Old Edinburgh (Edinburgh, 1869)).

For extracts from the above work, see Appendix XII.

2. This was one of the two Sub Committees which in 1868 were to form the Association for Improving the Condition of the Poor.

3. Fifteen districts were selected for sanitary examination and very concise tables, as to the conditions of dwellings within them, were published. Warden's Close, Grassmarket was included among these districts, so as to assess the results of Dr. Foulis's experiment of renovation. (A. Wood, Report on the Conditions of the Poorer Classes of Edinburgh and of their Dwellings, Neighbourhoods, and Families (Edinburgh, 1868), p.9).

For table of dwellings and their respective conditions, see Appendix XIII.
The Scotsman editorial might distinguish between the relevance of Dr. Littlejohn's Report as to sanitary improvement and Dr. Wood's as to charitable administration,¹ but any report which dealt with sanitary matters (as Dr. Wood's did) could not avoid referring to the Town Council as the responsible local sanitary authority and demand the obvious essentials that the Council form a sanitary committee,² that houses unfit for human habitation be shut up, that there be strong regulations against overcrowding of houses and moreover that they be vigorously applied.³

The actual work of the Association in the renovation of tenements, the building of rural model villages was a conspicuous failure and need not concern us here; the importance of the Association was that Wood's demands were to be oft repeated in the next few years. As a body doing house-to-house inspections (the records of which Dr. Littlejohn made great use of, as a member of the Association), they were all the more liable to realise the neglect on the part of the Council in this respect. As a body which held the traditional belief that, so long as there were dens of filth, so long would paupers be found to fill them and thus perpetuate the social disease of pauperism, they could easily believe that their work was handicapped by the negligence of the Council in the work of extirpating such dens. With a sanitary reformer of aggressive temperament, Dr. Alexander Wood, as Chairman of the Acting Committee of the Association (and likely enjoying the

1. Scotsman, 29 February 1868, editorial.
3. ibid., p.55.
clandestine and expert cooperation of Dr. Littlejohn), the likelihood of the timidity of the Council being regularly exposed was much increased. The unrest of this Association was also largely stimulated by the concern over the shortage of accommodation as a result of the activities of the Improvement Trustees; this reached a climax in the first half of 1870 as did the demands of Association on the Town Council, and both phenomena fell away in 1871. Of course the Council and the Improvement Trustees were one and the same body. The climax of pressure on the Council, however, came in the form of a memorial for them to do something real about sanitary improvement, and an embarrassing table of the results of their house-to-house visitation.

The presentation of a memorial to the Town Council was very reminiscent of a similar presentation in 1862 (see Chapter 3, p. 58). There were differences, of course, between the forces motivating such pressure groups in 1862 and 1870, but despite these differences, the similarities between the two movements were very significant. In 1870 the concept of fear of the unknown had yet to be eliminated, or Mrs. Bird would not have been provoked into writing such a lurid account of conditions in the Old Town after the style of George Bell despite the appointment of a M.O.H., the issue of his 1865 Report, the launching of the Improvement Scheme, the Town Council were still seen to be performing necessary sanitary work most inadequately.

1. Scotsman, 27 April 1870, reporting meeting of Town Council, 26 April 1870. For table of results of house-to-house visitation, see Appendix XIV. 299.

2. In 1861-2, pressure groups had been urging sanitary reform subsequent to the traumatic fall of a High St. tenement. In 1867-70, the primary motivating force was concern with the organisation for the relief of poverty, and the responsible pressure group had come to urge sanitary reform as a corollary.

3. See p. 171, footnote 1 and Appendix XIV.
Predictably, this memorial (like other demands of the Association) was courteously received but afterwards tacitly ignored. Remitting demands, like those for the setting up of a Sanitary Committee, to the Streets and Buildings Committee (where they were thence remitted to a Sub Committee), was a sure method of losing them indefinitely. Uncommitted members of Council were far readier to agree with Bailie Miller that all was well with the sanitary organisation, and that to change it was unconstitutional than with protests from radical sanitary reformers, like Councillor Gowans, that a need for radical reform was urgent. Thus the effect of the Association's direct and indirect pressure to the latter half of 1871 (when they lost significance as a pressure group) was minimal.

The only feasible method of setting up a Health (of Sanitary) Committee was for an appropriate motion to come from within the ranks of the Council. However, motions from two of the more radical sanitary reformers on the Town Council for the formation of a Health Committee were remitted to various Committees, from which bodies it was unlikely that any proposal of great significance would emerge. The lack of urgency shown by Committees in dealing with motions remitted to them on the one hand; and the automatic remitting by the Town Council of motions, calling for any novel organisation, to such Committees on the other hand, together meant that by the latter half of 1871, the likelihood of the formation of a Public Health Committee seemed as far away as ever, while public pressure for one was fading.

1. Councillor Gowans moved a resolution that a Health Committee be formed (Scotsman, 22 June 1870, reporting meeting of Town Council, 21 June 1870); Councillor Millar moved a resolution that the Lord Provost's Committee consider the duties of Dr. Littlejohn so as to make his department more efficient by adopting the principle of a Health Committee (ibid., 6 December 1871, reporting meeting of Town Council, 5 December 1871).
SECTION II + THE QUESTION OF WATER SUPPLY.

Though pressure on the Town Council for a more vigorous sanitary administration excited a good deal of public attention, this was dwarfed by comparison with the question of water supply. The sanitary importance of water is obvious, and writers on conditions in the Old Town like Dr. Littlejohn, Dr. Wood,1 Miss Bird2 were not slow to recognise that. The architects of the eventual new deal in Edinburgh's sanitary administration, Dr. Littlejohn, Chambers, (and to a lesser extent, James Gowans) strongly believed that an increased water supply was an essential constituent of such a new deal.3 The fact that the Improvement Scheme was in progress strongly influenced the original promoters of an increased water supply, but the catalysts triggering off the water question in 1868 (which lasted till 1874) were the meteorological factors of the dry summer of 1868, and the presence of an aggressive Town Councillor as representative at the Board of the Edinburgh Water Company, David Lewis, who was both genuinely concerned by the particularly numerous and heart-rending

1. See Appendix XIII, under heading "No. supplied with water."
2. A graphic extract from Miss Bird's work reads: "The above-named well ...... is a sign of one of the standing grievances of Edinburgh. It is the "water supply" of the large population living in those many-storeyed houses which give the immediate neighbourhood its picturesqueness .......... Here children carrying buckets nearly as big as themselves are sometimes known to wait from one to five hours for the water which is to wash their faces, cook the food, and quench the thirst of the family for the day." (I.L.Bird, Notes on Old Edinburgh (Edinburgh, 1869), pp.4-5).
3. While Glasgow and several other large cities had, through their Corporations (not through private companies), obtained their water supply from large lakes which could guarantee an inexhaustible supply, Edinburgh still was supplied with water through a private company. Though the quality of the water was excellent and was supplied cheaply, the Company went on drawing increased supplies from small reservoirs which could only supply a sufficient quantity for a comparatively short period.
complaints of want of water and who, as a radical, held a passionate aversion to the management of the water supply by a private company. In June 1868, Lewis had the initiative to move at a Town Council meeting for a Special Committee (composed of members of the Corporations of Edinburgh, Leith, Portobello) to report as to how the management of the water supply should be transferred to a public trust, and how a full and constant supply should be obtained. 1

An engineer, Stewart, recommended to the Committee which employed him that water be taken from St. Mary's Loch which would yield an inexhaustible supply. 2

That was an entirely natural way of solving the question of water supply; the transfer of water undertakings to municipal control was generally accepted nationally at this period. However, the political aspects of this question were to swallow the sanitary aspects in the next few years, and the result was that the outside public (stirred up by propaganda emanating from the Ratepayers Association, well aided by a large minority of the Town Council in the critical months of mid-1871, and embracing a not inconsiderable number of acknowledged sanitary reformers) 3 succeeded in working up such a fury against the scheme of the Water Trustees to take water from St. Mary's Loch, that their scheme was defeated; their vindictiveness against the Water Trustees meant that the leaders of the movement seemed indifferent as to whether Edinburgh got sufficient water or not. The same politico-sanitary manifestations were evident as during the Water of Leith drainage controversy in the early 1860's; only they were writ larger and they were brought into play over a topic of more crucial sanitary importance.

1. Scotsman, 24 June 1868, reporting meeting of Town Council, 23 June 1868.
3. For example, Charles Cowan, Henry Lees, Thomas Knox were prominent figures in this party. Charles Cowan and his brother James had for long been acknowledged advocates of sanitary reform; Henry Lees was to be the first convener of the Town Council's new Public Health Committee; Thomas Knox had for long evinced great sympathy for the
That such political fury could be aroused, was originally due to the relatively small-scale hostility of the Water Company to the manner in which the new public trust was to be constituted. The opposition to the 1869 Bill was essentially based on the vested interests of the Water Company; such interests stressed mention of preventible waste of water in an effort to discredit the other section of the Bill providing for an increased water supply from St. Mary's Loch. Opposition from ratepayers made a very weak impact, and the minority on the Town Council opposed to the Bill was small indeed. The irony was that, though the Bill authorising the transfer of the water undertaking easily became law (despite strenuous opposition in the Select Committees of Parliament from the Water Company, and lesser opposition from ratepayers), the part of the Bill authorising the new supply from St. Mary's Loch failed to pass Standing Orders because of a technicality.

Despite the fact the Water Company had gone out of existence, despite the fact that the intervening 18 months of relative placidity over the water question had seen the new Water Trustees settle to their activities by investigating the question of waste of water and by satisfying themselves (through repeated complaints of want of water in the dry summer of 1870) as to the need for a vastly increased

1. There was a clause in the 1856 Act, by which the water undertaking would be automatically transferred to a public trust at any time the Town Council chose. That public trust was to be composed of representatives of various public bodies (e.g. Merchant Company, Chamber of Commerce) and the Provosts of Edinburgh, Leith, Portobello. However, by the late 1860's, it was felt by the majority of the Town Council that such a body could scarcely be termed representative; thus, by the 1869 Bill, the Town Councils of the three burghs were to elect the Water Trustees. They could elect, however, a proportion of Trustees from without the Town Council.

2. This Bill provided for the transfer of the water undertaking to the Water Trustees, and for water to be taken from St. Mary's Loch.
water supply and that St. Mary's Loch was the most suitable source; the moment the Water Trustees announced their plans towards the end of 1870, opposition arose spontaneously and grew so prodigiously that by June 1871, a single week could see 60 letters appear in the Scottishman on the scheme. Colston, in his book, gives, as the reason, the marginally sanitary issue of fear of animalculae in the St. Mary's Loch water, and its excessive softness. That they failed to trust the reassurances of sanitary authorities like Dr. Littlejohn, Dr. Frankland, Dr. MacAdam (all of whom had a wide scientific knowledge), or even try to balance the two sides out, was due to something deeper. This was the fact that the St. Mary's Loch party was easily portrayed as a wicked political party with the demon, Lewis, in charge, this party allegedly having no concern for any anxieties or doubts, however serious, that the Edinburgh public might have. The small opposition to the 1869 Act had grown to massive proportions by 1871, chiefly because Lewis had in the interim been seen to be in charge, as Convener of the Works Committee of the Water Trust, and constant advocate of the St. Mary's Loch Scheme; and many had cause to hate him because of his strong aversion to alcoholic liquor, the Established Church and his activities in these fields. Not till political tempers had cooled

1. The Scottishman was uncompromisingly opposed to the St. Mary's Loch Scheme. Of these 60 letters, scarcely 1/10 supported the measure! James Colston wrote in his history of the St. Mary's Loch water supply question: 'Since the celebrated Disruption of the Church of Scotland in 1843, party feeling in Edinburgh had never run so high, nor was it so embittered as in this great water struggle. Indeed, personal friendships were in danger of giving way to private animosities. The opponents of the measure had, to all appearance, secured the public ear. The newspapers, as a rule, were on their side; and no step that could be taken to produce a popular clamour was left unadopted.' (J. Colston, Water Supply (Edinburgh, 1890), p.135).

2. Colston also wrote: "But the flea argument was the most powerful in the mind of the community. 'It produced the desired effect. It stirred people up against the measure.' (Ibid., p.135).
down by 1873 when James Cowan, as Lord Provost, was by now in a conciliatory mood, did the majority of the Town Council and the Water Trust respond to the urgent necessity for more water and try to undo the legal difficulties preventing such a supply - difficulties which they themselves had deliberately created. The consequent plebiscite (where the citizens decided what particular source of water they wished) was a vote in favour of the Moorfoots, and in 1874 the Moorfoots Bill passed the Select Committees of Parliament; though opinion on the water question was by no means silent, still it was a mere whisper compared with the frenzied shouting of 1871.

At last it was ensured that Edinburgh would get the sanitary essential of a decent water supply, but at no inconsiderable cost for the political frenzies over St. Mary's Loch and its protagonists. The Act for an increased water supply got Parliamentary sanction in 1874, not 1869 or 1871; and the future history of water supply was to vindicate the claim of the St. Mary's Loch party that it was vastly more satisfactory than the Moorfoots or anywhere else.

1. The way that the Lord Provost's Committee suggested that the Water Trust escape its legal difficulties was for the Town Council to provide the money required to pay the Parliamentary expenses of seeking a new Act, for increased water supply, out of the Common Good Fund. This was the solution offered in the autumn of 1873. Two years earlier, the acknowledged leaders of the "anti-St. Mary's Loch party" had put the Water Trustees in a most uncomfortable position by initiating (and eventually) obtaining an interdict against the Trustees applying public funds to recoup their Parliamentary expenses for the St. Mary's Loch Water Bill which had just been thrown out by a Select Committee of the House of Lords. (ibid., p.179).
SECTIION III - THE SETTING UP OF THE PUBLIC HEALTH COMMITTEE, AND ITS EARLY WORK.

With the noise of the water question subsiding after the end of 1872 and at last being settled, this was paralleled by silence on the part of the Association for Improving the Condition of the Poor in no longer making demands on the Town Council to take a more enlightened view of its responsibilities in the sanitary field. This was understandable since the Health Committee was belatedly and quietly formed at the latter end of 1872; and while the Town Council and Water Trustees were at last returning to grips with the water question in the proper manner, so the Public Health Committee were at last dealing systematically with insanitary dwellings.

However, the setting up of this Committee owed nothing at all to pressure from outside associations, the sanitary demands of the Association for Improving the Condition of the Poor being voiced far less frequently. The all-absorbing distraction of the water question of course drew various prominent figures in the Association on either side. By the time the political aspects of the question had subsided (the end of 1872), and the Association could take a full look at social and sanitary conditions, their earlier demands were being fulfilled (by the formation of the Public Health Committee).

The Committee originated in a little noticed notice of motion by a not unknown man, Bailie David Lewis, in mid-1872, when he asked for a remit to a special committee to consider how better to use the Public Health Act.¹

It is indeed difficult to trace the timing of this notice of motion with any important event which could be expected to generate demands for the formation of a Health Committee.

¹Scotsman, 9 July 1872, reporting meeting of Town Council, 8 July 1872.
Infectious diseases were or had been recently making more than a usual impact at this time, but it would be naive to connect their incidence with Lewis's motion. There had been a threatened cholera epidemic in the autumn of the previous year, but it was by now a phenomenon feared rather than experienced; the threat of one did not generate any demands for the formation of such a Committee.

At the beginning of 1872, typhoid fever and scarlet fever were present in Edinburgh in epidemic form, but severe weather and adverse economic conditions were blamed much more than any failings of sanitary administration in dealing with insanitary dwellings.

At the time, the Town Council was looking after the final stages of a smallpox epidemic which had been moderately severe, claiming 269 corpses over nine months; but, in the case of smallpox, failure to get oneself vaccinated was blamed far more than was the insanitary environment. Nor were complaints of the inadequacy of the Town Council in dealing with the epidemic causing any furore about the general sanitary failings of the Town Council resembling the furore two years earlier; these complaints emanated from very few people and were not sustained. In fact, there was in charge of the Watson's Hospital (adapted to take smallpox cases) a small Sub Committee of the Lord Provost's Committee, with a very dedicated Bailie Miller at the head.


2. In most weeks the number of patients in the Smallpox Hospital ranged between 150 and 200, the highest number at any one time being 213 on 3rd February, 1872. However, because of shortage of room and gaps in the machinery of intimations of smallpox, these cases represented less than half the total number of cases.
On the other hand, this assumption of municipal responsibilities did not encourage Miller towards any notions of a Health Committee. The absence of connection between the powers taken on by the Town Council when supervising the smallpox epidemic, and their setting up of a Public Health Committee shortly afterwards, is best summed up by noting that the question of municipal administration of infectious diseases hospitals was not even contemplated when powers were allocated to the new committee.

Certainly there was a background of general sanitary discussion to Lewis's notice of motion, it coming in the midst of a noisy paper battle between Thomson (an insurance manager) and the Scotsman, as to the standard of public health in Edinburgh. Thomson maintained it was deplorable while the Scotsman, forever the defender of Edinburgh's reputation, waged a constant war for about a month on the reliability of Thomson's statistics. Despite the vigour of the public health debate, never once was the idea of a Public Health Committee mentioned by either side.

Maybe, Lewis's notice of motion came during a period of genuine sanitary interest on the part of the Town Council. At the same meeting as where he gave his notice of motion, the Burgh Engineer submitted a detailed return of the number of houses of certain rental with and without water closets, what standard of water closets, with and without water. His return certainly gave ground for concern; in houses below an annual rental of £5, only 1,912 out of 9,124 had a water closet of which only 349 ventilated into the open air; only 4,010 houses of the same category possessed a water supply. The Burgh Engineer was likewise completing at this time a survey of

1. Scotsman, 9 July 1872, reporting meeting of Town Council, 8 July 1872.
cesspools, general house drainage, best means of ventilating drains etc. This activity on the part of the Burgh Engineer was the outcome of a large number of notices of motions in the closing weeks of 1871 and the opening months of 1872, on drainage generally, ventilation of drains, cesspools, the position of water closets.\textsuperscript{1}

This in turn was the outcome of a noticeable discussion (in which the movers of the above resolutions played a fairly prominent part) on drainage questions, principally waged in the correspondence columns of the local press. This was not caused by any current epidemic;\textsuperscript{1}

\begin{enumerate}
\item Since the various notices of motion tended to be similar in scope, only three were eventually remitted.
\item The main two motions which were passed by the Council of 7 February 1872 were by:
  \begin{enumerate}
  \item Councillor Wormald: "That it be remitted to the Streets and Buildings Committee to prepare, with the assistance of the Burgh Engineer, the M.O.H., and such other scientific and medical assistance as they may deem necessary, a report (1) on the general system of house drainage and cesspools, including cisterns and wastepipes, and to prepare a register of the cesspools for the information and protection of the public, (2) on the best system of ventilating the drains of the city, (3) on the present condition of the burying grounds, and the expediency of closing the West Church, Calton and Newington Burying-Grounds, and (4) on the general sanitary condition of the city."
  \item Councillor Lees: "That the Burgh Engineer be directed to ascertain and report the number of dwellings rented at under £5/year, and separately above £5 and under £12, provided with the following conveniences:— Number with water closets inside house, number with them outside but within outer wall of tenement, distinguishing how they severally are ventilated:— whether they ventilate (1) directly into the open air, (2) into the common stairs, or (3) into dwelling house or otherwise; also to report the number of houses with water inside the house, the number with water outside the house but on the staircase or otherwise within the outer wall of the tenement, distinguishing the houses with a rental of under £5 from those with a rental of between £5 and £12."
\end{enumerate}
\end{enumerate}

(\textit{ibid.}, 8 February 1872, reporting meeting of Town Council, 7 February 1872).
it was partly an academic discussion on technical drainage questions by engineers, such as whether it was feasible to separate the water required for drinking from the water required for flushing and scrubbing, what was the best means of ventilating sewers, what was the correct position for cisterns. However, there was a more serious and subjective side to the discussion; and this was the product of the nation-wide concern over the Prince of Wales's critical illness from typhoid in the closing months of 1871. It was blamed on bad drainage, and caused a public fear of improperly jointed or trapped drains, cisterns in close proximity to water closets, malodorous water closets ventilating into living rooms.

In Edinburgh, however, there was no reason for supposing that such public concern would lead to demands for the appointment of a Health Committee. This was a strictly scientific and sanitary, as distinct from a social-and-sanitary discussion; Gowans, predictably a prominent figure in the discussion, was not demanding, as he had done in 1870, the appointment of a Health Committee; he, like some other correspondents demanded strictly sanitary powers, such as that the Council appoint someone to inspect drains before they were covered in;\(^1\) at any rate, this sanitary discussion, though still evident, was largely subsiding by mid-1872. Even when the Burgh Engineer's return on water closets caused concern among some Town Councillors, Councillor Gowans, the most pressing member of Council for something to be done, never mentioned a Health Committee. An envisaged Health Committee was normally associated with administration of insanitary dwellings in the Old Town and generally reforming the poorer areas, and as such was a feature of social-and-sanitary

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discussions; the work of drainage reform, water closets etc. was applied rather more to the New Town than the Old Town, and in fact meant a demand for more vigorous effort on the part of the established Streets and Buildings Committee.¹

One is led to the conclusion that Lewis gave his notice of motion because of private airing of the idea of such a committee, from his close friend, Dr. Littlejohn.² The fact that there was no discussion at all when Lewis officially brought up his notice of motion was most likely due to the fact that the Council had in that year, 1872, become so accustomed to a plethora of sanitary motions that they saw no harm in going ahead with this particular one. The speed with which the Special Committee worked out the form a Public Health Committee should take is remarkable, considering the way earlier projects of this nature petered out in Sub Committees.³ However, this was a small committee of six, of whom two were Dr. Littlejohn and the Burgh Engineer. As Convener was Bailie Lewis himself; on it also was Councillor Lees, who had long been very anxious for a Public Health Committee to be formed, and who was to be the first Convener of the Public Health Committee when set up.⁴

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1. Between the years 1867-1873 (inclusive), 1873 was the busiest year for the Streets and Buildings Committee in dealing with water closets etc. This was after the Public Health Committee had been formed. (Streets and Buildings Committee, Minutes.)

2. Dr. Littlejohn, a retiring man, was not of the nature to push members of the Town Council, even privately, to do certain things and one cannot suppose that he persuaded Chambers to initiate the Improvement Scheme (see Chapter 5). But, as a close friend of Lewis, Dr. Littlejohn must long have been conversing with him as to the need for a health committee; that its appointment was precipitated at this time was not due to any particular event, but because Lewis chose, for reasons known only to himself, to take it up.

3. The Special Committee had concluded its suggestions by October 1872, and were accepted without question by the Town Council on 19 November (Scotsman, 20 November 1872, reporting meeting of Town Council, 19 November 1872). The Public Health Committee held its opening meeting on 17 December 1872 (Public Health Committee, Minutes, December 1872).

4. Scotsman, 17 December 1873, reporting meeting of Town Council, 16 December 1873 including tribute to Councillor Lees.
Another remarkable feature was the total absence of discussion as the Special Committee deliberated. This was of course done in private, but there was no discussion even when the Committee produced its findings; even if the wording of Lewis's motion did not include the setting up of a Public Health Committee, the reference to a better organisation for working out the Public Health Act meant something far-reaching and summed up to a large extent the agitation upon the Town Council from 1867-71. Even if Bailie Miller had lost his seat on the Town Council by the time that the Special Committee reported, he was strangely silent when Lewis put his motion.

The involvement of Lewis in a prominent manner was a major factor in embittering the agitation over the St. Mary's Loch scheme; yet no one referred to his part in promoting a new sanitary organisation, and the question was not prejudiced by the part he played. It was of course more difficult for opposition to sanitary improvement to appear respectable than opposition to a water scheme; however, that consideration did not prevent loud opposition to the Improvement Scheme when it was being worked out. It is begging the question to say that Lewis (among others) was promoting a movement that public opinion was indifferent to. Despite the far-reaching importance of the Public Health Committee in the future sanitary history of Edinburgh,—an importance which cannot be exaggerated—none talked about it as they did about the Improvement Scheme in 1866-67. However, while the launching of the Improvement Scheme was deliberately publicised, a motion like Lewis's appeared to the ordinary member of the public as simply another move in the adjustment of the relationships of Committees of the Town Council. The idea of a readjustment of Committees was as far removed, in people's minds, from the idea of vast hordes of the masses being turned loose in the streets (as a result of accommodation problems), as possible.
Though the Special Committee cautiously tried to give the Public Health Committee as small a role as possible in the power structure of committees, though the functions given to the Committee were scarcely unprecedented and though the most important function was seemingly inserted as an afterthought, it was this afterthought, (the closure of insanitary dwellings) that was chiefly responsible for the Committee's impact on the sanitary conditions of Edinburgh. The functions may have been undramatic, but the fact that the sanitary officials now had a vastly improved machinery for executing them was decisive in accounting for the quick success of the Public Health Committee. Dr. Littlejohn had now a Committee to report to which was solely concerned with sanitary matters.

At the very first meeting of the Public Health Committee, he was asked how much extra staff and reorganisation he required for the executing of sanitary legislation and he was granted an extra two inspectors who were to be specifically and systematically employed to thoroughly survey the interiors and exteriors of houses in the poorer

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1. The Special Committee felt that the new standing sanitary committee should not control any other committees such as the Streets and Buildings Committee or the Cleaning and Lighting Committee; the Sanitary Committee (which it was decided at a later meeting of the Special Committee to rename the Public Health Committee) would be merely in charge of all matters affecting public health, and could merely call the attention of other Committees towards such matters that fell within the proper functions of these Committees. The duties of the new Public Health Committee were merely those which it was felt the other Committees could be relieved of, viz:—

(i) Burial-grounds, (ii) Lodging-houses, (iii) Smoke Nuisance, (iv) Consideration of proposals to establish new manufactories, and the supervision of existing ones, (v) Inspection of Workshops, Bakehouses, Cowhouses, (vi) Adulteration of food, (vii) Prevention of epidemics (like cholera) and the establishment of special hospitals in such cases. (Special Committee, Minutes, 6 September 1872).

2. Only at a later meeting of the Committee was the all-important supervision of overcrowded and underground houses added to the duties of the new Committee. (Special Committee, Minutes, 17 October 1872).

areas. Very shortly afterwards, the Public Health Committee issued regulations to ensure that there was a united sanitary administration on the part of the sanitary officials - the M.O.H., the Burgh Engineer, and the Inspector of Cleaning. From the all-important administrative angle, Dr. Littlejohn now had a long-awaited opportunity to perform, and see performed, everyday sanitary work on a systematic basis.

In the next two years the Public Health Committee performed a wide range of functions; there were some interesting activities which drew public attention like the long proceedings to get the West Kirk Burial Ground closed; Dr. Littlejohn issued an interesting report on the feasibility of carbon closets in tenements; Dr. Littlejohn's monthly reports on the health of the city were now far more exhaustive and were plain for all to read in the Scotsman. However, what was easily the most significant activity in terms of the future sanitary history of Edinburgh was the vigour with which the Public Health Committee set to deal with the long neglected task of closing scandalously insanitary dwellings. After only nine months, the Convener (Councillor Lees) could claim that 50 tenements had been dealt with either with a view to closure or to extensive repairs being performed, and it had been necessary to resort to compulsory legal measures in

1. Scotsman, 7 January 1873. It should be noted that it was still police that were to be used as the extra sanitary inspectors.

2. The M.O.H. would get the help of the Inspector of Cleaning for removing nuisances (like manure) injurious to health. He could call on the Burgh Engineer for reports as to unwholesome tenements (when the reports of his inspectors gave him grounds for suspicion), and as to defective drains and sewers, especially when this was intended to form the subject of legal proceedings. The Burgh Engineer and Inspector of Cleaning could have the aid of the M.O.H. when his certificate was necessary for nuisances to be removed by action at law. The heads of departments were to get assistants, inspectors, overseers to note and report to superior officers nuisances of all kinds, no matter to what department they might belong. Communications had to be made by only Head Officers between departments. (Public Health Committee, Minutes, 4 March 1873).

3. Ibid., 2 October 1873, reporting meeting of Town Council, 30 September 1873.
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only seven of these cases. ¹

The need for such vigour was obvious, as a perusal of their minute book shows. The tenements dealt with included some set down by Dr. Littlejohn for special mention as far back as 1865. ² Despite this decisive new step in sanitary administration, comment on the Committee's activities was as silent as it had been when the Committee was being set up.

However, by 1874 anyway, its activities had established themselves in men's minds. The activities in the Old Town (along with the activities of the Improvement Trust) were enough to silence the concept of vague fear of the masses in the Old Town; the question of supply and demand of working-class housing (in relation to the closure by the Committee of what was really a scarce article) was not exciting sanitary opinion, as it had been, and was later to do. The attitude of satisfaction with the activities of the Town Council caused a falling off in subscriptions to the Association for Improving the

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1. Public Health Committee, Minutes, 2 September 1873.
   In some cases, where the owners of insanitary tenements challenged the Public Health Committee that their property was not a nuisance under the Public Health Act, the Sheriff gave a remit to an engineer and a medical man to report exhaustively on the tenements in question. These reports disclosed scandalous conditions having been permitted to remain a long time. However, this did not produce the same shocked reaction as would have been expected when the Association for Improving the Condition of the Poor were at the peak of their pressure on the Town Council as to insanitary dwellings; sanitary public opinion was by now relieved that the Council (through the Public Health Committee) were dealing with matters, not having it pressed upon them.

   From 1872-1874, nearly all the tenements dealt with by the Public Health Committee lay in the Old Town. (Public Health Committee, Minutes).
Condition of the Poor. Public opinion could be aroused when it was opposed to the actions of the Town Council (or was pressing the Council to do certain things), — not when the Council was thoroughly meeting the wishes of public opinion.

CONCLUSION.

The role of public opinion in the sanitary revolution (which meant so much to Dr. Littlejohn especially), involved in the setting up and setting to work of a Public Health Committee and the beginning of works to increase the essential of a water supply, is paradoxical. The role of public opinion in renewing demands that the Town Council take a wider view of their sanitary responsibilities was very limited. It was ignored when expressed; and the Public Health Committee was set up when demands for such a body were hardly heard at all. In the promotion of sanitary legislation; or, what was more important, its efficient execution; the initiative of individuals on the Town Council, the attitude of the Council as a whole, the activity of the committees and sub committees concerned was all-important. This self-generating force of the Town Council meant that the efficient execution of the Public Health (Scotland) Act and the Provisional Order, obtained in 1867, were set properly in motion in 1872 and at no other time.

However, when public opinion was violently opposed to proposed sanitary legislation, it was far more difficult for the local authority to defy it. The fact that opinion on the water question was expressed in the crudest political terms, not merely in sanitary terms as in the case of the pressure of the Association for Improving the Condition of the Poor, meant that public opinion had immeasurably greater power. Thus the tragic result was that the part of the sanitary revolution concerned with an increased water supply produced far less satisfactory
results than were intended by the promoters on the Town Council in 1868-69. While it was designed to be a principal part of the sanitary revolution, its only effect, during a great part of the period covered by this chapter, was a distraction from concern for sanitary conditions.
THE PLACID LATER 1870's AND MUNICIPAL AND POLICE ACT OF 1879

In the mid-Victorian era, the word progress had an almost magical tinge. As applied generally, it was starting to wear thin in the 1870's, but this was not so in the field of public health in Edinburgh. For decades things had improved superficially, while below the surface things went from bad to worse. The issue of Dr. Littlejohn's Report in 1865 forms a fitting prelude to the start of operations on an Improvement Scheme in 1867, the setting up of the Public Health Committee in 1872, the final decision to go to the Moorfoots for an increased water supply in 1874. These were fundamental milestones in the history of public health, and ensured that by the mid-1870's, progress was well established. Dr. Littlejohn's Report was not the direct cause for these events, but its issue made the necessity for such measures appear all the more compelling. They had not come about of course without a lot of argument; in the field of public health, public opinion knew it had to go somewhere but was hesitant about laying down, or seeing laid down, a definite programme.

However, by 1874, public opinion had settled down after earlier fears and hesitations, and in the span of this chapter (1874-1879), accepted the work being done in these three fields with little question. By contrast with the turmoil over the water question from 1869-71, these five years saw operations to obtain an increased water supply from the Moorfoots and Portmore Loch quietly carried through. This is not to say that people no longer felt conscious of the scarcity of water; at 16 of the 28 meetings of the Public Health Committee in 1877 and 1878, there was some discussion about want of water.¹ However, everyone

¹. Public Health Committee, Minutes, 1877-1878.
knew that more water was coming; none dared to question openly the desirability of that, or where they had chosen to go for it. In 1879, Dr. Littlejohn felt, that with the obtaining of an increased water supply, a milestone had been reached. These five years also saw the Improvement Trust, having completed the major portions of their Scheme which had caused the most disruption, moving on to the more minor parts; meanwhile, the permanent benefits of the Scheme were becoming most apparent; this change in emphasis meant that the old cries about displacements causing overcrowding grew even fainter during this period. (see also Chapter 7)

The Improvement Scheme and the new water supply were improvements being carried out "once-and-for all", and designed to improve matters in the hope that things could look after themselves after that; they were founded on specific legislation which was reasonably easy to formulate, since the promoters knew exactly what was required. The work of the Public Health Committee was far less conspicuous, and had attracted little notice when it was formed in 1872. (see Chapter 8, p. 186) However, it had a degree of permanence about it; no matter how much either the Improvement Scheme or the Moorfoots Water Scheme might miscarry in their results, the Public Health Committee could always be there to attend to the sanitary condition of the city. Its foundation, however, was not a legislative act; it was a form of administrative convenience for working out existing sanitary Acts.

There may have been different legislative principles governing the Public Health Committee and the Improvement Trust, but the public attitude towards them was the same. The public accepted the Public

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Health Committee, as it did the Improvement Scheme and the Moorfoots Water Scheme. Though public discussion on the work of the Public Health Committee was minimal, that cannot be taken as meaning that its existence and activities were not widely known. In fact, it is reasonable to advance the seemingly paradoxical thesis that the general absence of discussion on the sanitary problems of the Old Town was a result of public consciousness of the work that the Public Health Committee were doing. Along with the work being done by the Improvement Trustees, the detailed annual reports of the work of the Public Health Committee,¹ the detailed monthly reports on the health of the city prepared by Dr. Littlejohn and authoritatively commented upon by himself and James Gowans, the Convener of the Public Health Committee, all helped to make the public conscious that the chronically sordid environment of the Old Town was being adequately dealt with. This was such as to engender a mood of silent confidence rather than one of incoherent fear. Towards the close of the period covered by Chapter 8, it has been noted that such a mood was establishing itself as the Public Health Committee commenced its activities; during the period covered by this Chapter, such a mood was dominant.

In some ways, this was quite understandable. There had been a dramatic drop in the death rate in the worst areas set out in Dr. Littlejohn's 1865 Report; the Old Town mortality rate per 1000 had fallen from 32 in 1863 to 24 in 1874, while the notorious Tron district had even more dramatically dropped from 34 to 18.² The general death rate over the city showed a distinct improvement in the 1870's, as compared with the 1860's, and Edinburgh could now claim to be the

¹. As an example of work of Public Health Committee over a year (1878), see Appendix XV. (ibid., 12 February 1879, reporting meeting of Town Council, 11 February 1879).
². For example of business of meetings of Public Health Committee, see Appendix XVI (Public Health Committee, Minutes, 14 October 1878).
². Scotsman, 23 October 1875, reporting meeting of St. Bernard's Ward, 22 October 1875.
healthiest city in the kingdom. Annual death rates per 1000 dropped from the upper 20's to the lower 20's. Though it did not make all that much difference to the general death rate, it was a matter of congratulation that the symbol for dirt, overcrowding, loathsome living conditions was fast on the way to becoming all but extinct. There were 135 deaths from typhus in 1865, 24 in 1875, 6 in 1876, 6 in 1877. However, some features of the mortality returns showed that a lot remained to be done yet.

In some months, the death rate showed the same old magnitude; child mortality remained high, never being below 35% and sometimes approaching 50% of the total mortality; even if one confines public health to mean the supervision of infectious diseases, things were very far from satisfactory. Zymotic mortality could go down as low as 5% of the total mortality, but it could also be as high as 20%. Typhus cases may have been dramatically dropping in numbers, but another major type of fever, largely the product of bad drainage and sanitary arrangements, typhoid, was still prevalent. In the year 1875, by no means an above average year for it, there were 30 deaths. Prolonged and severe outbreaks of scarlet fever, hooping cough and measles were not

1. Scotsman, 10 January 1877, reporting meeting of Town Council, 9 January 1877.

2. For death rates/1000 of population/annum for Edinburgh, from 1864 to 1889 inclusive, see Appendix XVII (Scotsman, 21 October 1896, publishing Report by Bailie Pollard, on behalf of Public Health Committee, for year ending 15 May 1896).

3. Ibid., 23 January 1878, reporting meeting of Town Council, 22 January 1878.

4. Ibid., 10 January 1877, publishing Report by Dr. Littlejohn for 1877, as presented to meeting of Town Council, 9 January 1877.

5. In March 1878 there were 96 zymotic deaths (21.05% of the total mortality). The 96 deaths consisted of 60 from measles, 23 from hooping cough, 7 from scarlet fever, 4 from typhoid, 2 from erysipelas. (Ibid., 17 April 1878, publishing Report by Dr. Littlejohn for March 1878, as presented to meeting of Town Council, 16 April 1878).

6. Ibid., 19 January 1876, reporting meeting of Town Council, 18 January 1876.
uncommon. A scarlet fever epidemic lasted through a good part of 1874 and 1875, claiming 509 victims in 1875.\(^1\) Hooping cough was present in epidemic form in 1875 and 1878, claiming 204\(^1\) and 202\(^2\) victims respectively. Measles was present in epidemic form in 1878, and claimed 211 victims that year.\(^2\)\(\ast\)

These last three diseases mainly affected children, and in the monthly health reports, Dr. Littlejohn and Gowans pointed out more than once that they spread because parents allowed their children to roam at liberty and exposed themselves too early during convalescence.\(^3\) One doctor suggested there be legislation to punish offenders.\(^4\) The matter, of course, was impossible to remedy by legislation, and a desideratum here was education of the poor (as in a lot of other instances). However, even here people seemed to ignore that it was unreasonable to expect poor children to willingly confine themselves to the restricted confines of a slum dwelling. The obvious requirement was sufficient fever hospital accommodation. Similarly, when adults were rebuked by public health officials for returning to work too soon after suffering from infectious disease, they forgot that it was financially crippling for them to remain away from work longer than was absolutely necessary.

Even though Dr. Littlejohn could hardly force people, by legislation, to give up their careless habits, he felt strongly that he could stop infectious disease ever reaching them, if he knew precisely the locus of disease when it broke out. He only knew of the loci by

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1. Scotsman, 19 January 1876, publishing Report by Dr. Littlejohn for 1875, as presented to meeting of Town Council, 18 January 1876.
2. ibid., 5 February 1879, publishing Report by Dr. Littlejohn for 1878, as presented to meeting of Town Council, 4 February 1879.
3. ibid., 20 March 1878, reporting meeting of Town Council, 19 March 1878.
4. ibid., 26 October 1875, publishing letter by Dr. William Stephenson on "The new Municipal Bill and the Prevention of Scarlet Fever."

\(\ast\) For vital health statistics during Dr. Littlejohn's term of office, see Vol. 2, pp. 1-17, Appendix XXIII, and accompanying graphs.
the weekly mortality returns of the Registrar-General which gave him an idea, or by reports sent in by his staff. By then, it was usually far too late, for the disease would have spread. Any disinfection or fumigation process or isolation in hospital was of little avail.

At the end of 1874, in the midst of a scarlet fever epidemic, Dr. Littlejohn tried to upset the prevailing "sanitary calm" by explaining the need to institute some machinery for preventing the spread of epidemics, writing: I'll be no more able to cope successfully with such highly infectious diseases as smallpox, diphtheria, scarlet fever, until it is made compulsory on the parent or guardian to report them.¹ However, the Council, on the recommendation of the Public Health Committee, as a first step, sent a circular to all doctors in the city requesting them to inform the M.O.H.'s office of any case of infectious disease.² The medical officers of the various parochial boards agreed with Gowans to report infectious cases, so long as it was made compulsory on all medical practitioners to do so.³ Dr. Littlejohn must have been satisfied with this compulsory principle, but he could not really be satisfied until the principle was embodied in legislation; whereas scarlet fever germs would not wait, there was no guarantee that Dr. Littlejohn's wait for the necessary legislation would be a short one.

However, in the short term, to lessen one of the more obvious causes of the spread of infectious disease - that of children returning to school too early - Dr. Littlejohn was anxious to see introduced in Edinburgh a system of mutual co-operation between the health authorities and the School Board, which had been working very well in Glasgow.⁴

1. Scotsman, 23 December 1874, publishing Report by Dr. Littlejohn for November 1874, as presented to meeting of Town Council, 22 December 1874.
2. ibid., 23 December 1874, reporting meeting of Town Council, 22 December 1874.
3. ibid., 23 December 1874, reporting meeting of medical officers of various Parochial Boards, 21 December 1874.
Before very long, this system had proved itself in Edinburgh,1 but, so soon as this particular scarlet fever epidemic was past, little was heard of it during the span of this chapter.

The more general method of prevention of infectious diseases, involving voluntary intimation, was barren in its results. Dr. Littlejohn complained bitterly that very little attention had been paid to the Council's request by the doctors.2 That it was absolutely necessary for them to be compelled by legislation (as the parochial medical officers wished) was shown as obvious in a very short time. In 1875, only twelve doctors had sent intimations for a total of eighteen patients, and examples of spread of disease, because of scandalous neglect of disinfection precautions, abounded.3 Such an urgent matter had received so little response that Dr. Littlejohn adopted the step, unusual for him, of appealing to the medical profession directly at a meeting of the Medico-Chirurgical Society and offering them a payment of 2/6d for each intimation.4 This seemingly still had little response, for later that year he was forced to send a circular, embodying the ideas he had enunciated, to all the doctors in the city.5

This seeming indifference of the medical profession showed the supreme necessity for the belated legislation on this point in 1879. Where were the Woods, Starks, Bells who, as representatives of the medical profession, used to be so progressive for their time in ideas about public health? Resentment, on principle, of bureaucratic

1. Scotsman, 2 February 1875.
2. ibid., 27 October 1875, publishing letter by Dr. Littlejohn on "Scarlet Fever."
3. Public Health Committee, Minutes, 30 October 1876, 6 February 1877.
4. Scotsman, 3 March 1876, reporting meeting of Medico-Chirurgical Society, 1 March 1876.
5. ibid., 11 October 1876, reporting meeting of Town Council, 10 October 1876.
interference with private practice can hardly be advanced as a major
grievance when the circular, which Dr. Littlejohn sent out, took care
to point out that the sanitary authorities would move in only if the
medical man indicated that immediate attention was required, and that in
no case would there be a visit without the sanction of the medical man.1 Reasons for opposition of Dr. Littlejohn's proposals are very
difficult to pin down. In a round of newspaper correspondence, one
medical man said that it should be parents that intimate the cases,
so as he would not be placed in the invidious position of acting as
an informant on his own patients.2 Admittedly, the idea of parents
making the intimations was Dr. Littlejohn's originally, but he had
quickly dropped it.3 The fleeting instances of reasons for opposi-
tion to Dr. Littlejohn were hardly ever followed up anyway. At the
Medico-Chirurgical meeting all the speakers in the discussion following
his lecture said nothing in opposition to him but then went on and did
nothing.3 It is worth recording that when the system of compulsory
intimation of infectious disease was later copied in Glasgow and
Liverpool, the medical profession in these cities were equally reluct-
ant to see it imposed (even if the opposition was not so long draw-
out as in Edinburgh).4 One is led to the conclusion that, despite
any justified grounds for complaints as to bureaucratic grievance,
there was among the medical profession nationally, professional jealousy
of the institution of the Medical Officership of Health. They might
view it as an admirable institution when it was seen closing slums, but
not when it appeared to intervene in the domain of their own profession.

1. Public Health Committee, Minutes, 30 October 1876, 6 February 1877.
2. Scotsman, 28 October 1875, publishing letter by Dr. James Carmichael
on "Scarlatina."
3. ibid., 3 March 1876, reporting meeting of Medico-Chirurgical Society,
1 March 1876.
4. ibid., 13 December 1882, reporting meeting of Glasgow Town Council,
12 December 1882; ibid., 6 October 1882, reporting meeting of deputation of Liverpool
medical profession with Health Committee of Liverpool Corporation.
Dr. Littlejohn's struggle demonstrated the most glaring example of an absence of legislation in the public health field where the voluntary system just refused to work, but there were other yawning gaps where legislation was much required. Since the Public Health Committee was originally set up to execute the sanitary legislation available, it was not surprising that this body, through the mouthpiece of its Convener and of the M.O.H., should be repeatedly proclaiming the deficiencies of such legislation. Of deficiencies there were many.

Dairies often had such primitive sanitary arrangements that milk could easily become contaminated and cause outbreaks of typhoid or scarlet fever. A more easily traceable method of dissemination of such diseases was when a member of the family at the dairy took the disease and spread it over a whole neighbourhood through the milk.¹ There was no satisfactory legislation for either of these contingencies, and it certainly was not in the interests of the farmer to risk losing his business through the stoppage of his milk trade for however short a period.

There were environmental causes of disease to which Gowans was especially tireless in drawing public attention, and for which the remedies were obvious. Typhoid and diphtheria, caused by bad drainage arrangements, were as common in the New Town as in the Old Town. As an architect, Gowans waged a ceaseless war against shoddy architects and builders. Whenever there had been a high monthly death rate, he dwelt at length on the harm of house drainage, when it meant that bad joints and bad traps allowed foul sewer gas to permeate the house, when drains passing under the house allowed their contents to leak into the sub-soil, when water-closets were placed in the centre of buildings and

¹. Public Health Committee, Minutes, 6 February 1877.
so sent their malodorous vapours through the house, when water cisterns were not cleaned out regularly, when the overflow connection of wash hand basins and cisterns was directly with drains thus allowing sewer gas to permeate one's drinking water.1 Allied with these were complaints by Dr. Littlejohn and Gowans about people occupying new houses far too soon before they were entirely free from damp;2 this, apart from aiding the spread of infectious diseases, could also account for chest diseases (which could cause anything from 20% to 40% of the total mortality). This also demonstrated the lack of supervision over the occupation of new houses from a sanitary point of view.

The 1867 Provisional Order required water supply, water closets, a sink and soil pipes in each house, but was lax as to what plan these appliances should take, so as to be sanitarily safe. The only way in which the clauses faintly accorded with Gowans's ideas was over the placing of water closets.3 Even here, the fact that it permitted them to communicate by shaft to the open air meant that in a working-class tenement, each water closet connected with the shaft by a branch pipe, and so a smell in one flat permeated the whole tenement.

Dr. Littlejohn and Gowans devoted most of their comments in their Reports to these causes of disease, the remedy of which could reasonably be seen as practicable in the short-term. The questions raised affected the city of Edinburgh generally and were not confined to the Old Town. Conditions in the Old Town, though far more problematic, did not lend themselves nearly so much to demands for specific and relatively easily attainable remedies. Conditions were so much worse.

1. Scotsman, 13 January 1875, publishing letter by James Gowans on "Insanitary Houses."
2. ibid., 19 December 1877, reporting meeting of Town Council, 18 December 1877.
3. ibid., 29 July 1867, publishing article on Provisional Order.
in the Old Town than those in the rest of Edinburgh that, within their sphere of action, Littlejohn and Gowans were above all interested in a single topic of sanitary legislation, but a basic one: that of closing insanitary dwellings. The existing powers scarcely satisfied Littlejohn and Gowans. The Public Health Committee were certainly dealing with an impressive number of houses, but the relevant section 16 of the Public Health (Scotland) Act, 1867, was rather loose, and a proprietor could at least delay the closing of a tenement by taking the matter to Court. A need for more summary powers was obvious. Also lacking were the powers possessed by Glasgow and Dundee of strictly regulating the number of inhabitants in small houses in relation to the cubic capacity; this Dr. Littlejohn had taken note of in his 1865 Report.

That there was much to balance the happy picture of falling death rates is certainly the cumulative impression of the regular public health commentaries of Littlejohn and Gowans. That did not appear to be the impression on the contemporary readers. Their silence was perhaps natural over complaints by Gowans as to the inadequacy of powers for closing insanitary dwellings, when they were no doubt impressed by the work done by municipal agencies up to then and confident that the Public Health Committee would eventually secure the desired legislation, the niceties of which they were not familiar with. However, it was remarkable that public pressure on the Town Council, to hasten legislation on the lines suggested by Gowans, did not arise to any extent, as a result of the revelations of the potentially lethal drainage systems in their own homes. That Gowans should complain about public apathy towards the Public Health Committee's work was understandable.

1. See Appendix XV.
2. Section 16 of the Public Health (Scotland) Act set out that a house could be declared a nuisance and uninhabitable in respect of a certain number of points, the most important of which were defective structure, insufficiency of size, filthy condition. The final decision in these cases rested with the Sheriff; no set figure, for example, as to what precisely constituted insufficiency of size (overcrowding) existed (Scotsman, 29 July 1867, article).
3. ibid., 10 January 1877, reporting meeting of Town Council, 9 January 1877.
Though the general public appeared to be quite unaffected when warnings emanated from Gowans and Littlejohn, they were certainly not indifferent to matters affecting their sanitary well-being, especially when it was a case of opposing a particular action by a public authority or institution which appeared to be sanitary objectionable. When, in the winter of 1874-75, the Royal Infirmary managers let it be known that they intended to send the sewage of the new Infirmary in Lauriston Place into the local public sewer; the local ratepayers loudly expressed fears of infection spreading from the sewer to the houses along its line.\(^1\) The opposition to this scheme succeeded, some months later, in securing a compromise by which no sewage from the infectious diseases section of the Infirmary was to be sent into the sewer until it was disinfected to the satisfaction of the Town Council.\(^2\) Such loudly expressed ratepayers' fears were reminiscent of the pleas of the ratepayers by the side of the Water of Leith for an abatement of smells in the 1850's, but in the former case the ratepayers appeared to be better informed sanitorily. They were not merely complaining about smells as perceived by their olfactory senses; they were raising more sophisticated public health questions. The issue was purely sanitary; political questions were scarcely involved. The ratepayers' opposition could claim the support of most of the Town Councillors, clerics and a good section of medical opinion even if the elderly and distinguished doctor, Sir Robert Christison, was the chief defender of the Royal Infirmary managers' scheme.\(^3\)

Public sanitary consciousness, though most expressive when opposition to a scheme was involved, could direct itself into constructive channels. The middle-class public may not have responded to the

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1. Scotsman, 13 February 1875, reporting meeting of opponents to New Infirmary Drainage Scheme, 12 February 1877.
2. ibid., 2 March 1875, reporting meeting of Managers of Royal Infirmary, 1 March 1875.
3. ibid., 19 January 1875, reporting meeting of Court of Contributors to Royal Infirmary, 18 January 1875.
repeated pleas of Gowans and Littlejohn for better drainage arrangements in the direct manner which Gowans felt should be expected, but there is little doubt that they were alive to the importance of such a sanitary desideratum. Edinburgh, after all, was the city to lead the way in establishing a sanitary inspection system on private enterprise lines. This Sanitary Protection Association owed its inception in 1878 to the initiative of Professor Fleeming Jenkin rather than to any general movement of public opinion on the topic, but Jenkin was careful to mention that none he had met had failed to admit that questions of house drainage were of prime importance. Only 500 out of the population of approximately 200,000 had joined this association by 1880 whereby subscribers could have their houses tested thoroughly as to arrangements of drainage and sanitary fittings,¹ but a deliberate, not passive, interest in sanitary reform was involved by joining; many more must have been enthusiastic about the work of the Association who did not actually join.

A minority of public opinion had objected to the Association from the very beginning, since it was seen as going to conflict with the proper sphere of municipal action. Jenkin admitted this was the case, but did not see this as a reason for there being no Association; the Association could act as a stopgap until the proper principle of compulsory sanitary inspection was established.¹ However, the Association was still flourishing in the 1890's, by which time of course that desideratum had been reached.

The sanitary interests on the Town Council bore no grudges whatsoever against this body. Gowans admitted that this relieved the Public

¹. F. Jenkin, 'That is the best mode of amending the present Laws with reference to existing buildings, and also of improving their sanitary condition so as to render them more healthy, having due regard to economical considerations?,' Transactions of the National Association for the Promotion of Social Science (1880), 537-552.
Health Committee of much of their work, which was more than taken up
with looking after a teeming poor population in the Old Town, Dr.
Littlejohn enthusiastically joined the Association.  

If the middle-class public were concerned in a progressive sense
about their own sanitary interests, silent confidence in the work of
municipal agencies was such as to divorce themselves from any real active
concern about conditions in the Old Town (which still were far worse
than those in the rest of Edinburgh). Jenkin, alive to the magnitude
of the problems which still awaited the Public Health Committee in the
Old Town, offered his patrons the use of the Association's services to
obtain reports on the housing of the poor, but few indeed took advantage
of the offer. The patrons appeared to view their Association as con¬
cerned with their own sanitary interests in the New Town and in suburbia;
the task of attending to the problems of the Old Town should be left to
the Public Health Committee. Similarly, even though the general work
of the Committee had as much relevance to the New Town and to suburbia
as to the Old Town, the Committee's work tended to be regarded as
affecting the Old Town only, in the same way as the Improvement Trust
were solely concerned with the Old Town. Such an attitude was fostered
by the stress which Dr. Littlejohn's 1865 Report laid on conditions in
the Old Town, and by the fact that the publicised debate on sanitary

1. J. Cowans, "What is the best mode of amending the present laws with
preference to existing buildings and also of improving their sanitary
condition so as to render them more healthy, having due regard to
economical considerations?" loc. cit., 533

2. Scotsman, 20 February 1878, reporting speech by Professor F. Jenkin
to meeting of Literary Institute, 19 February 1878.

3. F. Jenkin, 'What is the best mode of amending the present laws with
reference to existing buildings, and also of improving their sanitary
condition so as to render them more healthy, having due regard to
economical considerations?,' Transactions of the National Association
for the Promotion of Social Science (1880), 544-545.
conditions at the time of Chamber's launching of the Improvement Scheme was confined to it. The development of the Sanitary Protection Association, a step away from, not towards pressure on the municipality for sanitary improvement, is an illustration of how the middle-class public did not feel involved at all by the work of the municipal sanitary agencies. Contact between the middle-class public and the Town Council, over sanitary matters, occurred only when they were incensed by action of the Town Council or wished the Town Council to protect them from any agency likely to harm their sanitary, political or financial interests. They did not feel concerned by Dr. Littlejohn's struggle with the medical profession (see pp. 197-9); when they failed to react to Gowans's and Littlejohn's strictures on the state of drainage in their own homes, they were not apathetic to the problem; instead, an extreme case of the attitude, that the Public Health Committee's work and warnings were admirable but hardly concerned them, was asserting itself.

Pressure for new sanitary legislation (to fill in the many publicised gaps the Public Health Committee were discovering) was so lacking among the public that it could only be expected to emanate from the Councillor, Gowans, who was directly concerned with operating the public health machinery. It is a feature of the placidity of the later 1870's that, throughout the entire period covered by this chapter, new sanitary legislation was under consideration and little impatience was expressed either by the public or by the bulk of the Town Councillors. It was in May 1874 that Gowans gave notice of a motion for a remit to the Lord Provost's Committee to consider amending the sanitary clauses of the Provisional Order, but it was not till the summer of 1879 that the Edinburgh Municipal and Police Act, embodying most of Gowans's desired

1. Scotsman, 27 May 1874, reporting meeting of Town Council, 26 May 1874.
sanitary provisions, became law. The generally placid temperament at this time over sanitary matters affecting the Town Council cannot explain the unnatural five-year gap between declaration of intent and achievement; when Gowans and Littlejohn felt they were struggling impatiently and ineffectively against forces slowing the production of legislation, such forces must be explained by administrative processes. Ideas of the requirements of public health might become more and more far-reaching in scope, but the creaking machinery of local government with regard to the preparation of legislative measures, remained the same.

Gowans definitely had sanitary legislation in mind at the outset; and so managed to impress its urgency on his colleagues in the sub-committee (to which the motion had been entrusted) that, a few months later, they decided to approach their M.P.s in an effort to get the desired sanitary provisions.¹ It was at this point that constitutional routine dictated that any new sanitary legislation would have to wait another year; Gowans became so impatient that he tried to see if the new Public Health (England) Act could be adapted to Scotland.²

Eventually, in the autumn of 1875, the Committee issued the clauses, which they felt should be introduced as part of a new Police Act as soon as possible. Dr. Littlejohn's most clamant requirement was met by a clause, very easily drafted, as to compulsory intimation of infectious diseases by the medical profession,³ there were also clauses as to the regulation of dairies;⁴ Gowans' gospel of house drainage arrangements was met at least a good bit of the way by regulations as to the safety of cisterns, sinks, baths, from sewage and sewer gas.⁵ The most far-

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¹. Lord Provost's Committee, Minutes, 27 May 1874.
². Scotsman, 24 March 1875, reporting meeting of Town Council, 23 March 1875.
³. ibid., 7 October 1875, publishing article on new Edinburgh Police Bill.
⁴. ibid., 8 October 1875, publishing article on new Edinburgh Police Bill.
⁵. ibid., 8 October 1875, publishing article on new Edinburgh Police Bill.
reaching clauses were those relating to insanitary dwellings: a certificate by the M.O.H. and Burgh Engineer of unfitness for habitation was sufficient to institute summary proceedings for their closure, not the long drawn out legal procedure of the Public Health (Scotland) Act. So as to come to grips with overcrowding, the Glasgow and Dundee system of "ticketing" small houses to regulate the precise amount of space per person and to set down a window as essential for any room used for sleeping in, was adopted. An attempt was made to remedy the lack of control over the general ventilation facilities of new houses in areas like Dalry by a clause setting down a minimum of space around new tenements.¹

These sanitary clauses were almost identical, except for adjustment of details, to the clauses in the 1879 Act. That they were not adopted by the Town Council in 1875 immediately after they had been formulated is an illustration of the undue caution with which the Town Council still viewed the production of sanitary legislation as with other types of legislation. The bulk of the Town Council were willing to allow the Public Health Committee a free hand in the execution of day-by-day sanitary work, but apparently felt that the Committee had to be curbed by the slowing effects of the lengthy deliberations of the Town Council as a whole, when it came to formulate legislation. There might have been substance in some of the demands of the Town Council for caution; the Councillors not on the Lord Provost's Committee had first seen the clauses only a week or two before;² within the previous three weeks, many of the more important clauses had been entirely altered. A very weak clause as to the closure of insanitary dwellings had only then been replaced by a suitably stringent one; an important clause as

¹Scotsman, 20 October 1875, publishing article on new Edinburgh Police Bill.
²Ibid., 19 October 1875, reporting meeting of Town Council, 18 October 1875.
to the ventilation of water closets was very mysteriously dropped.\(^1\)

However, it was usual for such arguments to be put whenever new legislation was under consideration; the complaints cited against this piece of legislation could easily have been remedied very quickly. There is far more substance in Lord Provost Falshaw's charge that the Town Council were shying away from doing anything new and big in the sphere of sanitary legislation, by the expedient of demanding a postponement of Parliamentary action.\(^2\)

The caution of the Town Council was reinforced when another question came to bulk much larger in this piece of legislation. This was the question of consolidation of legislation. In Edinburgh, as in other cities, the sum total of legislation in different Acts was so enormous that it had become almost unmanageable; that Edinburgh Town Council, like other municipalities, should be anxious to tidy up the unprecedented amount of legislation produced in the course of the 19th century, was hardly surprising. When, very shortly after the decision to postpone application for Parliamentary action, Bailie Tawse took the opportunity of moving that the sanitary clauses (to be eventually agreed upon) should be within the framework of consolidatory legislation and the Town Council agreed unanimously to his motion,\(^3\) such an attitude was obvious.

However, the emergence of the question of consolidation, in many ways inevitable, sowed the seeds for further delay in the production of sanitary legislation. The preparation of a consolidatory measure of legislation was bound to take some time, during which time the

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1. Scotsman, 7 October 1875, ibid., 8 October 1875, ibid., 20 October 1875, all issues publishing articles of New Edinburgh Police Bill.
2. ibid., 27 October 1875, reporting meeting of Town Council, 26 October 1875.
3. ibid., 17 November 1875, reporting meeting of Town Council, 16 November 1875.
sanitary clauses within the measure would have to wait. This was especially the case when the ruling Committee of the Town Council, the Lord Provost's Committee, regarded the principle of consolidation of legislation as bulking much larger than the principle of legislation for sanitary improvement. Thus, the history of the preparation of the bill for the next three years was governed by the implications of consolidatory legislation, even though the need for new sanitary legislation was urgent. Meetings of the Lord Provost's Committee and Sub Committees with the Town Clerk went on interminably; when eventually they were able to present the draft of a bill to the Council, it was for reasons irrelevant to public health that it was sent back to Committee for amendment. At last, in the autumn of 1878 the Council agreed to go ahead with putting it before Parliament, where it was passed in 1879.

Though public deputations occasionally waited upon the Council and though they were sometimes composed of men whom one knows to have taken an interest in sanitary improvement, their interest in the 1879 Bill was not due to any sanitary considerations, but due to social considerations like prostitution, Sabbath Observance, regulation of drinking houses. The only instances of voicing of outside opinion on the sanitary parts of the bill were obvious raising of objections by interested groups like builders and property owners. That their objections did not set off a public rally either in favour of or against the sanitary part of the bill, demonstrates the degree of public indifference. When the

1. Scotsman, 21 November 1877, reporting meeting of Town Council, 20 November 1877, ibid., 24 November 1877, reporting meeting of Town Council, 23 November 1877.

2. ibid., 17 October 1877, reporting meeting of Town Council, 16 October 1877.

3. ibid., 17 July 1878, reporting meeting of Town Council, 16 July 1878.

4. ibid., 9 January 1879, reporting meeting of Executive Committee of Edinburgh Master Builders Association, 7 January 1879.
Bill passed through the Select Committees of Parliament the only opposition came from a handful of owners of "irrigated meadows" over the question of legal rights to the sewage of drains; opposition was technical, not fundamental, and there never was any danger of the Bill being rejected because of their opposition.¹

Not surprisingly, the 1879 Act was to be looked on as a triumph of consolidatory legislation, rather than as a notable sanitary measure (as was, for example, the 1848 Local Police Act). When the draft was "running the gauntlet" of scrutiny by the Town Council clause by clause, the sanitary clauses took up the least time and were adjusted only in a minor way. The 1875 draft of sanitary clauses provided a firm basis. The only differences between that and the 1877 draft were that the powers of sanitary supervision of the Dean of Guild Court over new buildings were set down much more definitely; clauses providing for the proper ventilation of water closets were re-introduced. Clauses as to the regulation of cisterns were made slightly less stringent, the important clause as to the "ticketing" of small houses was tightened up.² The very important clauses, as to the procedure for dealing with insanitary dwellings and as to the intimation of infectious diseases by medical men, remained as before.※

Gowans remarked the following year that much legislation, generally, was imperfect because it was simply in response to militant public opinion raised up in times of scare like a cholera epidemic.³ This observation

¹ Scotsman, 14 May 1879, 15 May 1879, 16 May 1879, reporting examination of Edinburgh Municipal and Police Bill before Select Committee of House of Commons, 13 May 1879, 14 May 1879, 15 May 1879.
² J. Gowans, 'What is the best mode of amending the present laws with reference to existing buildings, and also of improving their sanitary condition so as to render them more healthy, having due regard to economical considerations?,' Transactions of the National Association for the Promotion of Social Science, (1880), 529-537.
³ J. Gowans, 'What is the best mode of amending the present laws with reference to existing buildings, and also of improving their sanitary condition so as to render them more healthy, having due regard to economical considerations?,' loc.cit., 533.

※ For annual table of returns of infectious disease, see Vol. 2, pp. 12-2, Appendix XXIII.
could scarcely be applied to the 1879 Act, for its production took place during a period of general non-involvement, on the part of the public, in the Town Council's sanitary work, especially in their preparation of sanitary legislation; and vis inertia on the part of the Town Council to the urgent need for new sanitary legislation. As such, it could get the benefit of more sober reflection than if it was a result of panic; but sober reflection went to unnecessary lengths; at least four years, involving the sacrifice of countless healthy lives, had been wasted. The 1879 Act marked a considerable advance in sanitary legislation and helps to explain, in part at least, the further drop in the death rate in the 1880's; but there were obvious limitations in the Act.

Gowans by no means achieved all he could have wished. He remarked that the lower limit enforced on the cubic space of small houses was lower than what the Government required in poorhouses and prisons. Many clauses about arrangements for drainage and sanitary fittings related to new houses, not existing ones. Possessing powers was one thing; using them was another. The Master of Works was responsible for thoroughly looking at the sanitary arrangements of new buildings, but he could not enforce his ideas on the Dean of Guild Court.

The best evidence of the inadequacies of the 1879 legislation is that Gowans continued to wage his crusade against foul sanitary arrangements and he made a name for himself as Lord Dean of Guild. He became so in 1885 and found that the Court had been lax in enforcing proper sanitary arrangements, and promptly enforced them as required.

The overcrowding regulations were hardly enforced by the Town Council. Though Dr. Littlejohn's long period of frustration was now

1. See Appendix XVII.
2. J. Gowans, "What is the best mode of amending the present laws with reference to existing buildings, and also of improving their sanitary condition so as to render them more healthy, having due regard to economical considerations?" Transactions of the National Association for the Promotion of Social Science, (1880), 529-537.
over and he had the benefit of the clause as to compulsory intimation, 
scarlet fever, measles, hooping cough, typhoid epidemics continued 
despite his expectations.

As the 19th. century wore to its close and sanitary legislation 
(because of imperfections discovered in existing legislation) grew more 
and more radical, Dr. Littlejohn, when asked to give his views, revealed 
he was strongly in favour of such measures or even that they did not go 
far enough and that he had been privately pressing them on the Town 
Council for a long time.¹ Despite his public reticence, it is there¬
fore clear that he could hardly be completely satisfied with the 1879 
Act.

There were other deep-seated problems which sanitary legislation 
could scarcely deal with. In addition to preaching to the middle-class 
public with little effect about the need for them to see to the drainage 
of their homes, Littlejohn and Gowans had preached to the poorer classes 
with little effect about the need for them to observe basic public health 
precautions (see p.196 ). The failure of the sermons to reach the poor 
was far more serious. The teachings of the Public Health Committee were 
of more relevance to the poor (see p.205 ); besides the nature of the 
barriers towards an observance by the poor of Littlejohn's teachings 
was such as could be only partly overcome by sanitary legislation. The 
efficiency of the public health organisation of the Town Council, coupled 
with refinements in sanitary legislation, could achieve considerable 
 improvement in the basic public health statistics in the short term, but 
there were more long-term barriers, in the shape of the educational and 
financial conditions among the poorer inhabitants, to the efficacy of a

¹. That was so in the case of the Improvement Schemes carried out by 
the Town Council at the end of the 19th. century (Scotsman, 26 
February 1900, reporting evidence of Littlejohn to Inquiry on behalf 
of Secretary of State for Scotland, with reference to Improvement 
Scheme of Edinburgh Corporation, 24 February 1900).
public health organisation. In this period Mr. Littlejohn consistently explained away bad winter mortality figures by referring to bad weather, bad weather causing a lack of employment. Littlejohn and Gowans were far enough removed in point of time from the teachings of W.P. Alison as to look on poverty as a fact of life which, moreover, was long since divorced from applied public health. Meanwhile, the time, when it was recognised that the Town Council had a direct part to play in promoting adult public health education, lay far in the future.

Problems caused by lack of education and poverty had to be left to associations like the Association for Improving the Condition of the Poor, but associations like these were dwindling in numbers and financial support. Previously, the problem had been that the public had been concerned with educating the poor as to the value of health among other things when the environmental conditions made this impossible. Now the problem was that the public left all to the Town Council in improving conditions and did not realise that that would be of limited benefit unless the poor were properly educated. With the Town Council now established as the proper body to deal with the conditions in the Old Town, the unthinking payment of compulsory low rates, rather than the payment of voluntary subscriptions, based on fear and conscience, to voluntary societies, discouraged public involvement.

Ministers (noted in Edinburgh for their great concern for the conditions of the poor) had, like the rest of the general public, been silent by not directing public attention to conditions in the Old Town in the period covered by this chapter. They felt they could afford to be silent, having in a short time seen such a dramatic destruction of the worst plague spots of the Old Town under the Improvement Scheme.

1. Scotsman, 12 March 1879, reporting meeting of Town Council, 11 March 1879.
However, a more insidious process, for which concern was loudly expressed in the early 1870's, was at work. The problem was that of supply and demand of housing and its recognition was to reach a climax in the 1890's. Already in 1880, a minister was complaining that legislation was of no use in improving the conditions of the very poor, because closure of insanitary dwellings simply led to overcrowding, with all its attendant problems, in neighbouring houses.¹

However, at this time, the influence of scarcity of housing like that of poverty or lack of education on public health statistics was masked by a recognition that public health statistics were indubitably improving. In later decades, such financial and educational barriers were to set more conspicuous and frustrating limits when the degree of basic improvement in mortality statistics became less marked; and, of course, this was a problem by no means confined to Edinburgh. 1879 can in fact be seen as a terminal date of the brief heady period of complacency about public health conditions for, immediately after the passing of the 1879 Act, but for no direct reason to do with the Act, public concern about conditions in the Old Town started to re-emerge. This began as a trickle with the establishment of Health Lectures in 1880 (see Chapter 10, p. 223), but by the 1890's had developed into a flood. While in the 1870's both the Town Council and the public had faith in what the Chambers Improvement Scheme, the work of the Public Health Committee, and public health legislation could do for public health statistics and general sanitary conditions; the passing of the 1870's into the 1880's only served to demonstrate the limits of what had been achieved in the 1870's.

¹ T. Smith, Transactions of the National Association for the Promotion of Social Science (1880), 562.
CHAPTER 10

STRENGTHS AND WEAKNESSES OF MUNICIPAL SANITARY ADMINISTRATION:
REVIVAL OF SANITARY CONSCIOUSNESS, 1879-1891.

There might have been a greater recognition of the presence of
intractable problems limiting improvements in general public health
standards in the 1880's, as compared with the 1870's (see Chapter 9,
p. 215), but such a recognition was still, to a large extent, masked
by the further improvement in public health statistics and by the
ever-expanding energy of the Public Health Committee.

In no year after 1880 did the death rate exceed 20/1000. The
decade showed an average annual improvement of 4.5 over the 1870's.
The zymotic diseases death rate did not drop with the same constancy;
scarlet fever and measles epidemics could play havoc with the gradual
trend. However, a gradual trend there certainly was. In the five
years, 1885-89, the zymotic diseases death rate was approximately 2/3
of that in the years, 1875-79. Though the phthisis death rate was not
as yet associated with public health, its gradual fall (before any proper
treatment for it was administered) is evidence of improving sanitary
conditions. In the quinquenniums 1875-79, 1880-84, 1885-89 respect¬
ively the average annual death rates/1000 of population were 2.36, 2.08,
1.93.

Typhus, for so long endemic, was now specially noted by the
Public Health Committee whenever it arose. In many years there were
fewer than ten deaths in the city; very rarely did the annual deaths
exceed twenty. The number of typhoid and diphtheria deaths remained

1. Scotsman, 21 October 1896, publishing Report by Bailie Pollard, on
behalf of Public Health Committee, for year ending 15 May 1896.
2. In 1885-89, the zymotic disease death rate/1000 of population/annum
was 1.59. In 1874-79, it had been 2.379. (ibid., 4 October 1898
publishing article on consumption).
3. Report of the Public Health Committee on Prevention of Consumption,
(Edinburgh, 1900), pp.59-61.
fairly constant, but the constant increase in population has to be taken into account. The number of scarlet fever, measles, and hooping-cough deaths was fairly high in epidemic years, but in non-epidemic years the number of deaths was getting very much lower.\(^1\) Of course there were corresponding drops in the death rates of other large towns at this period. The average annual phthisis death rate in Glasgow, for example, fell from 3.66/1000 in the quinquennium 1875-79 to 3.07/1000 from 1880-84 and to 2.64/1000 from 1885-89.\(^2\) However, the death rates of nearly all large towns were far greater than Edinburgh's, and there was a conscious pride felt by many that Edinburgh was the healthiest city in the kingdom.\(^3\) If the Improvement Scheme was cited in the late 70's and early 80's as the main cause of improved statistics in the public health field, the success of the hard won clause in the 1879 Act as to intimation of infectious diseases was also extensively cited in the first half of the 1880's,\(^4\) despite the apparent indifference of the Edinburgh public at the time of Dr. Littlejohn's struggle to obtain the clause. It failed to arrest many epidemics, but in non-epidemic years the number of cases was kept to a minimum. In this matter, Edinburgh gave a lead to Glasgow\(^5\) and Liverpool\(^6\) Corporations who took up the clause in 1882. This of course was work directly affecting the M.O.H. and was essential for the proper administration of public health; however, the environmental work of the Public Health

\(^1\) In 1885-89, the zymotic disease death rate/1000 of population/annum was 1.59. In 1874-79, it had been 2.379. (ibid., 4 October 1898, publishing article on consumption).


\(^3\) Scotsman, 19 November 1883, editorial.

\(^4\) ibid., 25 January 1882, reporting meeting of Town Council, 24 January 1882.

\(^5\) ibid., 13 December 1882, reporting meeting of Glasgow Town Council, 12 December 1882.

\(^6\) ibid., 6 October 1882, reporting meeting of deputation of Liverpool medical profession with Health Committee of Liverpool Corporation.

* For vital health statistics during Dr. Littlejohn’s term of office, see Vol. 2, pp. 1-17, Appendix XXIII; and accompanying graphs.
Committee lay at the foundation of sanitary improvement; though in its execution the Burgh Engineer was far more prominent than the M.O.H., it very much affected Dr. Littlejohn's statistics in the long run and was a subject of unflagging interest to him. If, by 1880 the Public Health Committee was firmly established in the public mind, by 1890 it was difficult to imagine the Town Council without the Public Health Committee. Its success in its earlier years owed much to the energy of its Convener, Cowans; yet when he was succeeded by the competent, but uninspiring Clark in 1881, there was no slackening in the Committee's tempo. As in its earlier years, its most prominent work was that of closing insanitary dwellings; after the passing of the 1879 Police Act which made the machinery far simpler, liberal use was made of the relevant clause (see Chapter 9, p. 208). This power was operated in a more sophisticated fashion after 1885, with the development of Open Court sittings exclusively devoted to making owners of insanitary tenements show cause why they should not be closed. So simple and effective was the procedure that a deputation came from Glasgow specially to see it at work. 1 Impressive statistics, as to the closure of insanitary dwellings for the year, were contained in the annual Reports of the Burgh Engineer, and in the annual Reviews of the Convener of the Public Health Committee. In the five years from 1885-90, 1,606 houses were closed as uninhabitable. 2 The fact that the Committee knew they had to act on a large scale is shown by the fact that the Burgh Engineer and his staff were authorised to make a comprehensive survey of 4,600 houses scattered over the Old Town in 1885 and a re-survey (combined with a survey of 2,000 other houses) in 1887. The first

1. Scotsman, 21 December 1888, reporting meeting of Glasgow public health deputation in Edinburgh, 20 December 1888.
2. ibid., 27 September 1890, reporting address of Cooper (Burgh Engineer) to meeting of Society of Municipal and Sanitary Engineers, 26 September 1890.
survey revealed that much was to be desired; nearly 10% of the houses were uninhabitable, but the second survey revealed a considerable improvement; only 2% of the houses were uninhabitable. The work of the Public Health Committee from year to year is thus clearly demonstrated.

It is easy to forget the role of other Committees in sanitary matters. However, the Streets and Buildings Committee still had large drainage works, the laying on of water fittings to provide water supply, of water closets within its province. In the five years from the autumn of 1885 to the autumn of 1890, water closets were introduced into 1,100 tenements.

By 1880, two stages in the municipal administration of sanitary police: organised environmental work to lessen the chances of disease, intimating of infectious disease when it broke out: were complete. The third stage: that of treating infectious disease (so far as hospital accommodation permitted) was completed by 1885. Of course Edinburgh could scarcely claim to be a pioneer, Glasgow having exercised such municipal responsibility for close on twenty years, and the creed of public health thinking, that the municipality should beat fever as an essential part of sanitary police, was now very well established. However, this step of the Edinburgh Town Council, belated as it was, enlarged the dimensions of the Public Health Committee's work considerably.

1. 2,945 of the 4,600 houses inspected were seriously out of repair; 1,638 were without water supply, 3,388 (73.8%) lacked a water closet. (ibid., 27 October 1885, publishing report of Burgh Engineer for year ended 30 September 1885).

2. 499 of the 6,425 houses inspected were seriously out of repair; 615 lacked water supply, 1,976 lacked a water closet (ibid., 6 April 1887, reporting meeting of Public Health Committee, 5 April 1887).

3. Streets and Buildings Committee, Minutes, 1885-1887.

4. Scotsman, 27 September 1890, reporting address of Cooper (Burgh Engineer) to meeting of Society of Municipal and Sanitary Engineers, 26 September 1890.
Not only were more things being done than ever before to prevent and treat infectious disease, but the public were also still more fully informed than ever before of the extent of it. The working of the legislation as to compulsory intimation (of infectious disease) meant that the local press could publish not only the number of deaths from particular diseases but also the number of intimations of these diseases month by month, quarter by quarter, year by year, together with the distribution of the diseases in the Old and New Towns and the Southern Districts. Epidemics were freely commented upon both as to the number affected and as to the investigations Dr. Littlejohn made into the origins of these epidemics; hitherto such epidemics had been accepted as things which one had to expect periodically.

After 1885 this information was amplified by regular returns of the number of patients suffering from various diseases in the City Hospital. The numbers were only a small proportion of the number suffering from the commoner infectious diseases, but were a reliable proportional index during epidemics; on the rare occasions when the serious diseases of typhus and smallpox claimed victims, the returns were an accurate guide of the number of cases and reassured the public that the number was being effectively kept to a minimum.

The extension in scope of sanitary administration was to be expected after it had been properly organised in the early 1870's; if, at the general organisational level, Edinburgh had been following other cities, by now, some features of its public health organisation were providing a model for other municipal corporations to follow. Edinburgh also had its particular guidelines as a reference point for so many branches of public health administration: namely the 1865 Report of Dr. Littlejohn. Though the voices and writings of the extrovert Cooper as Burgh Engineer, and the equally extrovert Dean of Guild Gowans and
Russell as Conveners of the Public Health Committee were most prominent, the imprint of the retiring Dr. Littlejohn can be seen in so much of the action of the Public Health Committee and its sanitary officials.

Despite the steady advances outlined, there can be no doubt that the quiescent public sanitary opinion of the later 1870's was giving way to a mood of greater concern in the 1880's which was to reach a climax in the 1890's. Both through the Town Council and through various voluntary societies, there was a sanitary conscience about the condition of housing of so many and the condition of so many of the people themselves. Within the Council such concern was seen in their easy acceptance of a motion by Gowans for a breakdown of death rates into wards and rentals of houses, the consequent attention focussed on St. Giles' Ward; the remit given to the Burgh Engineer to make a thorough report of common lodging houses. This was partly the local expression of a national feeling; most large municipal authorities in Britain were in a mood of self-searching at this period, as can be seen by the plethora of sanitary legislation culminating in the Housing of the Working Classes Act, 1890.

While the public sanitary mood of the 1870's is best illustrated by the setting up of the Sanitary Protection Association which was, to all intents and purposes, for the middle-classes, the change of mood by the 1880's is illustrated by the fact, that though the Sanitary Protection Association was still flourishing, a number of voluntary sanitary bodies, set up expressly for the poorer classes, had come into being. Most

2. The relative positions of various Wards in the monthly, half-yearly and annual death rates could vary a great deal, but St. Giles was consistently the Ward with the highest death rate. (Scotsman, 16 January 1889, reporting meeting of Public Health Committee, 15 January 1889; ibid., 29 January 1890, reporting meeting of Public Health Committee, 26 January 1890; ibid., 11 February 1891, reporting meeting of Public Health Committee, 10 February 1891).
3. Public Health Committee, Minutes, 10 July 1888.
prominent was the Social and Sanitary Society. Composed of an admixture of clergymen, women, Town Councillors and others, it in large part echoed the Association for Improving the Condition of the Poor in its concern for and direct contact with the physical and moral welfare of the lower strata of society. Its activities reflected the maturing of ideas about public health, it being less evangelical and more businesslike in nature and far more finely organised (as seen by the conciseness and regularity of the statistics produced). Having a sophisticated committee structure,¹ and being concerned with visiting so as to examine the cleaning, lighting, whitewashing, condition of water cisterns and general sanitation of various areas, and with revisiting the most notorious areas to check what improvements had taken place; this Society, like the Sanitary Protection Association, was the first of its particular kind in Britain and was, to all intents and purposes, a twin of the Public Health Committee.² With its committee structure and areas of inspection organised on an ecclesiastical basis, this Society was unique.³

1. There were Sub Committees of visitors who submitted reports to the General Executive Committee. There was a committee of ladies which also organised a system of visitors for collection of information. The General Executive Committee met to analyse the reports, and prepare them for submission to the Town Council (Royal Commission on the Housing of the Working Classes. Vol.V. Minutes of Evidence, Appendix, and Index as to Scotland, P.P.s.1884-85,XXXI,p.42,Q's. 19276-19283).

2. From 1885 to 1891, 54 reports on various areas were presented to the Town Council. The areas most often reported upon were the ecclesiastical areas of St. Giles, Tron, Free High Church. Using the divisions in Dr. Littlejohn's 1865 Report (see Chapter 4), these were the districts of Tron and part of St. Giles. Using municipal Ward divisions, these all lay within St. Giles' Ward (Public Health Committee, Minutes, 1885-1891).

3. The office-bearers of the Society were mainly clergymen. Sub Committees were usually formed of numbers of specific congregations. Similar Societies were to be in Leeds and Sheffield, but they did not have the same ecclesiastical bias in their organisation (Scotsman, 21 November 1892, publishing Annual Report of Social and Sanitary Society).
Closely associated with it was the Social Union, founded in 1887, whose membership considerably overlapped with the Social and Sanitary Society. While the Social and Sanitary Society examined the housing of the poor, the Social Union attempted to actually improve the housing, and directly manage it, so as to achieve the same purpose of improvement of the condition of the poor. Their procedure was normally to buy worn-out buildings, put them in repair and let them to suitable tenants. Though the Union and the Social and Sanitary Society were so inter-linked, the Union, unlike the Society, was fairly typical of such housing societies at this time. The Social Union, in name, was however, the first in the country and was soon imitated in other towns.

An even closer associate of the Social Union was the Edinburgh Association for Improving the Dwellings of the Poor, founded in 1885. Voluntary societies for building houses in this period were of course not peculiar to Edinburgh. Also, they laid greater emphasis on building houses for the moderately poor than for the artisans. While the Social Union took over old tenements, the above Association aimed to concentrate on building new improved ones. In the span of this chapter, they built a model tenement, containing forty houses in West Port.

On a different plane, the Health Association, taking its origins in 1880, did not aim at direct contact with the poor, but at propaganda which it was hoped would make "direct contact" societies superfluous.

1. Scotsman, 29 July 1887, reporting meeting of Edinburgh Association for Providing Improved Dwellings for the Poor, 28 July 1887.
2. ibid., 23 November 1892, reporting Annual General Meeting of Social Union, 22 November 1892.
3. ibid., 21 April 1885, reporting conference for considering housing of the poor and for forming an Association for Providing Improved Dwellings, 20 April 1885.
4. ibid., 7 October 1887, article.
5. ibid., 6 October 1880, reporting proposed lectures on sanitary questions. The movement began as a private society in the hands of Mrs. Trayner; largely owing to her pressure, it was expanded into the Health Association (ibid., 22 October 1881).
Like the other voluntary societies mentioned, this association was composed of a fair proportion of women (it being the brainchild of Mrs. Frances Trayner), some clergymen, some Town Councillors. However, the medical group within the Association was far more numerous, since the association depended on medical and public health experts for its essence, that being the delivery of lectures by acknowledged experts on the laws of health to those of the working classes who came along, and the issuing of leaflets designed to draw their attention to the fundamentals of healthy living.¹

These health lectures were by no means peculiar to Edinburgh; though the aforementioned societies, especially the Social and Sanitary Society, all had their peculiar local characteristics, the general emergence of these societies in the 1880's was a reflection of national trends. But none of these societies formed part of any national body; they arose spontaneously in different cities; their particular activities in particular cities arose because of local phenomena.

Despite the expanded scope in the 1880's, there were still considerable gaps in the public health machinery; in that respect the emergence of such societies does not strike the reader as surprising. Despite the reduction in the general mortality, child mortality persisted at a high level. There appeared to be a gross lack of interest on the part of the Town Council, its sanitary officials, and the general public to the scourge, tuberculosis, which carried off 1/7 of mankind. Despite the significance of Koch's isolation of the tubercle bacillus in March 1882 which confirmed that tuberculosis was infectious and thus a matter for sanitary police, more than a year passed before there was

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¹ Lectures were delivered on Saturday evenings during the months from October to February. There was, however, an interval of 3 years (1884-87) when the Association fell into abeyance.
the slightest sign of any lessons being drawn from it. Admittedly, the Victoria Dispensary for Consumption, founded in 1887 by Dr. Robert Philp and which had treated a total of 1,290 cases by 1890, represented the first organised effort in Scotland to do something about tuberculosis. However, this was a private institution and in 1890, when its managers were issuing an appeal for funds for a proper hospital, the appeal was for the most part ignored. The fact that the Dispensary was a private institution, reflected the short-sightedness of the Town Council; for in 1887 they unanimously passed it over as a candidate to mark the Queen's Jubilee.

Only Dr. Philp, of the Edinburgh medical profession, made any public profession of the need to take proper precautions against tuberculosis as an infectious disease. Most informed public opinion was far more interested in possible cures for tuberculosis by vaccination - hopes that were to be proved fruitless - and took that conclusion so much to heart from Koch's discovery that they forgot the other more definite lesson of the discovery.

More general interest was focussed on bovine tuberculosis and the consequent dangers from milk and meat; a Privy Council was looking into the whole question. As medical officer of the Board of Supervision and as M.O.H. for Edinburgh, Dr. Littlejohn felt strongly that tuberculosis should be included as one of the cattle diseases affected by the Contagious Diseases (Animals) Act, 1878, which would thus make cattle liable for seizure at slaughter-houses; he also drew the lesson of the infectious nature of tuberculosis - in cattle at any rate - in his demands that improved sanitation should be enforced in byres by means of the Dairies, Cowsheds and Milkshops Order, 1885.

1. Scotsman, 7 May 1883, editorial.
2. ibid., 8 December 1890, reporting lecture by Dr. R.W. Philp to meeting of Edinburgh Health Society, 6 December 1890.
3. ibid., 8 June 1887, reporting meeting of Town Council, 7 June 1887.
4. ibid., 23 May 1888, publishing report by Dr. Littlejohn on bovine tuberculosis, dated 30 March 1888.
It is unfair to blame the Town Council for not taking an initiative in dealing with tuberculosis in its more important human disease context, for hardly any Town Councils in Britain were doing so at this time, and they could hardly be expected to do so when they were given no effective medical lead. Dr. Littlejohn must have been aware of the lessons to be drawn from Koch's discovery (when one considers his insistence on improved sanitation in cattle sheds), but he felt too constrained to preach the lessons of human tuberculosis that he could have preached with so much authority (preaching as a M.O.H.).

However none of the aforementioned Societies criticised any public bodies or officials for being slow to take any positive measures against tuberculosis, for their attitude to it was the same. None of them, except possibly the Health Society, could be classed as medical societies; they were concerned with social and environmental conditions, as seen locally, not with a national (and, as yet, esoteric) question like tuberculosis.

If there were good reasons for not expecting the Town Council to be energetic in dealing with the problem of tuberculosis, that qualification did not apply to the shortcomings of the sanitary legislation they had at hand and their failure to apply some of their more useful sanitary powers effectively. The 1879 Act made for a considerable advance in sanitary legislation; yet important parts lay dormant. The clauses, which Gowans had been anxious to obtain, as to the sanitary requirements of new buildings on points of external air space, drainage, position of water closets, and of the need for certification by a sanitary official, the Master of Works, were very laxly enforced by the Dean of Guild Court (and formed the subject of occasional protest

1. All through his career as M.O.H., Dr. Littlejohn tended to be reluctant to take a line on any question, medical or otherwise, which had not been widely discussed.

2. The Burgh Engineer was automatically appointed Master of Works.

3. From November 1879 to June 1882, 153 out of 171 tenements had not been certified by the Master of Works as fit for habitation before occupation. (Scotsman, 30 August 1882, reporting meeting of Town Council, 29 August 1882).
by a few members of the Town Council at some Town Council meetings) till Gowans himself became Dean of Guild in 1885; not till 1889 was he able to say that the builders took the regulations of the 1879 Act seriously. Not only was there thus room for concern about drainage arrangements in new houses; the unsatisfactory drainage arrangements in existing houses were physically impossible for the machinery of legislation to cope with in a reasonable time; the Burgh Engineer could inspect drains on the request of the householders or he could inspect drains which he had reason to suspect were faulty. However, with a staff of four inspectors, the amount of work he could overtake was negligible. Closely connected with drainage: in fact, an integral part of it: was the arrangement of water cisterns. However, it was 1889 before the Town Council through the Public Health Committee, used its powers in section 205 of the 1879 Act to make regulations as to the inspection of waste pipes and the periodical cleaning of cisterns.

If the Town Council were lax in using some of the regulations they were entrusted with, they absolutely ignored others. A prominent example of that was the almost total failure to carry out the clauses in the 1879 Act as to closing overcrowded ("ticketed") houses. This was not because overcrowded houses did not exist; Dr. Littlejohn as good as admitted there were a great number in his evidence to the Dilke Commission; a survey of St. Giles' Ward in 1889 revealed that 375 out of 4,454 houses inspected came into the category of overcrowded.

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1. In the year 1882-83, 134 such inspections were made; in only 16 of these cases were there no defects. (ibid., 24 October 1883; publishing Annual Report of Burgh Engineer for year 1882-83).
2. The Burgh Engineer had laid proposed regulations for water cisterns before the Public Health Committee in 1885, but the matter dropped until 1889. (ibid., 18 June 1889, publishing memorial of Social and Sanitary Society, as presented to meeting of Town Council, 18 June 1889).
3. These were houses with a cubic air space of 300 cubic feet or less per inhabitant.
5. Report by the Burgh Engineer on the Sanitary Condition of St. Giles' Ward, as Ascertained by a House-to-House Survey (Edinburgh, 1889),p.3.
Though the Town Council were possessed of more sanitary legislation than they cared to use properly, in a number of ways it was obvious they needed more. Prominent among these legislative gaps was that of sub-division of dwellings. There was no surer way of creating a slum than by dividing an old, moderately respectable, dwelling into a multiplicity of smaller dwellings for the not so respectable; and this was something that went on constantly. Yet the Dean of Guild Court had no control over this, this being a matter of internal alterations.

In governing public health conditions, water, as the performer of essential sanitary tasks, is of twin importance with the houses one has to live in. It will be recalled that 1879 marked a watershed, in that the water from the Moorfoots was now available (this being also the year of the passing of the Police Act). The question of the sufficiency of the water supply vanished as an item of sanitary concern; yet by the later 1880's the minute book of the Streets and Buildings Committee began to show, in ever-increasing frequency, references to shortages of water; and the short-sightedness of the opposition to the St. Mary's Loch Scheme in 1871 (see Chapter 8) started to expose itself.

There were also some appalling legislative gaps in matters where the connection with public health was more direct. At least two scarlet fever and one typhoid epidemic in this period were conclusively shown to have been caused by contaminated milk from dairies outwith the city. Though the 1879 Act was satisfactory in ensuring that intra-mural dairies did not cause such epidemics,¹ the powers of the M.O.H. over extra-mural dairies were very weak indeed.² Though, they were never specifically cited as a cause of epidemics, the sanitary conditions

1. Scotsman, 8 October 1875, publishing article on new Edinburgh Police Bill.
2. ibid., 8 February 1882, reporting meeting of Town Council, 7 February 1882.
of the retail milk shops (with such a large proportion of them concentrated in the Old Town) were a constant anxiety to Dr. Littlejohn. ¹

Even after the passing of the general legislative measure of the Dairies, Cowsheds and Milkshops Order in 1885, four years were to pass before any regulations were seriously considered in Edinburgh, and even then they were not effectively applied till well into the 1890's.

In addition to the shortcomings of sanitary legislation and the shortcomings of the Town Council with regard to the operating of sanitary legislation (the *vis inertia* being most glaringly displayed in their inaction over administering legislation designed to deal with overcrowding of houses), other features of their activities showed that this traditional *vis inertia* persisted, especially when it came to working out new ideas. The significance of the Town Council taking over the City Hospital has been mentioned; yet the Council can hardly claim any glory. It was only after countless Annual General Meetings of the Infirmary managers had witnessed fruitless pleas on the Town Council to take a proper view of their responsibilities for treating infectious diseases (like most other Corporations in large cities), that Lord Shand (on the part of the Infirmary managers) impatiently forced the issue on the Council in 1885 by simply announcing that the Infirmary would take no more infectious diseases cases. ²

For the everyday work of treating common infectious diseases, the Town

1. The hygienically unsuitable location of the milk shops is illustrated by the fact that, of the 495 milkshops in the city, 278 lay in the Old Town. (Public Health Committee, Minutes, 1 April 1884).

2. Scotsman, 28 February 1885, reporting meeting of Managers of Royal Infirmary, 27 February 1885.
Council had shown itself to have no particular desire. Some of the older generation on the Town Council, like Harrison, the current Lord Provost, felt strongly that the Infirmary was the traditional and proper place for treating infectious disease; however, the attitude of the majority of the Town Councillors was simply that of being hidebound by a fortuitous agreement that the Infirmary had to provide 74 fever beds, and unprepared to contemplate any change in the status quo.

The short-sightedness of the Town's attitude, up to 1885, was to be demonstrated in retrospect not long after they took over the City Fever Hospital. There was suitable accommodation for only a total of 133, and at an early stage in the City Hospital's history, the Convener of the Public Health Committee, Bailie Russell, admitted there was very little space left for dealing with epidemics. That was to be shortly shown when a severe scarlet fever epidemic meant that in March 1887, the Hospital somehow had to accommodate 262. Despite the consciousness that the Hospital was inadequate, despite the way Dr. Littlejohn felt that the success of the 1879 clause as to compulsory intimation of infectious disease was hampered by inadequate hospital accommodation, no serious thought was given to extending the City Hospital till the 1880's had passed into the 1890's.

1. In 1884, the Town Council fitted out part of the old Royal Infirmary (the new Royal Infirmary in Lauriston Place having been opened in 1879) for the more serious infectious diseases and for special epidemics, but this step was merely an extension of the responsibilities for severe epidemics that the Council had been undertaking since 1870 in the old Canongate Poorhouse.
2. Scotsman, 20 January 1885, reporting Annual General Meeting of Committee of Contributors to Royal Infirmary, 19 January 1885.
3. ibid., 1 April 1875, reporting meeting of Town Council, 31 March 1875.
4. ibid., 30 June 1886, reporting meeting of Town Council, 29 June 1886.
5. ibid., 16 March 1887, reporting meeting of Town Council, 15 March 1887.
6. ibid., 5 March 1881, reporting joint meeting of Lord Provost's Committee and Public Health Committee, 4 March 1881.
Slowness and indecision were also exhibited in the attitude of the Council towards baths and wash-houses for the poor. This was something that Glasgow and Dundee held a lead over Edinburgh in, and was moreover something which Dr. Littlejohn strongly felt to be a sanitary necessity.\(^1\) Motions, to promote such desirable institutions, came before the Council from year to year from 1877 to 1890; strong and valid reasons were repeatedly given as to their desirability; yet the majority of the Council, though not hostile, adopted their traditional habit of seeming indifference to such a proposal, would push the matter on to a Committee who, after an interminable period of deliberation, would eventually give some obscure reason for not proceeding with the proposal at all. Not till 1890 was it eventually agreed to go ahead with baths and wash-houses in St. Giles' Ward.\(^2\)

Though the Public Health Committee were, at all times, extremely efficient in executing the everyday duties allotted to them, the machinery for executing such duties was often dependent upon the acquisition by the Town Council of the necessary legislative powers or upon the initiative of the Town Council in granting them the powers. In many cases, the Town Council were in no hurry to do so.

The various aforementioned voluntary Societies sometimes reminded the Town Council of some (but by no means all) of their omissions in sanitary administration. The most vocal Society was the Social and Sanitary Society, who presented a fairly comprehensive memorial to the Council in 1889 about things which demanded more attention.\(^3\) However,


the attitude of this Society vis-a-vis the Town Council was not basically one of complaint on one hand and indifference on the other. After all, a fair proportion of Town Councillors were associated with this Society. The frequent reports sent by the Society to the Town Council were not complaints as such; they provided information which the Society took pains to point out repeatedly was being acted upon by the Council. On their part, the Council acknowledged their gratitude to the Society, for providing them with this information! 1

Though the Public Health Committee and its sanitary officials were conscientious, at least in proceeding with the closure of insanitary dwellings, that produced its own problems; the further the Burgh Engineer (as the officer directly in charge) dealt with insanitary dwellings, the more he realised the gargantuan proportions of the task that lay before him with his handful of inspectors, and also of the need for a vast quantity of information. The existence of such a Society, with numerous and active Visiting Committees, was an unmitigated boon for him.

In earlier chapters it has been suggested that, despite any pressure of public opinion, the machinery of the Town Council continued regardless of any such external phenomena. However, the Social and Sanitary Society found such a ready response from the Council simply because they were regarded as part of the municipal machinery of slum inspection.

Nevertheless, in 1884 the Social and Sanitary Society was not formed so as to give a helping hand to the M.O.H. and Burgh Engineer; the formation of it and other Societies was an expression of a consciousness far more fundamental than any missing pieces of legislation (or legislation imperfectly executed). Though it alone possessed such a

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1. Scotsman, 21 January 1885, reporting meeting of Town Council, 20 January 1885.
name, the name Social and Sanitary indicates the nature of the common problems which gave rise to the formation of these Societies.

The 1880's in fact saw a revival of the social-and-sanitary concern of the later 1860's. Instances of bare rooms, straw bedding, utterly degraded inhabitants were not nearly so common in the 1880's because of continually rising real wages; but still the social improvement of the inhabitants of the poorer areas did not measure up at all to the hopes expressed so fervently, at the time of the launching of the Improvement Scheme, that sanitary improvement would automatically mean social improvement. There had indubitably been a drop in the death rate, but there was also only a limited improvement in the habits of the masses. Though sanitary legislation had done so much to deal with an insanitary environment, by the 1880's it was gradually being seen to have failed in improving social habits. Intemperance, indifference to overcrowding, indifference to filth had previously been adduced as an effect of grossly insanitary surroundings; now the persistence of such habits was seen as a bar to the efficacy of measures of sanitary improvement designed for their benefit;¹ amid constantly rising sanitary standards, such phenomena were all the more intolerable.

Such realisations could only come gradually, so the emergence of the various Societies was gradual. However, this realisation was really first seen in the avowed aims of Mrs. Frances Trayner in founding the Health Society in 1880.² As the first Society in the field for grappling

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1. Scotsman, 21 April 1885, reporting conference for considering housing of the poor, 20 April 1885. Especially notable was the much sterner attitude towards intemperance. The existence of an excessive number of public houses in St. Giles' Ward was the principal motive behind the sanitary inquiry into the Ward (ibid., 5 December 1888, reporting meeting of Town Council, 4 December 1888). The principal recommendation of the Public Health Committee, after perusing the Burgh Engineer's Report on St. Giles' Ward, was for a reduction in the number of public houses (Public Health Committee, Minutes, 1 October 1889).

2. Scotsman, 6 October 1880, reporting proposed Lectures on Sanitary Questions.
with the problem of the need to educate the poorer classes to sanitary improvement, it very soon congratulated itself on their ready response, as demonstrated by their attendance at the lectures in substantial numbers.¹

Some optimism was sanguine. To get them to attend helpful lectures was one thing; to see that they applied the lessons in their own homes was another. Hence, the need for Societies with more direct contact with the masses like the Social and Sanitary Society and the Social Union.

Though the various Societies each had their specific methods of operation, there was a fairly close liaison between them since they were all dealing with the common problem of sanitary education. The Town Council very much realised the need for such Societies, since the Council itself, more than any other organisation, was conscious of how the efficacy of its public health machinery was thwarted by the lack of interest in sanitary conditions shown by the poor; the remedy of the latter was obviously seen to be without its scope, so it had a great fund of goodwill for the Societies.

The tendency to overcrowd dwellings was certainly part of the social problem, but was very much an economic problem also. The failure of supply of working-class housing to meet demand was being felt acutely; quite apart from the constant increase in population and demolition of dwellings to make way for public buildings, the closure by the Public Health Committee of insanitary houses aggravated the position. In the Easter Road, Dalry, Fountainbridge and Gorgie areas there may have been new working-class houses being built; a builder with a social conscience, Findlay, may have been erecting model working-class tenements in the

¹. Scotsman, 10 February 1881, publishing letter by Frances Trayner on "Health Lectures."
Water of Leith village and finding it difficult to obtain tenants;¹ there may have been complaints from the Convener of the Public Health Committee that it was difficult to get the poor to move to good houses available;² but the truth was that the class of people ejected from insanitary housing could not afford to move to the class of houses where reasonable sanitary standards could be expected. Neither could they afford to move very far afield from the centre of the town, since their livelihood depended on their living within easy walking distance from their work. The only expedient for them was to further overcrowd old tenements already overcrowded.

If in the matter of sanitary education, sanitary opinion was disappointed by the lack of progress; in the matter of available housing, harsh economic and demographic facts dictated that the situation could only get worse unless a concerted attempt was made to build cheap, but sanitary, houses. That realisation explains the founding of the Association for Providing Improved Dwellings for the Poor in 1885 and their building of forty houses in West Port (see p. 223). That also explains the activities of the Social Union in completely renovating and then going on to manage what had been slum property. However, the resources of such associations could affect only a limited amount of property; also, the Association for Providing Improved Dwellings for the Poor discovered that, for the sake of economic viability, cheap houses would have to mean an annual rent of £8;³ this was far too much for the poorest classes to pay.

2. Scotsman, 21 April 1885, reporting conference for considering housing of the poor, 20 April 1885.
3. ibid., 23 October 1889, publishing Annual Report of Burgh Engineer for 1888-89.
The problem of a steadily growing insufficiency of accommodation could be met only by the Town Council building on a large scale; or, if not that, disciplining the masses to go to whatever suitable sanitary accommodation was available regardless of cost. The latter would be such a painful process that it could scarcely be seriously thought of; the former, despite hints as to the necessity for such in the Annual Reports of the Burgh Engineer, was at this time not seriously contemplated by the Town Council or by the majority of public sanitary opinion. Though some municipal building had been carried out in London and Glasgow, in Edinburgh it was generally regarded in the traditional manner of being a far-reaching departure from accepted commercial tenets. The prominence of Town Council sanitarians like Gowans, Clark, Russell on the Association for providing Improved Dwellings for the Poor was testimony to their distaste for municipally provided housing. The Town Council looked on the Association for Providing Improved Dwellings for the Poor in the same way as they did the reports of the Social and Sanitary Society - namely as a cog in assisting the public health machinery of the Council to be more effective.

1891 has been chosen as the terminal date for this chapter, this being the year when the Town Council sought additional sanitary powers under a new Municipal and Police Bill and when Russell, on his accession to the Lord Provostship (like Chambers nearly 30 years earlier) strongly

2. Even Telfer, President of the Trades Council, in his evidence to the Royal Commission on the Housing of the Working Classes (under the Chairmanship of Sir Charles Dilke), could not approve of the idea of municipal housing. He said that it would strike at that industry and enterprise that lies at the very root of our national existence. (Royal Commission on the Housing of the Working Classes. Vol. V. Minutes of Evidence, Appendix, and Index as to Scotland. P.P.s 1884-85, XXXI, p.38, Q.19186).
3. The expression of such a distaste was one of the principal features of the meeting held to found the Association (Scotsman, 21 April 1885, reporting Conference for considering housing of the poor and for forming an Association for Providing Improved Dwellings, 20 April 1885).
hinted at the need for a new Improvement Scheme. The 1891 Police Act represented no attempt to deal with the fundamental problems outlined as to the social and economic facts of life. It was designed to deal with problems which the Council had experienced in working their public health machinery and which they believed fell within their, and no one else's, scope, and for which a precedent had been set by the 1888 Burgh Police and Health (Scotland) Act and the 1890 Glasgow Police Act. As such, it did not include any powers to deal with the important disease of tuberculosis. Nor did it deal with any powers to extend the City Hospital, for the Council had scarcely wakened up to the necessity of facing this question (see p.230 ). The Act did however deal with the more obvious gaps in sanitary legislation already outlined. The powers of the Town Council over country dairies and milkshops were considerably strengthened; the impotence felt by the Dean of Guild Court and the Burgh Engineer in counteracting the insidious slum-producing process of sub-division was somewhat remedied by suitable clauses; the requirements of the sanitary arrangements of new buildings were extended, so

1. Scotsman, 7 November 1891, reporting meeting of Town Council, 6 November 1891.
2. The municipal authorities were given oversight of cowkeepers and dairymen, so as to prevent the spread of infection by milk. (ibid., 18 August 1890, publishing description of clauses of Edinburgh Municipal and Police Bill).
Milk dealers were required to inform the M.O.H. of the sources from which they obtained their milk. (ibid., 22 April 1891, reporting evidence of Bailie Russell to Police and Sanitary Regulations Committee of House of Commons, 21 April 1891).
3. Tenements could not be divided into more than 12 houses. This was placed under the power of the Dean of Guild Court. (ibid., 23 April 1891, reporting evidence of Bailie Russell to Police and Sanitary Regulations Committee of House of Commons, 21 April 1891).
as to cure legislative shortcomings, in this respect, brought to the attention of the Council by the sanitary officials.¹

Like previous sanitary legislation, the 1891 Act was useful when one considers the premise that social improvement was useless unless there was adequate sanitary legislation. Even if such legislation did not produce the desired results, still that did not destroy the maxim that adequate sanitary legislation was a pre-requisite for any social improvement. This connection was well realised by the Social and Sanitary Society. However, the other maxim (that traditional sanitary legislation, though a pre-requisite, could by no means do everything in the way of social improvement) was now becoming widely accepted; thus the Council realised there were some ways in which they could assist the work of the voluntary societies. That explains why Russell, in his inaugural speech as Lord Provost, strongly hinted at an Improvement Scheme, albeit on a much less grandiose scale than Chambers's.² Unlike the case with Chambers, this airing of the idea was not unexpected; powers had been taken in the 1891 Act to use the national Act framed specifically so that municipalities might go ahead with their various Improvement Schemes – namely the 1890 Housing of the Working Classes

¹The owners of every house, where there was no water supply, had to introduce it when required to do so by the Town Council, had to have a sink in a well lit and ventilated place with a proper waste pipe disconnected from the sewer; the owner of every house of not more than 2 rooms had to provide an adequate water-closet convenient to the house (within the house if of more than 2 rooms); every water-closet in houses to be built had to have one of its sides with a window of an area of at least four superficial feet (half of which was to be made to open); all sinks, waste-pipes, soil pipes, water closets had to be properly supplied with water, trapped and ventilated, so as to prevent any leakage of soil or effluvium (Social and Sanitary Society, Sanitary Code of Edinburgh (Edinburgh, 1891), pp.14-15).

²Scotsman, 7 November 1891, reporting meeting of Town Council, 6 November 1891.
Act. However, the inherent slowness of the Town Council in dealing with new problems had so far confined the question to the inner recesses of the Lord Provost's Committee from which it seemed most unlikely to emerge; and Russell deserves credit for his initiative in trying to get the Council to move in the matter.

The realistic way, in which this Improvement Scheme was hinted at, contrasts very vividly with the evangelical presentation by Chambers of his Improvement Scheme. The putting forward of an Improvement Scheme in the 1890's was after all an expression of at least partially blighted hopes of social improvement.

While the Chambers Improvement Scheme (and the 1866 Glasgow Improvement Scheme) were peculiar to Edinburgh and Glasgow, the fact that the Housing of the Working Classes Act was a national Act showed that the problems, giving rise to the ideas of such Improvement Schemes, were national ones, being experienced at the same time. While, in earlier periods of the century, the angle from which sanitary problems were viewed and the pace with which they were tackled could vary enormously from place to place; by the late 1880's and early 1890's, with most municipalities having attained a comparatively advanced stage of public health responsibility, all were feeling frustrated by the slow advance in social education of public health matters and by chronic housing shortages, and were tackling the problem in much the same manner.

These Improvement Schemes showed that Town Councils felt they had to increase the scope of their activities in even more dramatic form than hitherto. However, in 1891, the Edinburgh Town Council, in administering the Improvement Scheme, had only a hazy idea of what form this increased

1. Scotsman, 18 August 1890, publishing description of clauses of Edinburgh Municipal and Police Bill.
scope should take. Experiment and counter-experiment were to repeat themselves before the Town Council achieved anything like the desired result. The Council certainly felt they should do their utmost to prevent such a Scheme making the housing supply question worse, but, before long, they were to feel compelled to make a more positive contribution towards the solving of the housing supply question. The efforts of private agencies, though well meaning, were, through experience, acknowledged, even by themselves, to be insufficient for the need.

The matter of social and sanitary education was far more suitable for leaving to the agencies of private societies. In a nation like Britain, and notably in Edinburgh, society abhorred any thought of the Town Council imposing draconian discipline on the lines of New York or Berlin (where dramatic social and sanitary improvement was achieved in twenty years) on the poorer inhabitants, so that a lot of time had still to pass before municipalities took the responsibility of health education and health visitors on. Even so, the problem of indifference to sanitary conditions, on the part of sections of the population, is still with us to-day, albeit in much more limited form.

The haziness of the ideas of what scope the Town Council should possess explains why, though the Council knew that some good would come of the new Improvement Scheme, they realised that it could be but only a partial step in the long road towards tolerable sanitary and social conditions - a road which seemed so much longer than it did twenty years

previously. Improved standards of public health of course, as well as making the presence of insanitary conditions and insanitary people all the more noticeable, made them appear more difficult to stamp out. Even the possession by Edinburgh of the lowest death rate among large towns in the kingdom had the effect of making it seem all the more desirable to lower the rate still further.

Improvement Schemes were the way that the Town Council felt they could make a contribution to the social work of voluntary societies; but the great problem still remained which was that however the Council increased their activities both quantitatively and qualitatively, they discovered there was so much more requiring to be done.
CHAPTER 11

THE FRUSTRATING NINETIES: AN ASSESSMENT OF DR. LITTLEJOHN

As an opening to this final chapter to study public health administration and the role of Dr. Littlejohn in their chronological context, it is tempting to quote from a report by the Convener of the Public Health Committee, Bailie Pollard, in 1896 where, commenting on the reduced death rate in the past 30 years, he surmised: It may be doubted whether there ever was a period in the history of Edinburgh that could be more appropriately named its golden age.¹

This extract is refreshing, but deceptive. Pollard was looking back over thirty years, not considering the decade on its own. A much more accurate picture is obtained if one considers other sections of the report like the references to the continuing high child mortality and the almost inevitable processes whereby satisfactory housing metamorphosed into slums.

Contemporaries saw the 1870's as primarily a decade of sanitary achievement, the 1880's as one of achievement mixed with a growing awareness of the persistence of fundamental problems; generally, the 1890's was one of frustration. In his Presidential Address to the British Institute of Public Health, meeting in Edinburgh in 1893, Dr. Littlejohn commented that the poor are always with us, bringing with them the inevitable attendant problems.² Though the 1890's saw continuing attempts, in the form of large drainage schemes, for example, to make Edinburgh such an attractive place for the well-to-do to live in, public health work succeeded in making life show only a limited

¹. Scotsman, 21 October 1896, publishing report by Bailie Pollard, on behalf of Public Health Committee, for year ending 15 May 1896.
². ibid., 28 July 1893, reporting meeting of British Institute of Public Health, 27 July 1893.
environmental improvement for the poor. As if to emphasise the work that remained incomplete at the end of this story; in 1900, twenty years after the real completion of the Chambers Improvement Scheme, the retiring Lord Provost, Mitchell Thomson, could mention that the housing of the poor was still one of the most pressing current problems.  

While concern over the social and sanitary conditions of the poor was certainly considerable during the 1880's, there was the consoling factor that the basic index of public health, annual death rates/1000, were maintaining a dramatic improvement. In some ways, the figures for the 1890's were even better. The 1894 and 1896 figures of 16.07 and 15.46 respectively were the best yet attained; the average for the decade (1890-99) of 18.09 was much below that for comparable cities. However, it was only 0.11 below the average for the decade 1880-89. An improvement which had been dramatic was now becoming marginal. Even allowing for the increased population, the number of zymotic deaths generally in the 1890's showed little improvement over the 1880's. In one year, 1892, the number of zymotic deaths represented the disturbingly high proportion of 13.5% of the total deaths. The municipality could, of course, congratulate itself that the contribution of the more serious infectious diseases to such figures was becoming less and less significant. Typhus deaths were completely absent in the 1890's; though in 1898, it burst out in epidemic form for the first time for about twenty

1. Scotsman, 31 October 1900, reporting meeting of Town Council, 30 October 1900.
2. ibid., 21 October 1896, publishing report by Bailie Pollard, on behalf of Public Health Committee, for year ending 15 May 1896.
   ibid., 20 January 1897, reporting meeting of Public Health Committee, 19 January 1897.
   ibid., 1 January 1898, publishing article on health of city for 1897.
   ibid., 11 January 1899, reporting meeting of Town Council, 10 January 1899.
   ibid., 5 April 1900, publishing report by M.O.H. for year 1899.
3. ibid., 21 October 1896, publishing report by Bailie Pollard, on behalf of Public Health Committee, for year ending 15 May 1896.
   ibid., 20 January 1897, reporting meeting of Public Health Committee, 19 January 1897.
4. ibid., 18 January 1893, reporting meeting of Public Health Committee,
years, it claimed only 9 deaths out of 79 cases. In terms of number of cases, diphtheria and typhoid were rising if at a slower rate than the population; however, the number of deaths in proportion to cases was considerably diminishing. What did cause the most concern in public health circles was the persistence of the less serious diseases like measles, scarlet fever and, to a lesser degree, hooping cough and erysipelas, which affected mainly children; even if the proportion of deaths/cases was extremely low and getting lower, the astronomical number of cases in epidemic years meant that the number of deaths could be considerable. In 1897, 7924 measles cases accounted for 287 deaths; in 1895, 2832 scarlet fever cases accounted for 65 deaths. There were 235 deaths from hooping cough in 1897.

With the significance of the general sanitary environment, in determining the incidence of tuberculosis, already realised (see p.224), the average death rate/1000/annum from phthisis of 1.86 for the quinquennium 1895-99 compares well with the corresponding figure for Glasgow of 2. However, this was above the corresponding figure for London for the three years, 1894-96, of 1.74. Moreover, the figure for Edinburgh for the second half of the 1890's reversed the trend of the past 45 years, in that it represented an actually increased death rate as compared with the quinquennium 1890-94; this happened while Glasgow's phthisis death rate witnessed an improvement of 0.34 from quinquennium to quinquennium.

Furthermore, the traditional differentials in the death rate between the Old Town and the New Town continued. Though the compilation of annual death rates ward by ward by Dr. Littlejohn ceased after 1894,

1. Scotsman, 11 April 1899, editorial.
2. Ibid., 1 January 1898, publishing article on health of city for 1897.
3. Ibid., 1 January 1896, publishing article on health of city for 1895.

*For vital health statistics during Dr. Littlejohn's term of office, see Vol. 2, App. I-17, Appendix XXIII and accompanying graphs.
†See Vol. 2, Appendix XXIII, Graph A.
to that date the rates for St. Giles' and Canongate Wards remained consistently well ahead of those in other Wards where the relative positions in the death rate league table oscillated sharply from year to year. 1

It is noted in Chapter 7 that a dramatic improvement in the death rates in the 1870's and 1880's was accompanied by an attitude of unquestioning self-congratulation at the results of the Chambers Improvement Scheme. By contrast, the stagnant progress in reducing death rates in the 1890's was accompanied by an attitude, not so much of disillusionment, as of a recognition that the various Improvement Schemes, though essential for the eradication of a grossly insanitary environment, were far from being the final answer. As if to emphasise the prevailing mood of dissatisfaction, the 1890's saw the emergence of a recognition that the Chambers Improvement Scheme had to bear at least part of the responsibility for the persistently acute problem of working-class accommodation shortages. The statement of Bailie Macpherson, who, as a representative of St. Giles' Ward, was especially concerned about this problem, that the Chambers Improvement Scheme had failed to make due provision for those dispossessed of their homes, 2 was not questioned since it was known by all interested in this problem to be an incontestable fact.

It is noted in Chapter 10 that the strong hint of Russell, on his accession as Lord Provost, that the Town Council embark on an Improvement Scheme by use of the Housing of the Working Classes Act, was born

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1. Scotsman, 1 February 1893, reporting meeting of Public Health Committee, 31 January 1893. ibid., 28 February 1894, reporting meeting of Public Health Committee, 27 February 1894. For details of death rates in each ward, see Appendix XVIII.

2. ibid., 19 October 1892, reporting meeting of St. Giles' Ward, 18 October 1892.

* For map of ward boundaries in this period, see Vol. 2, Map D.
of a recognition that the Town Council had to increase the scope of their activities, though they were as yet hazy as to how precisely to do so. That the Improvement Scheme was seen as something which could only go part of the way towards doing so, is strikingly shown by the fact that during the 1890's not one Improvement Scheme was authorised, but three. Despite the demolitions consequent on these three Improvement Schemes and the demolitions in the Canongate area consequent on the North British Railway Scheme for extending Waverley Station, sanitary public opinion still felt that a few more districts should have yielded to the demolishers' tools.

Unlike the stir caused by the introduction of the Chambers Improvement Scheme, the declaration of intent of Russell as to an Improvement Scheme and the subsequent rapid preparation of concrete plans for slum clearances sparked off hardly a whisper. At the preliminary statutory Inquiry, under the Housing of the Working Classes Act, into the Improvement Scheme in 1893, the evidence led against the Scheme was merely for the purpose of disputing the amount of compensation to be paid to owners of property to be demolished. The powers under the relevant Act were far more far-reaching than those under the 1867 Improvement Act; 818 houses (more than a quarter of the number of houses removed under the allegedly gigantic Chambers Improvement Scheme) were to be removed in a short time. It is noted in Chapter 7 how, once the latter was fairly well under way, a highly organised committee machinery was

1. Scotsman, 12 October 1895, publishing article on improvements to Waverley Station.

2. ibid., 16-18 February 1893, reporting Inquiry, over application of Town Council to Secretary of State for Scotland, to make a Provisional Order under Housing of the Working Classes Act, 15-17 February 1893.

3. ibid., 16 February 1893, reporting Burgh Engineer's evidence to Inquiry over application of Town Council to Secretary of State for Scotland to make a Provisional Order under Housing of the Working Classes Act, 15 February 1893. For list of areas affected by 1893 Improvement Scheme, and number of houses to be demolished in each, see Appendix XIX.
accompanied by a seeming public indifference to the progress of the Scheme. These features were even more marked in the case of the Improvement Schemes of the 1890's.\(^1\) A miniscule Committee of the Town Council, the Improvement Scheme Committee, took charge of the execution of the Scheme, and one scarcely heard anything of their activities. While in the initial stages of the Chambers Improvement Scheme, there were frequent references to the changes being made in the Old Town landscape, the only references to the physical changes achieved by the Improvement Schemes of the 1890's were in fragments of the Burgh Engineer's Annual Reports,\(^2\) or in brief remarks by Councillors at their Ward meetings. Admittedly, these Improvement Schemes were far less extensive than their predecessor, but scarcely an area of the Old Town, unaffected by the latter, was left untouched by the 1893 Improvement Scheme. Many of these areas were of limited extent, but the area between High Street and Cowgate and the area in Thornybauk (Tollcross) were quite extensive and were subjected to easily visible changes.\(^3\) The start of works under the Chambers Improvement Scheme was bound to attract public attention since clearances on such a scale, for the specific purpose of sanitary improvement, were unprecedented. Obviously, similar clearances in the 1890's lacked that sense of novelty.

1. It might appear misleading to say that the public were indifferent to the progress of the Improvement Schemes of the 1890's, when they were seen as a chief factor responsible for the housing shortage. However, discussion on the housing shortage is not taken to mean discussion on the progress or the execution of the Scheme; for, even if connected, one was not inherent in the other. Progress of the Scheme meant the actual work that the Improvement Scheme Committee were performing.


3. Though, strictly speaking, Tollcross, like Canonmills, did not lie within the Old Town. For list of areas affected by 1893 Improvement Scheme, and number of houses to be demolished in each, see Appendix XIX.
In Chapter 7 it is noted how the lack of comment on the administration of the Chambers Improvement Scheme, in its middle and latter stages, by a structure of committees, was accompanied by an attitude of unqualified confidence in the administration. What comment there was, was invariably one of ecstatic praise. Admittedly, in the 1890's, voluntary societies, like the Social and Sanitary Society, congratulated the Town Council on their Improvement Schemes, but these congratulations were more a matter of form than anything else, and found few echoes. That the attitude of ecstatic praise was not repeated in the 1890's does not mean that the public looked on the shadowy Improvement Scheme Committee as incompetent or corrupt, or that they looked on the Improvement Schemes as irrelevant to sanitary needs; as in the case of the administration of Chambers Improvement Scheme, they had confidence in the Committee and looked on the Schemes as essential. However, in the case of the Chambers Improvement Scheme, praise was justified since Edinburgh, along with Glasgow, led the way with such Schemes in Britain and it seemed to the public that it was leading to a gigantic advance in sanitary conditions; in the case of the Improvement Schemes of the 1890's, Edinburgh Town Council was doing no more than copy what was being done in other cities at this time. Disillusionment at the persistence of sanitary problems in the later 1880's meant that the Town Council stood condemned if they did not increase the scope of their activities in a big way in the 1890's, not that they were the recipients of adulation for doing so.

The activities of the Improvement Scheme Committee were looked on in the same way as were those of the Public Health Committee; namely as continuous activities to be expected of the municipality in the matter of sanitary administration. Thus, the clearances of the 1893 Improvement

1. Scotsman, 6 December 1893, reporting Annual General Meeting of Social and Sanitary Society, 5 December 1893.
Scheme were followed by similar clearances in 1898 (involving Stockbridge and Portobello) and in 1900 (involving Greenside and the Simon Square district). Despite the statistics that were produced as to the fall in the death rates in the areas affected by the 1893 Improvement Scheme, sanitary public opinion was more interested in the fact that visibly insanitary housing and personal squalor abounded in other districts like Stockbridge, Greenside, Simon Square.

The condition of the more important areas affected by the Chambers Improvement Scheme was so deplorably worse than anywhere else, that it was reasonable to suppose that, once these clearly defined areas had been swept away, there would be a dramatic improvement in sanitary conditions and death rates. This dramatic improvement did take place, and even if its impact had lessened after 1885, a lasting result was that higher standards were used to define what constituted a disgracefully insanitary district. That brought a seemingly endless number of working-class districts into this category. Added to this was the fact that working-class areas outside the Old Town, built in the second and third quarters of the 19th century, were now showing increasingly sad signs of wear and tear of property and of subdivision of property. With the passage of time, these naturally exhibited a tendency to increase in numbers. It is no coincidence that while the 1893 Improvement Scheme principally affected the Old Town; the planners of the 1898 and 1900 Improvement Schemes turned their attention to areas outside the Old Town.

The pressure from Dr. Littlejohn, other sanitary officials and several individual Town Councillors on the Town Council for improvements in the areas to be dealt with was so insistent, that one cannot over-emphasise the attitude of concern over insanitary conditions. As early as 1892, there were protests from the St. Andrew's Ward representatives that Greenside was not to be included in the 1893 Improvement

* For map of areas affected by 1893, 1898, 1900 Improvement Schemes, see Vol. 3, Map D.
Scheme, a representative of St. Stephen's Ward, W.S. Brown, was unremitting in his pressure for something big to be done about the Stockbridge area; in his evidence to the statutory Improvement Scheme Inquiries, Sir Henry Littlejohn complained that this clearance was not so big as he would have wished; in the case of the Simon Square Improvement Scheme, he complained of how he had had so repeatedly to draw the attention of the town Council towards the need for one. That such internal pressure was so persistent does not mean that the sanitary machinery of the Town Council was showing its traditional characteristics of slowness and unreceptiveness, it was restrained not by inherent slowness but by the external problems of shortage of housing. That the internal pressure was not usually supplemented by external pressure was because the public (including voluntary societies like the Social and Sanitary Society) were confident that the Town Council were alive to the sanitary responsibilities confronting them; more surprising was that there was hardly any complaint about the estimated net expenditure for the 1898 and 1900 Improvement Schemes of £62,746 however, an attitude, of acceptance of the need for financial sacrifice to promote sanitary improvement, was growing all the time.

1. Scotsman, 27 July 1892, reporting meeting of Town Council, 26 July 1892.
2. Ibid., 15 March 1898, reporting evidence of Brown to Inquiry, on behalf of Secretary of State for Scotland, with reference to Improvement Scheme of Edinburgh Corporation, 14 March 1898.
3. Ibid., 24 March 1898, reporting evidence of Littlejohn to Inquiry, on behalf of Secretary of State for Scotland, with reference to Improvement Scheme of Edinburgh Corporation, 23 March 1898.
4. Ibid., 26 February 1900, reporting evidence of Littlejohn to Inquiry, on behalf of Secretary of State for Scotland, with reference to Improvement Scheme of Edinburgh Corporation, 24 February 1900.
5. Ibid., 14, 15, 25 March 1898 and 26 February 1900, reporting Inquiries with reference to Improvement Schemes of Edinburgh Corporation, 12, 14, 24 March 1898 and 24 February 1900.
With the road towards achieving a satisfactory goal of sanitary improvement seeming so much longer now than during the later 1860's and 1870's, the Improvement Schemes were a cause and symptom of depression rather than optimism. They were not inexorably drawing all the poor towards the "promised land"; they were revealing just how many more of the poor were still so very far away from the "promised land."

In thirty years a fundamental debate between those wildly enthusiastic about the novelty of and those desperately fearful of an Improvement Scheme had been replaced by an attitude of optimistic unanimity as to the beneficial results of the Improvement Scheme, to be in its turn replaced by an attitude of pessimistic unanimity as to the enormity of the work requiring to be done by more Improvement Schemes.

Alongside the stagnant progress in reducing death rates and the failure of repeated Improvement Schemes to satisfy by their results the aspirations of sanitarians, a steadily improving public health administration by the Town Council provides a refreshing contrast. The gaps, revealed in the administration in the 1870's and 1880's, were being largely plugged. The Public Health Committee, headed by its illustrious Convener, Pollard, assumed unprecedented importance, and sought new fields to conquer. ¹ The Town Council, through the Public Health Committee, was largely making good where it had lagged behind other cities; at last, a sincere sense of municipal responsibility was overcoming the inherent slowness of the machinery.

¹. At the ceremony to cut the first sod for the site of the new City Hospital at Colinton Mains, the Lord Provost, Andrew McDonald, remarked that when he entered the Town Council (in 1881), the business of the Public Health Committee was taken up when there was nothing else to do; now it was the most important business they had (ibid., 15 May 1897, describing ceremony of cutting turf on site of new City Hospital, 14 May 1897).
There was one exception, of course, to the general rule, that being over the very important question of water supply. With the gradual increase in population, and the constant increase in the number of water closets, a want of water came to be increasingly felt. Though the Water Trust had definitely determined to seek a new source of water supply, a succession of remits to the Works Committee, reports by both independent engineers and engineers of the Trust, a sudden decision to abandon one source in favour of another after the former had surely been deliberated on for long enough, were all reminiscent of the traditional picture of slow making and execution of decisions on the part of public authorities. In September 1888, the Trust remitted to the Works Committee and their engineers to report on various available sources of water; not till 1895 was an Act passed for obtaining an increased water supply from Talla; not till 1905 was the long coveted water flowing into the city.

Mercifully, such an exhibition of municipal action was not typical. Admittedly, a stringent measurement of small houses (for ascertaining whether their dimensions reached the prescribed figure) had to wait till the appointment of a Chief Sanitary Inspector in 1898 under the Public Health (Scotland) Act, 1897, even though local legislation to that purpose had been passed as far back as 1879 (see Chapter 9). However, the inspections of the Burgh Engineer's staff of houses in poorer wards had become so much more systematic and comprehensive during the 1890's as to compensate for the omission of the strict execution of this piece of legislation.

1. The subject of "want of water" was on the agenda at 19 of the 21 main meetings of the Public Health Committee in 1892, at 18 of the 22 main meetings in 1895. (Public Health Committee, Minutes, 1892, 1895).


3. Strictly speaking, the Water Trust and the City Corporation were distinct bodies. However, the membership of the two bodies overlapped to such an extent that it is valid to consider the record of the Water Trust, when assessing municipal action in the public health field.
In a number of ways, the scope of the activities of the Burgh Engineer and Dr. Littlejohn is difficult to distinguish; when the Chief Sanitary Inspector, on his appointment, took over some duties of both of them, the confusion as the specific duties of each of the main sanitary officials grew still further.¹ Dr. Littlejohn of course took a general interest in all branches of public health administration, as did the Burgh Engineer; however, the Burgh Engineer was directly responsible for such environmental branches as inspecting the condition of dwellings;² it is from his reports (after 1898 from the Chief Sanitary Inspector's) that precise details are set out. It is noted in Chapter 10 how such environmental sanitary administration, like the closure of insanitary dwellings by the Public Health Committee, had reached a reasonably advanced stage by the 1880's (though of course it expanded during the 1890's). Far more dramatic, however, was the self-generating administrative force which caused a vastly increased scope in the administration of more strictly public health (as distinct from environmental) matters which were of specific interest to Dr. Littlejohn (like the administration of the City Hospital, the inspection of dairies and meat, the treatment of tuberculosis).

Dr. Littlejohn it may have been who was most concerned with this growth of public health administration, but his mouthpiece and that of the other main sanitary officials was undoubtedly James Pollard. An unpaid Councillor, he wrote several useful and concise articles on public health administration generally; he about took it upon himself to set a movement going to devise some means by which the Town Council could deal with tuberculosis; in his search for guidance over how to deal with certain branches of public health administration, he was no narrow parochialist; he went not only to see what was being done in other towns

¹ The duties of the Chief Sanitary Inspector were to exercise surveillance over (i) common lodging-houses, (ii) dairies, (iii) common stairs and passages, (iv) the cubic air space of small dwelling houses, (v) the working of the Shop Hours Act. (Public Health Committee, Minutes, 11 March 1898).

² Though he automatically passed on such reports to Dr. Littlejohn for his guidance.
in Britain, but to the Continent (often at his own expense).  

Though it would be churlish to detract from his personal characteristics of industriousness and utter devotion, he was the supreme illustration of the growing expertise of the Public Health Committee rather than its creator. The administration of the City Hospital was one item where his sense of devotion could be seen at its most intense in his visits to English and Continental hospitals for guidance, in his knowledge of all the issues involved in building a new Fever Hospital, but his prominent role in this branch of public health administration was largely an expression of developing administrative processes. These processes (largely stamped with the ideas of the almost constantly silent Dr. Littlejohn) were expressed in a much greater sense of municipal responsibility in the running of the City Hospital (in which respect Edinburgh had been lagging behind other cities) and an inevitable decision to make a thorough extension. The steep rise in the number of people using the City Hospital, which can be properly traced to 1892, owed more to a severe scarlet fever epidemic than to the chance of Pollard having just become Convener of the Public Health Committee; though an epidemic was the initial cause of this rise, the disappearance of that epidemic did not mean that the number of inmates resumed the scale prevalent in the early years of the City Hospital; after 1892, the number in the City Hospital rarely fell below 150; during epidemic years, new records were being constantly set, one of 359 in October 1895 being bettered by 459 in October 1897.

1. Pollard's model of municipal administration was Berlin, where it was operated with characteristic German thoroughness. After a visit in 1893, he published a book on it (J. Pollard, A Study in Municipal Government. The Corporation of Berlin (Edinburgh, 1893)).

2. There was an average of 96 in the City Hospital at any one time in 1888, of 219 in 1892 (Scotsman, 12 June 1894, publishing article on "Fever Hospital Extension.")

3. Scotsman, 9 October 1895, reporting meeting of Town Council, 8 October 1895.

4. ibid., 27 October 1897, reporting meeting of Town Council, 26 October 1897.
This constant increase of course bore no direct relation to increases in cases of infectious disease; it is more accurate to say it bore a direct proportion to an increase in the scale of municipal responsibilities.

Connected with this vastly increased use of the City Hospital was the overdue decision to vastly extend its dimensions. That was not Pollard's initiative; the motion to that effect was put by Mitchell Thomson in 1892. The unanimity with which it was received lends testimony to the increased sense of public health responsibility on the part of the municipality. Admittedly, five years were to pass before the decision to build a new hospital at Colinton Mains was officially passed, Pollard being in these years the spokesman of the Sub Committees to whom this question had been entrusted. This long delay might savour of the approach of the Water Trust to an increased source of water (see p. 252), but the decision as to where to site the new Hospital was a far more difficult one to reach. This was especially the case with the general views of Town Councillors undergoing change during the period of deliberation; initially there were very good reasons for remaining at the same central site as the current hospital. However, rising standards of what constituted satisfactory space in a Fever Hospital meant that the estimates for expanding on the old site were constantly rising; the invention of pneumatic tyres removed many of the disadvantages of suburban hospitals remote from central areas.

Another way of making an approximate quantification of the increased importance being given to the municipal treatment of infectious diseases is to consider that accommodation in a new hospital was planned for 350 in 1892, for 400 in 1894, for 512 in 1896 and it was finally agreed to provide for 600 when work was started on the new hospital in 1897.

1. Scotsman, 25 May 1892, reporting meeting of Town Council, 24 May 1892.
2. ibid., 23 May 1892, publishing Report by Drs.Littlejohn, Muirhead, Wood on "Proposed Reconstruction of City Hospital".
3. ibid., 12 June 1894, publishing article on "Fever Hospital Extension."
4. Public Health Committee, Minutes, 8 December 1896.
5. Scotsman, 27 February 1897, reporting meeting of Town Council, 26 February 1897.
Some Town Councillors wondered why there should be such a large allowance of accommodation, when the Council were working strenuously on Improvement schemes so as to prevent the causes of infectious diseases at their source. However, they were missing the point. The number of beds in the new hospital, just like the number of patients being currently treated in the old one, was an expression of the scale of municipal responsibilities.\(^1\) Pollard's name was constantly in the public eye and ear, he being so immersed in the administration of the City Hospital; but this devotion was more an expression of the importance of the Convenership of the Public Health Committee amidst the greatly developed administrative public health processes than an expression of his admirable personal characteristics.

A much less conspicuous branch of public health administration, but one which caricatures the developing administration of the 1890's so obviously, and where the impersonal hand of Dr. Littlejohn in the public health machinery is so evident, is that of supervision of dairies. It is especially important when considered as an example of tightening up of public health legislation of a hygienic (rather than environmental) nature, for so long allowed to lie dormant (see Chapter 10).\(^2\)

Firstly, this was work which the Public Health Committee was exclusively concerned with. Whenever reports came before the Town Council, they were merely for the purpose of confirmation and excited minimal comment (unlike the question of where to site the new City Hospital). More particularly, this was work where Dr. Littlejohn was seen to be the moving spirit; it was on his representation that the preliminary survey of dairies was made in 1893,\(^3\) it was he who suggested

\(^1\) The greater willingness on the part of the public to send their children to hospital must also be taken into account.

\(^2\) The relevant legislation was the "Dairies, Cowsheds and Milkshops Order", 1885.

\(^3\) Public Health Committee, Minutes, 14 March 1893, 23 May 1893.
the regulations, the time for their introduction; prosecutions for insanitary dairies arose out of his reports, it was his annual reports that gave the authoritative information. This is far from suggesting that he was coaxing an indifferent Public Health Committee; the co-operation they lent him in the form of Sub Committees, and the fact they realised the need to give him full freedom to execute his wishes, speaks much for their growing sense of municipal responsibility.

Secondly, the speed shown in proceeding from preliminary survey in 1893 to the final approval of regulations in 1896\(^1\) might not appear impressive. This was not, however, an expression of a slow-moving cumbersome municipal machinery; it was an expression of the M.O.H.'s wish for trial and error to decide which were the most suitable regulations, for a period when the insanitary dairies and milkshops could voluntarily close down by means of warning rather than prosecution (though, of course, the period of warning could not be permitted to last for too long.)

Thirdly, the quiet execution of public health legislation behind the scenes was soon effective. More by the dairymen's free will than by compulsion, the number of retail dairies and milkshops in Edinburgh fell from 852 in 1893\(^2\) to 468 in 1898;\(^3\) by the time of Sir Henry Littlejohn's Report for 1897 he was commenting on this great improvement.\(^4\)

Furthermore, as the enforcement of this legislation proceeded, the public health administration grappled with the age-old problem of the lack of supervision of dairies outside the city boundary which supplied milk to Edinburgh (see Chapter 10); by the time the Chief Sanitary

1. Scotsman, 13 March 1896.
2. Ibid., 30 August 1893, reporting meeting of Town Council, 29 August 1893.
Inspector (see p.253) presented his report for 1898, 222 such dairies had quietly but firmly been made subject to supervision of the municipal public health authorities.¹

Closely connected with legislation to supervise the condition of dairies, designed so as to protect the food of the municipality's constituents, was legislation to enforce the purity of meat. While the purity of milk could be but indirectly protected by supervising the condition of dairies and milkshops, there was a more exact test for the purity of meat in the inspection of carcases. Unlike the inspection of dairies, the inspection of carcases was fairly thoroughly carried out before the span of this Chapter opens; the 1890's saw merely an increase in volume of the machinery rather than an adoption of machinery hitherto not operated. Chiefly to be noted is the adoption of the clearing-house system in 1893 for inspecting carcases, this making for far greater efficiency.² Admittedly, this was carried out in the teeth of opposition from butchers,³ who, in combination with a majority of the Town Council, had defeated the proposal the previous year,⁴ but the fact that the Council eventually unanimously accepted something which they knew Dr. Littlejohn had been pressing on the responsible Committees and which they saw the respective Conveners of these Committees, Pollard and McDonald pressing more vocally, again speaks much for the growing sense of public health municipal responsibility.⁵ The acceptance of the exercise of these responsibilities is demonstrated by how no attempt was made subsequently to revert to the traditional practice of inspecting all meat at the City Slaughter-houses.

2. Scotsman, 22 March 1893, reporting meeting of Town Council, 21 March 1893.
3. ibid., 8 March 1892, publishing memorial of Edinburgh Master Butchers' Association to Town Council.
4. ibid., 9 March 1892, reporting meeting of Town Council, 8 March 1892.
5. ibid., 22 February 1893, reporting meeting of Town Council, 21 February 1893.
In the later 1890's, the municipal authorities may have reached no firm conclusion about the important matter of how to treat tuberculous milk and meat; however, even though this had become a widely discussed topic, the varying nature of professional opinions on the topic did not make it easy for the municipal authorities to know precisely what to do.

The genuine anxiety of the Public Health Committee, to know what it should do over the whole matter of dealing with the greatest single total disease of tuberculosis, lends an edifying conclusion to an assessment of its work during the span of this thesis. Of course, the question assumed prominence at this time less because of any strictly local factors than because of an international professional interest in the question. With the discovery by Koch of its infectious nature, and the fast fading hopes of its being amenable to inoculation, it formed a principal feature of discussion at international medical conferences in the 1890's, the discussion being followed closely by the public.

However, for the ordinary member of the public, even for the ordinary Town Councillor, there was a long way to go between interesting oneself in methods of medical treatment, even knowing it was infectious, and realising that, as infectious, it came into the sphere of sanitary administration. Professional discussion on tuberculosis was bound to be internationally based, the means of dealing with it could apply universally; but these means had to be applied by local authorities and there had to be local participants to press for the setting up of these means.

Though the advantages of Edinburgh's natural position, and its possession of a reasonably efficient administration of general public
health, meant that its tuberculosis death rate was extremely low;\(^1\) when it came to corporate measures, Edinburgh, like many other British cities, was rather backward. (Treatment of tuberculosis by private agencies was steadily advancing,\(^2\) but there were few signs of it being recognised as a sphere of the all-important municipal agencies.) Signals of pressure from public sanitary opinion, Dr. Littlejohn, ordinary Town Councillors, were all lacking. Far more than anyone else, Pollard was responsible for bringing the subject into the proper sphere.\(^3\)

As a man willing to seek expert medical guidance, not merely from Sir Henry Littlejohn, but from celebrated men like Loeffler, Virchow, Brehmer as they enunciated their theories at International Congresses; and as a man who possessed the all-important wish to see the Public Health Committee apply these theories (where practicable), and for whom no city was too distant to be inapplicable as an example of municipal treatment of tuberculosis, Pollard was ideal. The growth of the public health machinery during the century is strikingly demonstrated by his attitude to the infectious nature of tuberculosis. It has been seen at various points during this story how typhus, cholera, smallpox were dreaded because they were known to be infectious. By contrast, Pollard believed the most hopeful aspect of tuberculosis was that it was infectious and not hereditary; this he preached repeatedly like an evangelical preaching divine salvation.

1. For comparison of tuberculosis death rate in Edinburgh with that of other cities throughout the world, see Appendix XX. (Report of the Public Health Committee on Prevention of Consumption (Edinburgh, 1900), pp.25-27, 55).

2. The Victoria Hospital in Craigleith was opened on 22 November 1894. It provided accommodation for 15 indoor tuberculosis patients (Scotsman, 27 April 1897, publishing statement by Directors of Victoria Consumption Hospital.)

3. In 2 anonymous articles to the Scotsman, Pollard published information on the corporate measures being taken to counteract tuberculosis in Glasgow, New York, Hamburg, Berlin, Basle, Budapest, Vienna (ibid., 27 September 1898, 4 October 1898, publishing articles on "Campaign against Consumption".)
Though by the time of the close of this thesis, and indeed by the time of his tragic death, few concrete steps had been taken by the Public Health Committee to deal with tuberculosis,¹ Pollard had directed discussion into and pressed for measures,² nearly all of which were to be executed before many years had passed.³ From an administrative point of view, there was nothing very novel about any of the measures devised, but they did envisage making tuberculosis be subject generally to the procedures already established for other infectious diseases, though these procedures required special adaptation to the nature of tuberculosis, a chronic, not a fast-acting disease.

Pollard directed discussion on tuberculosis into the proper channels by writing anonymous letters in the *Scotsman* which set out the concise facts as to tuberculosis and, by referring to what had already been done by other municipalities ranging over the whole world, posed the question strongly as to what the Edinburgh municipality should do. With the discussion as to tuberculosis in relation to municipal administration thus set going; despite inevitable ebbs and flows, it never lost its impetus. Apart from that, Pollard's most significant action was to move a resolution, also in the autumn of 1898, for the Public Health Committee to investigate what role the local authority should play in dealing with tuberculosis.⁴ The resultant Report of the Public Health

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1. In 1900 the Public Health Committee reached an arrangement with the Royal College of Physicians for the bacteriological examination in their laboratory of sputum for tubercle bacilli. (Public Health Committee, Minutes, 23 January 1900).

2. As to set an example, the Corporation received its milk only from dairies where all the cattle had been tuberculin tested, (Scotsman, 22 February 1899, reporting meeting of Town Council, 21 February 1899).

3. Pollard's main suggestion was for a hospital to receive 100 cases of advanced tuberculosis. (Report of the Public Health Committee on Prevention of Consumption (Edinburgh, 1900), pp.71-5)

4. In 1902, voluntary notification of tuberculosis was instituted (Public Health Committee, Minutes, 25 November 1902).

In that year also, public notices were issued to warn the public of the danger of expectorating in public (ibid., 6 May 1902).

In 1905, 50 advanced cases of tuberculosis were admitted to the City Hospital for the first time (ibid., 24 October 1905).

4. Scotsman, 12 October 1898, reporting meeting of Town Council, 11 October 1898.
Committee on Prevention of Consumption (1900) bore the stamp of Pollard more than anyone else. The lengthy well-illustrated introduction showed his ideas of thoroughness, ranging as it did over all the aspects of tuberculosis and its incidence all over the world; the conference held by his Special Committee with leading representatives of the local medical profession bore the marks of his brilliant chairmanship. (This conference, designed to give the Special Committee expert information to guide them in how to deal with tuberculosis, revealed many inevitable differences over medical theories on the treatment of tuberculosis; but, at least, it served the purpose of confirming the validity of the conclusions Sir Henry Littlejohn had reached in a Special Report.)* Though there is no record of Littlejohn having pressed any members of the Town Council to investigate how to treat tuberculosis, and though he maintained a characteristic silence over the whole question (except for his Report); the Report showed that, as a M.O.H., he realised the proper role of local government vis-a-vis tuberculosis; neither had old age lured him into any complacency with the sanitary condition of the town.

The contribution of Littlejohn to the discussion must not, however, be allowed to detract from the initiative and subsequent devotion of Pollard. Such action illustrated his personal qualities but, quite apart from his personal views on the treatment of tuberculosis, it was undoubtedly a consciousness of his responsibilities as Convener of the Public Health Committee, that principally spurred him on to act as he did. In the same way, it might appear remarkable that when he moved the resolution for an investigation into the role the local authority should play in the question, none of the Council made any real comment.

1. Special stress must be made of the need Littlejohn felt for further sanitary improvement including the clearances of insanitary areas, the provision of more public baths (Report of the Public Health Committee on Prevention of Consumption (Edinburgh, 1900), p.80).
despite the significance of the resolution. The answer is that they were prepared to put their faith in whatever Pollard decided, because of his position as Convener of the Public Health Committee.

Pollard might appear to have usurped the functions of Littlejohn as M.O.H., which he had executed so efficiently over the matter of dairy inspection, for example (see pp.256-8). Littlejohn, however, appeared conspicuously only over questions, like that of dairy inspections, which could be worked out behind the scenes: the question of municipal administration of tuberculosis had obviously to be brought out into the open, being a new one; and Sir Henry Littlejohn had persistently been reluctant to appear to press for action over a new branch of public health administration, when someone else could press equally effectively. With Pollard so anxious to act, he could afford to let him do so.

In accordance with the sighting of these new frontiers, the Health Association, continuing its scheme of winter lectures to the working classes (see Chapter 10), followed the current advances in public health theories; and the voiced opinions of the Social and Sanitary Society also took on a more modern note. They kept well abreast of the Public Health Committee's extended activities, expressing satisfaction about the enforcement of regulations for milkshops, and expressing a wish that the education of the poor could be extended to apprehending the dangers of tuberculous milk and meat. Both the 1897 and 1898 Annual General Meetings provided opportunities for the main speakers to discourse on the dangers of milk-borne disease.

1. Scotsman, 12 October 1898, reporting meeting of Town Council, 11 October 1898.
2. ibid., 9 January 1894, reporting meeting of Committee of Social and Sanitary Society, 8 January 1894.
4. ibid., 17 November 1897, reporting Annual General Meeting of Social and Sanitary Society, 16 November 1897.
   ibid., 7 December 1898, reporting Annual General Meeting of Social and Sanitary Society, 6 December 1898.
However, the fact, that the interests of the Social and Sanitary Society showed an increasing tendency to the scientific, does not mean that they had lost their old characteristics of the 1880's. Their close connection, in personnel, with the Town Council was maintained, Pollard acting as Chairman at many of their Annual General Meetings; their comprehensive district sanitary visits (organised on an ecclesiastical basis) continued, as did their reports to the Town Council. They sent not a few deputations to the Town Council over familiar matters like the cleaning of common stairs, the need for caretakers in poor tenements; they also sent deputations over new ideas they adopted like the need for lodging-houses specifically for women, and for women sanitary inspectors to deal with the old problem of untidy tenants in tenements.

Considering the title of this chapter, however, it might seem surprising that there were not more deputations. It might also seem surprising that, even considering that they took on some new districts, the number of districts reported upon fell substantially during the 1890's. The Social and Sanitary Society, in its annual report for 1899, may have expressed concern at the clamant need for more housing, but no attempt was made to force this on the attention of the Town Council.

Just as there was no need for them to point out the need for Improvement Schemes to the Town Council, there was, by 1899, no need to tell the Council about the shortage of housing — something which they knew

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1. Scotsman, 21 October 1892, reporting meeting of Town Council, 20 October 1892.
2. ibid., 12 January 1898, reporting meeting of Town Council, 11 January 1898.
3. 27 districts were reported upon in 1894 (ibid., 15 December 1894, reporting Annual General Meeting of Social and Sanitary Society, 14 December 1894); only 9 in 1897 (ibid., 17 November 1897, reporting Annual General Meeting of Social and Sanitary Society, 16 November 1897).
4. Ibid., 30 November 1899, reporting Annual General Meeting of Social and Sanitary Society, 29 November 1899.
only too well. When the Council further expanded their machinery of slum inspection, the Social and Sanitary Society were delighted to see that there was less need for them to form part of the sanitary machinery.

The Social and Sanitary Society were of great value in propagating new methods of supervising the sanitary conditions of Edinburgh. However, over the fundamental work of making house-to-house visitations, it was inevitable that the activities of the Society should diminish while those of the Town Council increased.

Events were showing, however, that the Town Council had to face up to more questions involving the housing of the poor. Planning Improvement Schemes and making comprehensive house inspections were not enough. The question of municipal provision of housing in Edinburgh became more and more real year by year. Despite earlier professions as to the need for housing to be strictly a matter for private enterprise, despite the personal identification of so many Councillors with voluntary societies interesting themselves in the housing of the poor (see Chapter 10, p. 236); the Town Council were being driven to lay aside long-held principles and build houses for the poor.

In 1893, the Corporation spokesmen may have been saying at the Improvement Scheme statutory Inquiry that they intended to rebuild on the cleared areas,¹ but the long subsequent hesitation indicated that they hoped and supposed that the safeguards against wholesale eviction in the Improvement Act would not make that necessary. They freely admitted that the evicted would have to move to empty houses at higher rents, but hardly saw that as a problem. At the similar inquiry in 1898, the Corporation spokesmen, usually complacent about accommodation

¹ Scotsman, 16 February 1893, reporting evidence of Lord Provost Russell to Inquiry over application of Town Council to Secretary of State for Scotland to make a Provisional Order under Housing of the Working Classes Act, 15 February 1893.
availability when their Improvement Schemes were being assessed, freely admitted that the 1893 Improvement Scheme had made the housing position difficult. In 1899 it was decided to provide more houses in an Improvement Scheme area, Allan St. in Stockbridge, than were to be taken down. A Corporation, in 1890 ideologically opposed to municipal provision of dwellings, had by 1900 spent nearly £40,000 in providing 237 houses. At that time, also, the same number again were in course of erection in various parts of the city. Along with the actual provision of housing, there was a growing recognition of the need to fix the size and location of houses in accordance with the needs of those for whom they were intended. While the first houses were built on the western edges of the town in McLeod St. in accordance with theories that it was best that the poor should move away from the central areas, most of the subsequent municipal houses were sited in the city centre since greater attention was paid to those Councillors who argued as to the need for the poor to live close to their work. While, at first, the majority of the Town Council felt that the provision of single-room houses would set a very bad example; by the close of the 1890's they were far more reconciled to the idea on the basis that it was the most that a lot of the poor could afford.

There is a telling contrast between the attitude of the Town Council towards municipal housing before and after 1895. Before 1895, a Sub Committee of the Lord Provost's Committee had been advocating the construction of municipal houses between High Street and Cowgate.

1. Scotsman, 14 March 1898, reporting speech of Comrie Thomson, counsel for Corporation, to Inquiry, on behalf of Secretary of State for Scotland, with reference to Improvement Scheme of Edinburgh Corporation, 12 March 1898.
2. ibid., 19 October 1899, reporting meeting of Town Council, 18 October 1899.
3. ibid., 26 July 1900, publishing Report of Burgh Engineer for year 1899. For list of municipal houses already built, see Appendix XXI.
4. ibid., 31 October 1900, reporting meeting of Town Council, 30 October 1900.
However, the fact that many of them were to be of one room was distasteful to many Councillors; and the persistent complacency of Councillors as to availability of alternative accommodation for those evicted under the Improvement Schemes, meant that the Council displayed their traditional lack of urgency over this question, so important from a public health point of view, despite their efficiency in dealing with other public health questions. They allowed the matter to rest in the Sub Committee rooms from year to year, and, rather than give a negative decision, made no decision except "delay". After 1895 the Council were more prompt in considering motions for the provision of municipal houses; admittedly, this being a far-reaching departure in municipal policy, there were often long debates where not a few Councillors expressed doubts, but there was a definite tendency towards a more liberal treatment of such questions; and almost all such motions were passed. The main reason for this turning point in 1895 was a Report by the Burgh Engineer showing the steep fall in the number of available houses, especially at low rents, since the early 1890's and the extent of subdivision caused by this. The relevant figures, coming from such an authoritative source, lent greater urgency to the question; pressure from a growing (if still small) section of the Town Council itself was felt to be all the more compelling.

Factors, external to the Town Council's public health machinery, were at least subsidiary. The North British Railway Company (see p. 246) began demolition operations in 1895 and thus caused further clearances, and made public agitators about scarcity of accommodation all the more vocal in their demands. Scarcity of housing may thus have been an

1. Scotsman, 23 November 1895, publishing article on Report of Burgh Engineer.

For table of number of habitable unoccupied houses from year to year, extent of subdivision of houses, number of habitable unoccupied houses Ward by Ward for Martinmas 1895, see Appendix XXII.
acute problem in the 1890's, but there had been scarcely a decade all through the span of this thesis when there had been no problem. However, in the 1890's, the national growth of a working-class consciousness meant that working-class spokesmen were far more vocal in their concern for and their demands for remedying the scarcity of working-class accommodation and, despite some ebbs and flows, they generally sustained their demands right through the 1890's; this helped to make the Town Council ever more conscious of the seriousness of the problem.

They certainly did not approach the question of municipal housing as they approached the question of treatment of tuberculosis - namely, as a grand new frontier to municipal administration. To the mid-1890's, nearly every major city in Britain, except Edinburgh, had begun to provide municipal houses; the housing problems in Edinburgh were very similar to those in other cities. However, the Town Council did not necessarily believe that this indicated they were backward; rather did they hope that they would avoid the necessity of doing what was being done elsewhere. However, when the necessity did impress itself upon Edinburgh Town Council, the examples of municipal housing in other cities certainly made the decision easier for them to take.

The activities of the Town Council in this field are best compared with their connected activities with the Improvement Schemes. Both, representing attempts to cope with fundamental problems, were expressions of frustration at, on the one hand, the persistence of insanitary houses and inhabitants indifferent to the tenets of public health, on the other

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1. At all times, a constant net increase in population kept scarcity of housing existent as a problem.
...hand, the persistence of a scarcity of housing. Viewing both fields separately, with each there were plenty grounds for frustration at recognition of the work requiring to be done; the fact they were so directly connected meant that the Improvement Schemes were both the cause and effect of the scarcity of housing. Any attempt to clear out a grossly insanitary area full of low-rented slums meant an inevitable diminution in the supply of housing at low rents; this meant further overcrowding in neighbouring areas and subdivision of houses in slightly better areas; the subdivision meant that the evicted slum dwellers felt no inducement to improve their sanitary habits, their presence caused the area to deteriorate in all respects so as another Improvement Scheme was imperatively necessary. The fact that the process was so circular meant that the problem was not merely frustrating: it was virtually insoluble. Besides, the sanitary responsibilities felt by the Town Council were such that the circle could not easily be stopped from revolving by ignoring insanitary areas which Sir Henry Littlejohn demanded be dealt with by an Improvement Scheme (see p. 250).

Scarcity of housing had to be remedied in a grand manner before the other two bogeys of the infernal triplet: education of the poor to improved sanitary habits, general condition of their housing: could be solved. The habits of the poor had certainly improved as compared with conditions described in the 1860's; horrific accounts of the interiors of dwellings and the debauchery of their inhabitants were no longer a commonplace in the Old Town, but improvement of habits did not proceed at anything like the same pace as did the pace of municipal authorities in attempting to improve sanitary conditions. The Social and Sanitary Society and kindred societies, called into being by the persistence of indifference to sanitary improvement on the part of the poor, had done

1. Though the slum perpetuating process of subdivision had been made subject to legislation in the 1891 Police Act (ibid., 22 April 1891, reporting evidence before Police and Sanitary Regulations Committee of House of Commons, 21 April 1891), it had only been limited, not stamped out.
much useful work in that direction which (in combination with the effects of constant rises in real wages) had had some results. However, the results were still nothing nearly as great as had been hoped, since such societies were hamstrung essentially by the shortage of housing. Though, at all times, there was some legislation left unused, in general the Public Health Committee (and other committees with sanitary duties like the Streets and Buildings Committee and the Cleaning and Lighting Committee) had done about as much as they could within the limits of legislative powers. The Public Health Committee, by the 1890's, had become outstandingly good in their use of public health legislation, especially in work easily amenable to effective execution of effective laws, like the supervision of dairies etc. (see pp.256-8). A current Scotsman editorial could comment: The record of the Edinburgh Health Committee's work is a credit to municipal government. However, the scarcity of housing meant that, instead of insanitary conditions dying out with successive application of municipal powers, they were as just quickly created. Scarcity of housing was not so amenable to legislative remedies as were insanitary dairies.

The best evidence for the persistence of fundamental sanitary problems is given by Sir Henry Littlejohn's attitude. Having been appointed M.O.H. nearly forty years before, and now in extreme old age, he showed no signs of complacency. Despite remembering the much worse conditions of the 1860's; his evidence to Improvement Scheme statutory inquiries (see p.250) and his report with reference to tuberculosis (see p.262) show how he was driving on, not pulling back. After forty years' experience, he was still not content.

He could not be expected to be content so long as the problem of shortage of housing (existent all through his appointment and long before

1. Scotsman, 21 October 1896, editorial.
it), expressed publicly at intervals to about 1885 and persistently thereafter, militated against the solution of other fundamental problems, as well as being a problem in itself. A supply of municipal housing at low rents was still insufficient. Only when the municipality built houses at uneconomic rents\(^1\) (to cover estates, not a section of a street, and looked on such provision as a long-term policy, not a temporary need; could a real start be made to bring the sanitary consciousness of the poor and the internal condition of their houses up to the standards of the time.

Against these problems, one might have expected the mood of depression to be counterbalanced by pride and confidence in the growing professionalism of the Public Health Committee and by great optimism in their determination to grapple with the problem of tuberculosis. Such optimism was undoubted, but the concept of tuberculosis as a medical problem, was totally different from the concept of slums, as a social and environmental problem. Sanitary public opinion, of course, recognised the growing professionalism of the Public Health Committee, but was further depressed by the recognition that, despite this, the overall efficacy of the Committee was rendered impotent by the persistence of slums, which, despite their efforts, they could not stamp out. However, though sanitary public opinion may not have recognised it, the Committee was itself tending to differentiate between "public health" and "sanitary" activities. They were coming to look on such questions

1. Rents in most municipal houses were designed merely to cover capital and running costs. Still, they were designed to pay for themselves, albeit if it was foreseen they would not repay their initial costs for 80 years. Before municipal houses could reach the class for whom they were intended, they would have to be rented at less than £5 a year (1/11d. a week). As it was, the lowest rents, even for a single room, charged in this period were in High School Yards at £5,4: (ibid., 4 March 1896, reporting meeting of Town Council, 3 March 1896).
as the administration of the City Hospital, dairies, meat inspection, tuberculosis as "public health" in which there were sweeping advances in the 1890's, with it being much easier for the expertise of Sir Henry Littlejohn to have direct results here. They looked on problems connected with slums generally as "sanitary" activities, these remaining unsolved. (This differentiation was confirmed shortly after the conclusion of this story by the formation of Public Health and Sanitary Standing Sub Committees.)

Though municipal treatment of tuberculosis could eventually cause a steep fall in the death rate, some years were to pass before the activities of the Council were sufficiently advanced in this field for this to be possible. Anyway, before 1900, the question is studied more to illustrate the professionalism of the Public Health Committee than to look into the future and assess the eventual effects on the death rate. This professionalism, exemplified so nobly over the latter question, did in the field of inspection of food and kindred subjects, in the field of administration of the City Hospital, undoubtedly save a considerable number of lives.

However, a general sanitary environment in the Old Town (and newer working-class areas) brought closer to the standards that Sir Henry Littlejohn would have been happier with, could save many more. In this field, however, the Public Health Committee's professionalism came up against severe social and economic barriers, not found over the questions of the administration of the City Hospital, control of infection of tuberculosis, administration of dairies to anything like the same extent.

1. Public Health Committee, Minutes, 24 November 1903.

2. Legislation might ensure that milk and meat reached the consumer in a hygienic condition, but it was also necessary and far more difficult to ensure that the consumer was hygienic in handling food.
The Chambers Improvement Scheme and the early work of the Public Health Committee had cleared away the most conspicuously intolerable areas and sharply reduced death rates, but these operations now appeared to have taken place so far in the past that, with scarcity of housing now causing less deplorable, but still insanitary areas, to perpetuate themselves, a stagnant progress in death rates was evident and seemed to have been long since evident. Even if death rates give a useful commentary on sanitary progress over a decade, it has to be noted that sanitary public opinion did not generally complain about the stagnant progress in death rates. However, death rates attracted notice only when they had dramatically fallen, risen, or were dramatically bad. With none of these phenomena present, it is no surprise that general silence about death rates was accompanied by unease over the recognition of the lot of sanitary work that remained to be done.

At the start of the 1890's, the Town Council knew they had to increase the scope of their activities but were not sure how (see Chapter 10, pp. 239-40). By 1900, what their activities should be primarily, was clear. It was admirable for them to contemplate using their powers to isolate inhabitants of a slum from tubercular infection by placing tubercular patients in hospital; it was equally admirable and quite as effective to supply an amount of low-rented municipal housing capable of obviating the necessity for these inhabitants to dwell amidst such housing conditions as still gave the tubercle bacilli too good an opportunity for claiming victims.

Meanwhile, with the 19th century passing into the 20th, and some fundamental sanitary problems remaining unsolved, Sir Henry Littlejohn, now aged 74 and knighted in 1896, had been M.O.H. for Edinburgh for 38 years and still had 8 years of office remaining.* The public health situation in Edinburgh, as in other cities, was unrecognisably good as compared with 40 years earlier. The areas of the city, the foulness

*For biographical sketch of Dr. Littlejohn, see Vol. 2, pp. 18-20, Appendix XIX.
thereof Dr. Littlejohn had illustrated in his 1865 Report by reference to the high death rates of over 30/1000/annum, now had death rates comfortably below 25/1000/annum in most years and had thus met Littlejohn's target as set in 1865. While, at the time of his appointment, there had been much talk about the need for strong action in meeting basic sanitary problems and little response, by 1900 the scale of municipal action in this field was massive and constantly growing. Edinburgh had tended to lag behind other cities (though not all of them) in instituting a settled routine of action in the public health field, but had now largely caught up. This was in keeping with a trend whereby different municipalities had had different attitudes towards the need for strong action in the public health field in the middle of the century, but by 1900 were taking a similar approach to public health problems.

The breakthrough in the approach of Edinburgh Town Council towards public health problems has been shown not to date directly from Dr. Littlejohn's appointment. The largest single contribution towards the extermination of the most notoriously insanitary areas was the Chambers Improvement Scheme - a course of action in the public health field taken only in a minority of cities. This had been foreshadowed in a principal suggestion in Dr. Littlejohn's 1865 Report and was taken up almost immediately by Chambers, but the emergence of the Improvement Scheme owed so much to the fact that Chambers became Lord Provost at that time that it is dangerous to point to Littlejohn's 1865 Report as being the point where Edinburgh Town Council made a breakthrough in their approach to public health problems. For some years afterwards the Town Council's attitude to public health matters (excluding the Improvement Scheme) remained as it had done before 1865. It was not till the setting up of the Public Health Committee in 1872 that Edinburgh had a systematic and specialised municipal department to attend to all recognised public
health matters on a perpetual basis (while the Improvement Scheme consisted of a single job, albeit a massive job). On this basis, the date of the breakthrough in the approach of the Town Council towards public health matters was 1872 (when the Town Council took a step in keeping with what was being done in other cities). Even if evidence would suggest that Dr. Littlejohn persuaded Bailie Lewis to move the decisive motion to put machinery in action for the setting up of a Public Health Committee, it was a whole decade after his appointment that he did so.

Dr. Littlejohn is best remembered for his Report on the Sanitary Condition of Edinburgh, and deservedly so. No sanitary officer in any British city provided such comprehensive information as Littlejohn did for Edinburgh, Simon's Reports as M.O.H. for the City of London not excepted. Besides, he achieved more than simply a reputation as an illustrious author on public health matters; his main suggestions had all been carried out by 1900.

However, it would be anomalous to confine discussion of Dr. Littlejohn, M.O.H. for Edinburgh for 46 years, to a Report produced shortly after he took office, before he had any real power to influence the conduct of public health administration. Even if the implementation of the Report's suggestions bore the merit of his authority and constituted a logical programme, important matters of public health policy in 1900 were not discussed in 1865. Even if the figures set as death rate targets in 1865 were still relevant in 1900, the 1865 Report made no mention of tuberculosis, of municipal administration of an infectious diseases hospital, of municipal housing. A logical programme in 1865 was, in many ways, out of date by the end of the century.

Discussion of Dr. Littlejohn must include matters other than his 1865 Report. Yet, after 1865, Dr. Littlejohn's name was only very fitfully before the public. In the public health annals of Edinburgh the later 1860's are best remembered for the Chambers Improvement Scheme,
The early 1870's for the furore over the St. Mary's Loch water scheme, the middle and later 1870's for the sense of public contentment with the work that the Public Health Committee were doing, the 1880's for the recrudescence of voluntary societies whose actions were based on modern public health principles, the 1890's for the execution of smaller Improvement Schemes and for the discussion over means of attending to tuberculosis. Over none of these matters was Dr. Littlejohn's name prominently before the public; over the question of how to deal with tuberculosis, Littlejohn seemed content to allow Pollard, as Convener of the Public Health Committee, to take the lead in directing discussion. He did not appear to be prominent in any pressure upon the Town Council in the 1880's to take over the management of the infectious diseases hospital; again Pollard led the discussion over the question of a new infectious diseases hospital. Littlejohn's name appeared prominently in discussion of questions like dairies, meat inspection, ice cream shops, and such topics. These were recognised items of interest to a M.O.H., but none of these were fundamental matters of public health in the way that the question of insanitary housing was. The question of intimation of infectious diseases was the only question of crucial importance to public health, in connection with which Littlejohn's name appeared prominently over a long period.

Yet, Littlejohn's role as M.O.H. was not negligible by any means. Even if he rarely spoke in public, his statistics of death rates and his special reports over a miscellany of public health topics were, usually, the authority on which action in the public health field was based. Length of tenure of office could not bring with it any accusations that, in old age, his attitude to public health problems was becoming out of date. In the 1890's (whenever it was his place to do so) he was as adamant in pressing for schemes of sanitary improvement
as he had been in the 1860's. His length of tenure of office constituted, if anything, the strength of his contribution as M.O.H. for Edinburgh. While there was a succession of Burgh Engineers and of Conveners of the Public Health Committee, Littlejohn's tenure of the Medical Officership of Health was a constant factor. If he was more silent in public than most M.O.H.'s, he could afford to be so, because his length of tenure of office alone gave him great authority. He was the "sheet-anchor", often unseen and unheard, of public health policy in all its branches. Consultations between sanitary officials, sanitarians both inside and outside the Town Council, and Dr. Littlejohn over sanitary problems and sanitary schemes must have been indeed numerous. Littlejohn may have let Pollard take the lead over the question of treatment of tuberculosis and the question of the siting of the new City Hospital, but one can be sure that Pollard would be in constant consultation with Dr. Littlejohn; Littlejohn could afford to let Pollard take the lead over such matters since they were bound to have his approval.

While the improvement in Edinburgh's public health standing between 1860 and 1900 need surprise no one who knows of the general trend in public health over Britain as a whole, the contribution of Dr. Littlejohn to the improvement in Edinburgh was considerable. Improvement in sanitary conditions in Edinburgh was not bound to come automatically just because it was happening elsewhere; there had to be local action. Though Dr. Littlejohn's appointment produced little immediate improvement, his position, as the ultimate authority and the steadying constant factor in municipal public health policy over a long period, was a vital one.
APPENDIX I (see Chapter 4, p. 77, footnote 1).

SPECIMEN OF DR. LITTLEJOHN'S WEEKLY REPORTS ON THE HEALTH OF THE CITY

12 deaths registered during the week; that is equivalent to an annual mortality rate of 28.06/1000; that is 8 above the weekly average number registered deaths in 1863, is 8 above the number of registered deaths for the previous week; there were 106 registered deaths in the corresponding week of 1863.

(Here follows a table of the number of deaths in 5 year age groups except for the number of deaths under 5 years of age where they are given in age groups of 1 year. It transpires that 36 of the 92 deaths occurred among infants under 5 years of age).

Amongst the registration districts, the 92 deaths were distributed as follows: St. Andrew's 25, St. George's 23, Newington 18, St. Giles'14, Canongate 12.

The 22 deaths from infectious diseases were distributed, as to types of infectious diseases, and as to registration districts, as follows:

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<th>St. George's</th>
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<th>Canongate</th>
<th>St. Giles'</th>
<th>Newington</th>
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<td>Fever</td>
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<td>1</td>
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<td>Diptheria</td>
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<tr>
<td>Smallpox</td>
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<tr>
<td>Scarlet Fever</td>
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<td>2</td>
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<tr>
<td>Hooping Cough</td>
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<td>4</td>
<td>1</td>
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<td>Measles</td>
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<td>Erysipelas</td>
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<td>7</td>
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<td>2</td>
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<td>22</td>
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(accompanied with this table is a meteorological table for that week, giving atmospheric pressures, rainfall, temperature, wind speeds).

1. Scotsman, 20 April, 1864, publishing report of Dr. Littlejohn on the health of the city for the week ended 16 April 1864.
APPENDIX II (see Chapter 4, p. 84, footnote 6).

LIST OF SUBJECTS DEALT WITH IN TEXT OF DR. LITTLEJOHN'S 1865 REPORT

1. Density of population, death rates, birth rates and brief commentaries and explanations on 19 sanitary districts,

2. an analysis of the distribution of various epidemic diseases, brain diseases, heart diseases, chest diseases (with explanation) among the different sanitary districts,

3. analysis of the density of population in various small areas, and an examination of their relation with death rates, with comparisons of the density of population in other cities,

4. analysis of the buildings in Edinburgh which were worst for overcrowding,

5. lodging-houses,

6. the provision of improved dwellings,

7. administration of the Poor Law Boards,

8. industrial nuisances and offensive trades,

9. byres,

10. trade in unsound meat,

11. bakehouses,

12. relative healthfulness of various trades and occupations for their employees.

13. public institutions including charitable educational and medical institutions, workhouses, reformatories,

14. drainage,

15. house cesspools,

16. street cesspools,

17. the Water of Leith,

18. various irrigated meadows,

19. water supply,

20. burial grounds,

21. summary of main sanitary defects in Old Town, New Town, Southern Districts, with suggestions for remediying them.

1. Littlejohn, Report, pp. 8-120.
APPENDIX III (see Chapter 4, p. 84 footnote 7)

LIST OF DEATH RATES AND DENSITY OF POPULATION IN EACH SANITARY DISTRICT

(death rates are given per 1000 of population per annum in 1863; density of population is given per acre, as taken from 1861 census of population).

<table>
<thead>
<tr>
<th>District</th>
<th>Death Rate</th>
<th>Density of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper New Town</td>
<td>17.38</td>
<td>90.3</td>
</tr>
<tr>
<td>Lower New Town</td>
<td>15.47</td>
<td>95.4</td>
</tr>
<tr>
<td>West End</td>
<td>31.88</td>
<td>22.1</td>
</tr>
<tr>
<td>Upper Water of Leith</td>
<td>19.46</td>
<td>29.6</td>
</tr>
<tr>
<td>Lower Water of Leith</td>
<td>17.58</td>
<td>7.2</td>
</tr>
<tr>
<td>Broughton</td>
<td>17.63</td>
<td>28.8</td>
</tr>
<tr>
<td>Calton and Greenside</td>
<td>22.12</td>
<td>39.0</td>
</tr>
<tr>
<td>Abbey</td>
<td>36.65</td>
<td>20.3</td>
</tr>
<tr>
<td>Canongate</td>
<td>31.23</td>
<td>206.7</td>
</tr>
<tr>
<td>Tron</td>
<td>34.55</td>
<td>314.5</td>
</tr>
<tr>
<td>St. Giles'</td>
<td>28.8</td>
<td>121.8</td>
</tr>
<tr>
<td>Grassmarket</td>
<td>32.52</td>
<td>237.6</td>
</tr>
<tr>
<td>Fountainbridge</td>
<td>25.2</td>
<td>95.0</td>
</tr>
<tr>
<td>George Square and Lauriston</td>
<td>37.46</td>
<td>36.2</td>
</tr>
<tr>
<td>Nicolson Street</td>
<td>29.0</td>
<td>286.0</td>
</tr>
<tr>
<td>Pleasance and St. Leonard's</td>
<td>26.65</td>
<td>132.2</td>
</tr>
<tr>
<td>Newington</td>
<td>21.79</td>
<td>21.2</td>
</tr>
<tr>
<td>Grange</td>
<td>13.78</td>
<td>7.5</td>
</tr>
<tr>
<td>Morningside</td>
<td>22.54</td>
<td>4.1</td>
</tr>
</tbody>
</table>


* For map of sanitary districts, as defined in Littlejohn's 1865 Report, see Vol.2, MHA.
APPENDIX IV (see Chapter 4, p.84 , footnote 8 )

LIST OF AREAS MOST Densely overcrowded, mortality in each of these areas

(death rates given in mortality for 1863/1000/annum; density of population given in population per acre, as ascertained from 1861 population census).

<table>
<thead>
<tr>
<th>Area</th>
<th>Death Rate</th>
<th>Density of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tron, between North Bridge and St. Mary's Wynd</td>
<td>39.26</td>
<td>646</td>
</tr>
<tr>
<td>India Place</td>
<td>26.33</td>
<td>553</td>
</tr>
<tr>
<td>Greenside</td>
<td>26.6</td>
<td>524</td>
</tr>
<tr>
<td>St. James's Square</td>
<td>24.03</td>
<td>361</td>
</tr>
<tr>
<td>Dean St.</td>
<td>25.02</td>
<td>336</td>
</tr>
<tr>
<td>Canongate, between St. Mary's Wynd and St. John St.</td>
<td>29.47</td>
<td>331</td>
</tr>
<tr>
<td>Village of Water of Leith</td>
<td>23.72</td>
<td>151</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Death Rate</th>
<th>Density of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Luke's</td>
<td>26.59</td>
<td>447.8</td>
</tr>
<tr>
<td>St. James's, Westminster</td>
<td>20.55</td>
<td>424.4</td>
</tr>
<tr>
<td>Holborn</td>
<td>35.07</td>
<td>392.3</td>
</tr>
<tr>
<td>Strand</td>
<td>18.94</td>
<td>328.8</td>
</tr>
<tr>
<td>St. Giles'</td>
<td>38.34</td>
<td>309.2</td>
</tr>
</tbody>
</table>


* For map of areas described by Littlejohn as most severely overcrowded in his 1865 Report, see Vol.2, Map A.
APPENDIX V (see Chapter 4, p. 85, footnote 1)

LIST OF BUILDINGS MOST DENSELY OVERCROWDED, WITH NUMBER OF WATER CLOSETS IN EACH

<table>
<thead>
<tr>
<th>Building</th>
<th>No. of inhabitants</th>
<th>No. of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 8 Cowgatehead:</td>
<td>179</td>
<td>38</td>
</tr>
<tr>
<td>Middle Mealmarket Stair, Cowgate:</td>
<td>248</td>
<td>56</td>
</tr>
<tr>
<td>Old &quot; &quot; &quot; &quot; &quot;</td>
<td>110</td>
<td>22</td>
</tr>
<tr>
<td>58 Blackfriars' Wynd:</td>
<td>130</td>
<td>28</td>
</tr>
<tr>
<td>Elphinston's Land:</td>
<td>135</td>
<td>35</td>
</tr>
<tr>
<td>Scot's Land, 341 Cowgate:</td>
<td>170</td>
<td>42</td>
</tr>
<tr>
<td>Hope's Land, 268 Canongate:</td>
<td>103</td>
<td>29</td>
</tr>
<tr>
<td>Purves' Land, 327 Canongate:</td>
<td>119</td>
<td>29</td>
</tr>
<tr>
<td>Burns' Land, North Back of Canongate:</td>
<td>68</td>
<td>13</td>
</tr>
<tr>
<td>Birtley Buildings, Mid-Common Close, Canongate:</td>
<td>125</td>
<td>33</td>
</tr>
<tr>
<td>Crombie's Land, West Port:</td>
<td>70</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building</th>
<th>No. of rooms</th>
<th>No. of storeys</th>
<th>No. of water closets</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 8 Cowgatehead:</td>
<td>60</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Middle Mealmarket Stair, Cowgate:</td>
<td>59</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Old &quot; &quot; &quot; &quot; &quot;</td>
<td>31</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>58 Blackfriars' Wynd:</td>
<td>49</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Elphinston's Land:</td>
<td>45</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Scot's Land, 341 Cowgate:</td>
<td>53</td>
<td>6</td>
<td>-</td>
</tr>
<tr>
<td>Hope's Land, 268 Canongate:</td>
<td>36</td>
<td>Not given</td>
<td>-</td>
</tr>
<tr>
<td>Purves' Land, 327 Canongate:</td>
<td>32</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Burns' Land, North Back of Canongate:</td>
<td>25</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Birtley Buildings, Mid-Common Close:</td>
<td>35</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Crombie's Land, West Port:</td>
<td>27</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

1. Littlejohn, Report, pp.31-36.
APPENDIX VI (see Chapter 6, p. 108, footnote 3).†

OPERATIONS SANCTIONED UNDER 1867 IMPROVEMENT ACT

(1) PLAN OF COUSIN AND LESSELS OF OPERATIONS IN EACH BLOCK

BLOCK 1 - BETWEEN LEITH WYND AND NORTH BRIDGE - All back buildings in closes immediately behind High St. to be cleared out except for those either in good repair, recently rebuilt, or which did not interfere with general scheme of improvement. New street to be 50 feet wide; level of the part of Leith Wynd next Canongate to be raised; entrance to Leith Wynd to be diverted to last. New street to turn north near Old St. Paul's Episcopal Church in Curruber's Close. To be broad arched openings through Chalmers' Close and North Gray's Close; to be steps at north end of Halkerton's Wynd.

BLOCK 2 - BETWEEN LEITH WYND AND NEW ST. - Houses abutting against Canongate in Kinloch's, Seton's, Morocco, Logan's, Old Fishmarket Closes, on east side of Leith Wynd, to be removed. Leith Wynd to be diverted to join Canongate at Coull's Close and to be widened to 40 feet; all buildings on east side of Leith Wynd from Sheppard's Court southwards to be removed. New street to run east from Leith Wynd to New St. to Big Jack's Close where it would turn south, and enter Canongate opposite St. John St.; front tenement in Big Jack's Close to be removed.

*BLOCK 3 - BETWEEN ST. MARY'S WYND AND ST. JOHN ST. - St. Mary's Wynd to be widened to 50 feet; all buildings in closes as far east as Gibb's Close, and on east side of Chessel's Court, and some buildings in Plainstare's, Watson's, Milne's Closes, to be taken down; new 40 foot wide cross-street to be formed eastwards from St. Mary's Wynd which would turn north at Chessel's Court and enter Canongate.

BLOCK 4 - BETWEEN ST. MARY'S WYND AND NIDDRY ST. - To be cross-street from St. Mary's Wynd to Blackfriar's Wynd; the latter to be widened to 50 feet; all tenements from east side of Blackfriar's Wynd to Hyndford's Close to be demolished; some buildings to be demolished.

*The plans for operations in Block 3 were to be amended by a subsequent vote of the Town Council.

† For map of plans of Cousin and Lessels, see Vol. 2, Map C.
between South Foulis Close and Fountain Close, and between World End's Close and St. Mary's Wynd. All old buildings between Cant's and Dickson's Closes to be removed, as also some ruinous tenements in Hall's Court and a tenement in Middry St. Opening to be made into Dickson's Close.

BLOCK 5 - BETWEEN BLAIR ST. AND OLD FISHMARKET CLOSE - Stevenlaw's Close to be widened by enlarging archway of front tenement and by removing house behind it, as also all buildings on west side of close below Free Tron Church as far as second tenement above Cowgate. 30 foot wide cross-street to run from there to Old Fishmarket Close; to south of this street, all houses between it and Cowgate to be taken down; similar space to be formed on northern side of block after removal of houses in closes abutting against High St.; where practicable, to be further openings between this space and northern side of new street, so as to leave standing only the buildings which were in good repair.

BLOCK 6 - BETWEEN COWGATE AND NORTH COLLEGE ST. - All old buildings between Horse Wynd and College Wynd, and thence east to Hastie's Close, except for Free Church in Cowgate and tenement on east of it, to be taken down. Cowgate to be widened to 35 feet, and range of new houses to be built on south side of it; Horse Wynd to be widened, diverted to ease, and carried round into North College St. North College St. to be widened to 70 feet.

BLOCK 7 - HIGH SCHOOL 'WYND - Old tenements on east side of High School Wynd, old house on east side of Bull's Close, house behind it in High School Yards, to be demolished. Old tenement on north west corner of High School Wynd, corner tenement between Pleasance and South Back of Canongate to be taken down and rebuilt.

BLOCK 8 - GRASSMARKET - Old tenements on east side of Dewar's Close, all tenements between Currie's Close and Jamieson's Close from back of houses in Grassmarket north to Castle Wynd, tenements in closes west of Girdwood's Close including the five front tenements on north west corner of Grassmarket, to be removed. These to leave a large open space. The five front tenements would be rebuilt, but front would be kept back to allow excess from King's Stables to be widened.

At south east corner, old ruinous houses on south side of Cowgate to be rebuilt so as to leave broad open street; tenements behind these from Warden's Close eastwards to be removed,
APPENDIX VI - BLOCK 8 (cont'd)

as also some old buildings in Aird's, East Smith's, West Smith's, Cowie's, Gilmour's Closes; ample space to be left for ventilation.

BLOCK 9 - WEST PORT - Four old houses at north east corner of entrance to West Port, four others a little beyond, which blocked up street, to be removed. New tenements to be built; several old tenements, including Crombie's Land, to be taken down so as to widen street and to clear out spaces behind houses.

BLOCK 10 - BETWEEN SPITTAL ST. AND LAURISTON PLACE - New street to continue to Spittal St. in line of Lady Lawson's Wynd which would be widened to 40 feet by taking in a part of the Cattle Market, and by removing a few houses on both sides next West Port. Three houses in West Port facing the street to be taken down; all the buildings behind, between there and Spittal St., to be cleared out so as to leave space for a line of houses on either side of the new street and for open spaces.

BLOCK 11 - CANONGATE WEST OF NEW ST. - In White Horse Close, two old front tenements to be taken down and rebuilt in a line with the houses on east side; in Ramsay's Close, old tenement next Canongate to be taken down and rebuilt; archway to be widened, all buildings on west side of Ramsay's Close west to Whiteford House to be taken down and removed, so as to leave clear open street to North Back of Canongate; line of new houses to be built on west side with open court in front. Old houses densely packed in Brown's, Campbell's, Malloch's Closes to be pulled down and rebuilt, with ample space around for ventilation; building between Cadell's House and tenement next Canongate in Brown's Court to be removed, as also the two small houses on east side of Brown's Court. Buildings on east side of Miller's Close, between it and Tolbooth Wynd, to be taken down and removed.

All houses between Reid's and Strathie's Closes to be taken down, as also some houses between Reid's Close and Haddington's Entry; new line of houses to be built on west side of the space, so as to leave an open court in front. Tenements on west side of Stewart's Close to be taken down and removed, so as to leave clear open court.
APPENDIX VI (cont'd).

BLOCK 12 - BETWEEN NICOLSON SQUARE AND BRISTO ST. - New street to be built from Bristo St. to Nicolson Square. All houses on both sides of Middleton's Entry, as also the houses fronting Potter Row and Bristo St., to be taken down. Line of new houses to be built on each side of new street.

BLOCK 13 - BETWEEN WEST RICHMOND ST. AND EAST CROSSCAUSEWAY - Buildings dividing Davie St. from Simon Square, buildings between Simon Square and East Crosscauseway, to be removed and to be wide street from there to West Richmond St. Archway from Nicolson St. to Simon Square to be widened and raised; some old houses on north side of Gilmour St. where it entered Simon Square, as also a house at the south east corner where it joined St. Leonard's St. opposite Carnegie St., to be removed, so as to connect Simon Square to Carnegie St.

BLOCK 14 - ENTRANCE TO QUEEN'S PARK - To go through Carnegie St. and Heriot Mount.

(ii) CHANGE OCCASIONED BY VOTE OF TOWN COUNCIL ON 12 DECEMBER 1866.²

BLOCK 3 - BETWEEN ST. MARY'S WYND AND ST. JOHN ST. - St. Mary's Wynd to be widened to 50 feet, old and dilapidated buildings between every second close in Block to be removed. Cross-street, as originally projected, not to be built.


2. Scotsman, 13 December 1866, reporting meeting of Town Council, 12 December 1866.
APPENDIX VII (see Chapter 6, p. 109, footnote 3).

COST OF PURCHASING PROPERTY IN EACH BLOCK, AS FINALLY ESTIMATED BY COUSIN AND LESSELS

For explanation of areas to which Block numbers referred, see Appendix VI.

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£ 33,970</td>
</tr>
<tr>
<td>2</td>
<td>£ 43,985</td>
</tr>
<tr>
<td>3</td>
<td>£ 26,800</td>
</tr>
<tr>
<td>4</td>
<td>£ 39,530</td>
</tr>
<tr>
<td>5</td>
<td>£ 19,600</td>
</tr>
<tr>
<td>6</td>
<td>£ 53,650</td>
</tr>
<tr>
<td>7</td>
<td>£ 5,180</td>
</tr>
<tr>
<td>8</td>
<td>£ 19,820</td>
</tr>
<tr>
<td>9</td>
<td>£ 6,540</td>
</tr>
<tr>
<td>10</td>
<td>£ 11,300</td>
</tr>
<tr>
<td>11</td>
<td>£ 13,020</td>
</tr>
<tr>
<td>12</td>
<td>£ 24,610</td>
</tr>
<tr>
<td>13</td>
<td>£ 16,080</td>
</tr>
</tbody>
</table>

TOTAL £314,085

No purchase of property was involved in the operations upon Block 14.

1. D. Cousin and J. Lessels, Additional Statement of Cousin and Lessels, (Edinburgh, 1866).
APPENDIX VIII (see Chapter 6, p. 114, footnote 3).

OUTLINE OF CHAMBERS'S ORIGINAL PLANS; ASSESSED RENTAL OF PROPERTY TO BE DEMOLISHED IN EACH BLOCK AND ESTIMATED COST OF PURCHASE

(1) PROJECTED OPERATIONS

BLOCK 1 - BETWEEN NEW ST. AND LEITH WYND - District to be opened up by street entering at Morocco Close, going westwards to open up several closes, and finishing at the north end of Leith Wynd. Various open spaces to be left.

BLOCK 2 - BETWEEN ST. MARY’S WYND AND ST. JOHN ST. - East side of St. Mary’s Wynd to be removed, so as to widen it to 40 feet; some semi-ruinous buildings to be removed so as to give open paved courts, some new tenements to be erected.

BLOCK 3 - BETWEEN LEITH WYND AND NORTH BRIDGE - To be 40 foot wide diagonal street from south end of Leith Wynd down to Fish Market, crossing the foot of Halkerston's Wynd and going through the central arches of the North Bridge. New street would cut across a number of narrow closes.

BLOCK 4 - BETWEEN ST. MARY’S WYND AND NIDDRY ST. - To be 40 foot wide street from near the north end of Niddry St. to east end of Cowgate opposite north end of Pleasance. To be a broad passage at Murdoch's and Fountain's Closes, with a cross-passage from each to a widened Blackfriar's Wynd. Block to be otherwise opened up by removal of some old buildings about Cant's, Skinner's, Hyndford's, World's End and other closes.

BLOCK 5 - BETWEEN OLD FISHMARKET CLOSE AND STEVENLAW’S CLOSE - To be opened up by two broad passages, entering by pends from High St. at Stevenlaw's and Covenant's Closes. About half-way between High St. and Cowgate, both passages to unite, issuing in Cowgate opposite north end of Horse Wynd. To be considerable removal of old, and erection of new, buildings.

BLOCK 6 - BETWEEN COWGATE AND NORTH COLLEGE ST. - North College St., from Adam Square to Brown Square, to be widened to 70 feet. Block of old houses between College Wynd and Horse Wynd to be removed; both wynds to be widened and new buildings and leave open central space reached by three broad passages.

* For map of Chambers's original and modified plans, see Vol. 2 Map B.
APPENDIX VIII (cont'd).

BLOCK 7 - INFIRmary ST. - Infirmary St. to be continued to east end of Cowgate. Continuation of street to slant across Surgeon Square and clear away some old wretched buildings at Cowgate. High School Wynd to be improved by removal of wooden fronts on various tenements.

BLOCK 8 - GRASSMARKET - On north side, old buildings to be removed, open spaces and new buildings to be formed. On south side, entrance from Cowgate to be much widened, new buildings to replace old ones with wooden fronts. West of this, in adjoining closes, some dilapidated tenements to be removed, so as to leave open paved courts; several new buildings to be erected.

BLOCK 9 - WEST PORT - Street to be widened where necessary; some buildings including Crombie's Land to be removed.

BLOCK 10 - CASTLE TERRACE TO LAURISTON - New street to cut across West Port and remove several narrow closes and to embrace Lady Lawson's Wynd thus doubling its width to 40 feet.

BLOCK 11 - CANONGATE EAST OF NEW ST. - Some dilapidated tenements to be removed leaving open spaces, several new buildings to be erected.

(i) ASSESSED RENTAL AND COST OF PURCHASING PROPERTY IN VARIOUS BLOCKS

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>ANNUAL RENTAL</th>
<th>COST OF PURCHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>£ 858</td>
<td>£ 15,444 (at 18 years'purchase)</td>
</tr>
<tr>
<td>2</td>
<td>£ 1,471:10:-</td>
<td>£ 29,430 (at 20 years'purchase)</td>
</tr>
<tr>
<td>3</td>
<td>£ 1,473</td>
<td>£ 29,460 (at 20 years'purchase)</td>
</tr>
<tr>
<td>4</td>
<td>£ 1,885</td>
<td>£ 27,700 (at 15 years'purchase)</td>
</tr>
<tr>
<td>5</td>
<td>£ 1,382</td>
<td>£ 27,640 (at 20 years'purchase)</td>
</tr>
<tr>
<td>6</td>
<td>£ 2,599</td>
<td>£ 51,980 (at 20 years'purchase)</td>
</tr>
<tr>
<td>7</td>
<td>£ 612</td>
<td>£ 12,240 (at 20 years'purchase)</td>
</tr>
<tr>
<td>8</td>
<td>£ 1,273</td>
<td>£ 25,460 (at 20 years'purchase)</td>
</tr>
<tr>
<td>9</td>
<td>£ 623</td>
<td>£ 12,460 (at 20 years'purchase)</td>
</tr>
<tr>
<td>10</td>
<td>£ 879</td>
<td>£ 17,580 (at 20 years'purchase)</td>
</tr>
<tr>
<td>11</td>
<td>£ 700</td>
<td>£ 14,000' (at 20 years'purchase)</td>
</tr>
</tbody>
</table>

TOTAL COST £263,394

1. Scotsman, 14 February 1866, reporting meeting of Town Council, 13 February 1866.
APPENDIX IX (see Chapter 6, p. 115, footnote 2)\textasteriskcentered

OUTLINE OF CHAMBERS'S MODIFIED PLANS; NET ESTIMATED COST OF OPERATIONS IN EACH BLOCK

(i) PROJECTED OPERATIONS

Operations were projected only in Blocks 1, 2, 3, 4, 5 (for description of areas to which Block numbers referred, see part (i) of footnote). The operations projected on Blocks 2, 3, 5 were the same as those projected in the original plans (see Appendix III). In Blocks 1 and 4, however, the following changes were projected from the original plans.

BLOCK 1 - Long diagonal street to be replaced by a shorter street beginning at Morocco Close and terminating, by a bend, in Gilmour St.

BLOCK 4 - Instead of a diagonal street, to be (a) removal of certain tenements at Cant's Close, (b) clearing out of Hall's Court, (c) widening of Blackfriar's Wynd to 20 feet and having a 25 foot wide street from there across Todrick's Wynd to South Gray's Close (also to be widened to 20 feet) to Cowgate; also to be cross-street from Blackfriar's Wynd to Niddry St., (d) to be broad passages at Fountain's and Malloch's Closes, and 20 foot wide cross-passages from these two passages to Blackfriar's Wynd, (e) several old buildings to be removed so as to allow paved open courts.

(ii) NET ESTIMATED COST OF OPERATIONS

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>BETWEEN</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLOCK 1</td>
<td>NEW ST. AND LEITH WYND</td>
<td>£11,124</td>
</tr>
<tr>
<td>BLOCK 2</td>
<td>ST. MARY'S WYND AND ST. JOHN ST.</td>
<td>£24,415</td>
</tr>
<tr>
<td>BLOCK 3</td>
<td>LEITH WYND AND NORTH BRIDGE</td>
<td>£22,370</td>
</tr>
<tr>
<td>BLOCK 4</td>
<td>ST. MARY'S WYND AND NIDDRY ST.</td>
<td>£16,000</td>
</tr>
<tr>
<td>BLOCK 5</td>
<td>OLD FISHMARKET CLOSE AND STEVENLAW'S CLOSE</td>
<td>£20,706</td>
</tr>
<tr>
<td></td>
<td></td>
<td>£94,615</td>
</tr>
</tbody>
</table>

1. Scotsman, 14 February 1866, reporting meeting of Town Council, 13 February 1866.

\textasteriskcentered For map of Chambers's original and modified plans, see Vol. 2, Map B.
APPENDIX X (see Chapter 7, p.141, footnote 1).

EXTRACTS FROM ANNUAL REPORTS OF WORKS COMMITTEE (1869-1871)

AMOUNT SPENT ON EACH BLOCK AT TIME OF ANNUAL REPORTS; TOTAL INCOME AND EXPENDITURE

<table>
<thead>
<tr>
<th>Block</th>
<th>Operations to 30 September 1869</th>
<th>Operations to 30 September 1870</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>£27,992:16:1</td>
<td>£28,351:10:0</td>
</tr>
<tr>
<td>4</td>
<td>£30,099:8:10</td>
<td>£38,323:0:6</td>
</tr>
<tr>
<td>7</td>
<td>£365:5:11</td>
<td>£635:10:2</td>
</tr>
<tr>
<td>6</td>
<td>£25,784:8:2</td>
<td>£51,815:7:7</td>
</tr>
<tr>
<td>1</td>
<td>£2,633:15:1</td>
<td>£15,179:7:5</td>
</tr>
<tr>
<td>2</td>
<td>£572:2:6</td>
<td>£898:6:0</td>
</tr>
</tbody>
</table>

Total expenditure for properties, and in connection with purchases to 30 September, 1869 was **£87,447:16:7**

To date, £75,621:5:0 borrowed on debentures.
£21,889:10 received as produce of assessments.
£1,575:15:10 received from rents from old properties acquired by Improvement Trust.

Total expenditure for properties, and in connection with purchases to 30 September, 1870 was **£135,785:6:10**

To date, £109,046:5:0 borrowed.
£38,874:0:0 received as produce of assessments.
£3,063:11:2 received from rents from old properties acquired by Trust.

£55:5:6 of ground annuities recovered.
APPENDIX X (cont'd).

(iii) OPERATIONS TO 30 SEPTEMBER 1871

| BLOCK 3  | £28,384: 1: 0 |
| BLOCK 4  | £39,026: 3: 0 |
| BLOCK 7  | £ 635:10: 2  |
| BLOCK 6  | £59,333: 8: 4 |
| BLOCK 1  | £24,309: 0: 3 |
| BLOCK 2  | £16,194:17: 8 |
| BLOCK 8  | £  539: 2:10  |
| BLOCK 5  | £  119: 0: 6  |
| BLOCK 9  | £     5: 5: 0  |

a: Properties in Blocks 5 and 8 acquired under compulsory powers of improvement Trust, for the Town Council under Provisional Order, and Trust had been reimbursed by Town Council.

Total expenditure for properties, and in connection with purchases to 30 September, 1871 was £168,546: 8: 9

To date, £135,456: 5: 0 borrowed.

£ 56,684: 0: 0 received as produce of assessments.

£ 4,441:14:11 received from rents from old properties acquired by Trust.

£  600: 6: 7 of ground annuals recovered.

£  7,064: 5: 8 received for old properties and building areas sold.

SUMMARY OF WORK DONE, YEAR BY YEAR

(1) AT 30 SEPTEMBER 1869: Greater part of old properties in St. Mary's Wynd (Block 3) block swept away; St. Mary's Wynd now 50 feet wide. New buildings on east side of the new St. Mary's St. were substantial. Houses and shops would all be ready for occupation by Whitsunday 1870.

Not all of the Blackfriars' (Block 4) block cleared out yet, since Improvement Trust careful not to evict too many within a given time. However, a considerable no. of the old tenements removed, embracing some in the upper parts of Toddrick's Wynd, and of Blackfriars' Wynd and all the tenements in Skinner's Close and Murdoch's Close. Was expected that the lower portion
APPENDIX X (cont'd).

of the area would be cleared away within 3 months and that building operations might be started in the spring of 1870.

The greater part of the old properties in the North College St. (Block 6) block had been acquired by the Trust; was hoped that by Whitsunday 1870 the Trust would remove these old buildings and form Chambers St.

It had also been resolved to proceed with the purchase of property in Block 1 through which Jeffrey St. was to run. Several properties had already been acquired in that area.

(ii) AT 30 SEPTEMBER 1870: All the buildings on the east side of St. Mary's St. completed. 6 or 7 narrow closes had been completely eradicated by this portion of the Improvements.

All the properties in the Blackfriars' Block (Block 4) acquired. Most of the old buildings required for the formation of Blackfriars St., situated between Blackfriars' Wynd and South Gray's Close, had been cleared away. The building plans for the south end of Blackfriars' St. had been prepared by the Improvement Trust's Architects giving 8 areas, of which 5 had been sold, and some were in course of erection. The plans for the north end of the street were being prepared.

Nearly all the buildings in the North College St. block (Block 6) had been acquired by the Improvement Trust; those on the western section, from Brown Square to Minto House, had been removed. The portion, extending eastwards to Hastie's Close, would be removed after Martinmas 1870; the remaining portion, including Adam Square, would be removed at Whitsunday 1871. Plans for this portion were being prepared by the Architect; on their approval by the Trust, steps would be taken immediately to expose the building areas for sale. The completion of the Industrial Museum was now being proceeded with.

Considerable progress had been made in acquiring properties in Blocks 1 and 2, required for the formation of Jeffrey St.

(iii) AT 30 SEPTEMBER 1871: Nearly all the buildings on the east side of Blackfriars St. completed, and most of them were occupied. Only 3 building areas in the street were still unsold; the street was properly paved. There were still some dilapidated tenements
APPENDIX X (cont'd).

(iii) (cont'd).

between Dickson's Close and Cant's Close which would be taken down immediately. On the same side of the High St. there were still several closes – Hyndford's Close, South Poulis Close, Fountain Close – not yet disposed of. A considerable portion of the property had been acquired by the Trust, but since 1 or 2 houses not scheduled, the Works Committee had been unable to deal with this portion.

The houses in Leith Wynd and the closes behind, at the head of the Canongate, were being removed for the formation of Jeffrey St. The Works Committee had intended to proceed with the opening up of the lower part of Jeffrey St. as far west as the North Bridge; but since the Trust had been unable to obtain some of the property in the line of the street before Whitsunday 1872, the opening up could not be proceeded with until after then, when the entire length of street would be opened up.

There had been unexpected delays in acquiring and removing some of the old properties in the line of North College St., but there was every prospect that building stances would be ready for sale early in the spring of 1872. The ground had been cleared from Adam Square to George IV Bridge; the roadway of Chambers St. had been formed.

On the north side of Block 6, near to the Gowgate, several tenements were being built under Clause 33, so as to accommodate a portion of the labouring classes who might be displaced elsewhere.

1. Edinburgh Improvement Trust, Minutes, 29 October 1869, 6 December 1870, 2 November 1871.
APPENDIX XI (Chapter 7, p.150, footnote 1)

DATES ON WHICH OPERATIONS ON VARIOUS BLOCKS AUTHORIZED

| BLOCK 3  | 20 December 1867 |
| BLOCK 4  | 20 December 1867 |
| BLOCK 6  | 4 November 1868  |
| BLOCK 1  | 13 January 1870  |
| BLOCK 7  | 23 January 1872  |
| BLOCK 8  | 23 January 1872  |
| BLOCK 13 | 23 January 1872  |
| **a** BLOCK 12 | 17 October 1873 |
| **a** BLOCK 10 | 13 July 1874 |

**a**: after exhaustive examination of financial aspect by Finance Committee.

BLOCKS 2, 9, 11 executed in bits and pieces.

BLOCK 5 not executed at all.

---

1. Edinburgh Improvement Trust, Minutes, 20 December 1867, 4 November 1868, 13 January 1870, 23 January 1872, 17 October 1873, 13 July 1874.
APPENDIX XII (see Chapter 8, p.171, footnote 1).

EXTRACT FROM MISS BIRD'S NOTES ON OLD EDINBURGH

The entrance of the close which we selected is long and narrow, and so low as to compel a man of average height to stoop. It is paved with round stones, and from the slime in which they were embedded, and from a grating on one side almost choked up with fish heads and insides, and other offal, a pungent and disgusting effluvium was emitted. The width of this close is four feet at the bottom, but the projecting storeys of the upper houses leave only a narrow strip of quiet sky to give light below. A gutter ran along one side of the close ——— and this ———— was in a state of loathsomeness not to describe. Very ragged children ———— were sitting ———— not playing, not even quarrelling, just stupefying. Foul air, little light, and bad food had already done their work on most of them ———— They matted hair and filthy rags were full of vermin. ——— Some of these will die, many will be educated into the hardened criminality of the often-imprisoned street boy, many will slide naturally into a life of shame ———— "God help them!" exclaimed a mother, so drunk that her own babe seemed in peril in her arms. Ay, God help them! But our Father which is in heaven charges the responsibility of their destiny on the respectable men and women of Edinburgh.

1. Scotsman, 2 February 1869, publishing review of Miss Bird's work.
TABLE SHOWING CONDITION OF DWELLINGS IN DISTRICTS SELECTED FOR EXAMINATION
(by WOOD)\(^1\)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.of houses examined</td>
<td>38</td>
<td>35</td>
<td>53</td>
<td>12</td>
<td>18</td>
<td>25</td>
<td>15</td>
<td>52</td>
<td>50</td>
<td>29</td>
</tr>
<tr>
<td>No.with 1 room</td>
<td>28</td>
<td>29</td>
<td>49</td>
<td>12</td>
<td>13</td>
<td>20</td>
<td>10</td>
<td>48</td>
<td>36</td>
<td>24</td>
</tr>
<tr>
<td>No.with 2 rooms</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>No.with above 2 rooms</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Average size of rooms</td>
<td>12x9</td>
<td>15x12</td>
<td>17x17</td>
<td>15x13</td>
<td>14x11</td>
<td>16x12</td>
<td>12x9</td>
<td>12x13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Largest no.sleeping in 1 room</td>
<td>8</td>
<td>7</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>No.supplied with water</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No.supplied with W.C.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No.capable of ventilation</td>
<td>31</td>
<td>25</td>
<td>39</td>
<td>10</td>
<td>13</td>
<td>21</td>
<td>15</td>
<td>10</td>
<td>42</td>
<td>29</td>
</tr>
<tr>
<td>No.with stair light</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>No.with stair dark</td>
<td>7</td>
<td>6</td>
<td>52</td>
<td>0</td>
<td>18</td>
<td>26</td>
<td>10</td>
<td>6</td>
<td>50</td>
<td>26</td>
</tr>
<tr>
<td>Average rents, and how paid</td>
<td>5/6m</td>
<td>1/5w</td>
<td>1/3w</td>
<td>1/6w</td>
<td>1/7w</td>
<td>1/6w</td>
<td>1/7w</td>
<td>1/6w</td>
<td>6/8m</td>
<td>1/10w</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
<th>TOTAL</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.of houses examined</td>
<td>4</td>
<td>20</td>
<td>19</td>
<td>35</td>
<td>458</td>
</tr>
<tr>
<td>No.with 1 room</td>
<td>2</td>
<td>10</td>
<td>7</td>
<td>16</td>
<td>332</td>
</tr>
<tr>
<td>No.with 2 rooms</td>
<td>2</td>
<td>10</td>
<td>9</td>
<td>17</td>
<td>111</td>
</tr>
<tr>
<td>No.with above 2 rooms</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Average size of rooms</td>
<td>13x8</td>
<td>13x10</td>
<td>11x10</td>
<td>14x11</td>
<td>10x8</td>
</tr>
<tr>
<td>Largest no.sleeping in 1 room</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>No.supplied with water</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>31</td>
<td>97</td>
</tr>
<tr>
<td>No.supplied with W.C.</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>32</td>
<td>58</td>
</tr>
<tr>
<td>No.capable of ventilation</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>35</td>
<td>356</td>
</tr>
<tr>
<td>No.with stair light</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>No.with stair dark</td>
<td>0</td>
<td>20</td>
<td>19</td>
<td>22</td>
<td>264</td>
</tr>
<tr>
<td>Average rents, and how paid</td>
<td>22/6q</td>
<td>1/7w</td>
<td>1/8w</td>
<td>47/8hy</td>
<td>1/7w</td>
</tr>
</tbody>
</table>

FOR KEYS, SEE OVERLEAF.
APPENDIX XIII (continued)

KEYS

| GENERAL HEADINGS | A | KAY'S COURT, CROSSCAUSEWAY |
|                 | B | HATTER'S COURT, CROSSCAUSEWAY |
|                 | C | 116 & 118 COWGATE |
|                 | D | MIDDLE MEALMARKER STAIR |
|                 | E | EAST MEALMARKET STAIR |
|                 | F | 8 COWGATEHEAD |
|                 | G | PLAINSTANE CLOSE, GRASSMARKET |
|                 | H | SKINNER'S CLOSE, HIGH ST. |
|                 | I | COVENANT CLOSE, HIGH ST. |
|                 | J | MIDCOMMON CLOSE, CANONGATE |
|                 | K | MOROCCO CLOSE, CANONGATE |
|                 | L | 2, GREENSIDE PLACE |
|                 | M | 9, GREENSIDE PLACE |
|                 | N | 17, GREENSIDE PLACE |
|                 | O | NORTH SIDE, JAMAICA ST. (Under flats) |
|                 | P | WARDEN'S CLOSE, GRASSMARKET. |

MEASUREMENT OF ROOMS

Measurements given in feet.

W.C. | W.C. an abbreviation for water closets.
NO.  | NO. an abbreviation for number.

HOW RENTS PAID

w rents paid by the week
m rents paid by the month
q rents paid by the quarter
by rents paid by the half-year
5/6 five shillings and sixpence.

APPENDIX XIV (see Chapter 8, p.173, footnote 1)

TABLE OF RESULTS OF HOUSE-TO-HOUSE VISITATION OF ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR (as Appendix to Memorial of Association to Town Council, April 1870)¹

122 Dwelling-houses reported by visitors to be in need of investigation
118 complained of
  4 taken down or shut up since visitors' report

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>overcrowded</td>
<td>17</td>
</tr>
<tr>
<td>deficient in light</td>
<td>26</td>
</tr>
<tr>
<td>deficient in air</td>
<td>23</td>
</tr>
<tr>
<td>deficient in water supply</td>
<td>106</td>
</tr>
<tr>
<td>deficient in means of getting rid of refuse</td>
<td>118</td>
</tr>
<tr>
<td>deficient in water closet accommodation</td>
<td>118</td>
</tr>
<tr>
<td>injurious to health from dampness</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>of ordinary houses</td>
<td></td>
</tr>
<tr>
<td>of cellar dwellings</td>
<td></td>
</tr>
<tr>
<td>fulfilling conditions of 1854 Police Act</td>
<td>94%</td>
</tr>
<tr>
<td>not fulfilling conditions of 1854 Police Act</td>
<td>6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>of all houses inspected</td>
<td></td>
</tr>
<tr>
<td>unfit for human habitation, and incapable of being so</td>
<td>15</td>
</tr>
<tr>
<td>requiring extensive repairs</td>
<td>33</td>
</tr>
<tr>
<td>requiring water</td>
<td>106</td>
</tr>
<tr>
<td>requiring water closets</td>
<td>118</td>
</tr>
<tr>
<td>requiring soil-pipe</td>
<td>106</td>
</tr>
<tr>
<td>requiring means of ventilation</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Scotsman, 27 April 1870, reporting meeting of Town Council, 26 April 1870.
APPENDIX XV (see Chapter 9, p. 194, footnote 1)

SUMMARY BY GOWANS OF WORK OF PUBLIC HEALTH COMMITTEE IN YEAR 1878

During the year the Committee had had 15 reports from Dr. Littlejohn as to the health of the city, 23 as to smoke nuisances, 4 as to unsatisfactory streets, 3 as to analyses of food. 159 notices were served on proprietors of insanitary dwellings; 6 of these were dealt with, with a view to be shut up. There were 34 reports from Dr. Littlejohn as to want of water, 3 as to insufficient drainage, 17 as to various kinds of nuisance, 5 as to cases of epidemic disease, 1 as to an insanitary district, 9 as to insufficient cistern accommodation.

N.B. Gowans was by no means trying to be exhaustive as to the work of the Committee, but the above statistics give an idea of the range of its work and especially of the work of Dr. Littlejohn.

1. Scotsman, 12 February 1879, reporting meeting of Town Council, 11 February 1879.
APPENDIX XVI (see Chapter 9, p.194, footnote 1)

MEETING OF PUBLIC HEALTH COMMITTEE ON 14 OCTOBER, 1878.1


Report by Sub Committee as to house in area flat of 8 Mansfield Place —— serve the usual notice.

Report by Burgh Engineer, M.O.H., and Sanitary Inspector as to houses and cellars in area flat of tenement, 41 Arthur St. —— serve the usual statutory notice.

Report by Burgh Engineer, M.O.H., and Sanitary Inspector as to tenement, 7 Greenside Court —— serve the usual statutory notice.

Report by Burgh Engineer of observations as to smoke nuisances —— serve notice on Meikle Builders (2 cases); Burnet Reid, 109 Causewayside; Jack, 123 Causewayside; Braine, Cockburn St.; Grove Laundry, 15 Duncan St., Newington; Wilson, Albert St., Leith Walk; Fleming, Merchant, Albert St.; Lawrie, Leith Walk.

Letters from White Millar, S.S.C. to Burgh Engineer as to complaint of the Burgh Engineer against William MacDougald in regard to smoke nuisance —— delay proceedings.

Letter from McKnight to Burgh Engineer as to additional cistern accommodation, 1 Albert St. —— adhere to the order of the Council as to cisterns containing 5.7 gallons for each person.

Letter from Curror & Cowper, S.S.C. as to additional cistern accommodation, 58 Thistle St. —— adhere to the order of Council.

Proposal to introduce a clause in Bill to compel parties to burn coke —— (business not disposed of)

Motion by Councillor Clark as to Water of Leith, joint with Streets and Buildings Committee —— Remit to Burgh Engineer and Dr. Littlejohn to examine and report as to deleterious state of the matter in the Mill Lade.

1. Public Health Committee, Minutes, 14 October 1878.
APPENDIX XVII (see Chapter 9, p. 19, footnote 2).

DEATH RATES/1000 OF POPULATION/ANNUM FOR EDINBURGH, 1864-1889. 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Death Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>26.3</td>
</tr>
<tr>
<td>1871</td>
<td>26.9</td>
</tr>
<tr>
<td>1872</td>
<td>26.75</td>
</tr>
<tr>
<td>1873</td>
<td>20.48</td>
</tr>
<tr>
<td>1874</td>
<td>22.27</td>
</tr>
<tr>
<td>1875</td>
<td>23.17</td>
</tr>
<tr>
<td>1876</td>
<td>19.62</td>
</tr>
<tr>
<td>1877</td>
<td>20.86</td>
</tr>
<tr>
<td>1878</td>
<td>21.53</td>
</tr>
<tr>
<td>1879</td>
<td>22.89</td>
</tr>
<tr>
<td>1880</td>
<td>20.6711.05</td>
</tr>
<tr>
<td>1881</td>
<td>18.86</td>
</tr>
<tr>
<td>1882</td>
<td>18.54</td>
</tr>
<tr>
<td>1883</td>
<td>18.22</td>
</tr>
<tr>
<td>1884</td>
<td>18.89</td>
</tr>
<tr>
<td>1885</td>
<td>16.82</td>
</tr>
<tr>
<td>1886</td>
<td>17.89</td>
</tr>
<tr>
<td>1887</td>
<td>18.65</td>
</tr>
<tr>
<td>1888</td>
<td>16.64</td>
</tr>
<tr>
<td>1889</td>
<td>16.54</td>
</tr>
</tbody>
</table>


* For fuller information as to vital health statistics, and for graphs of principal health statistics, see Vol. 2, pp. 1-17, Appendix XXIII and accompanying graphs.
DEATH RATES, WARD BY WARD 1891, 1892, 1893.

<table>
<thead>
<tr>
<th>1891</th>
<th>1892</th>
<th>1893</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canongate</td>
<td>27.73</td>
<td>St. Giles'</td>
</tr>
<tr>
<td>St. Giles'</td>
<td>27.49</td>
<td>Canongate</td>
</tr>
<tr>
<td>St. Leonard's</td>
<td>22.87</td>
<td>George Square</td>
</tr>
<tr>
<td>George Square</td>
<td>21.89</td>
<td>St. Leonard's</td>
</tr>
<tr>
<td>St. Andrew's</td>
<td>21.11</td>
<td>St. Andrew's</td>
</tr>
<tr>
<td>St. Cuthbert's</td>
<td>19.67</td>
<td>Calton</td>
</tr>
<tr>
<td>St. Luke's</td>
<td>18.57</td>
<td>St. George's</td>
</tr>
<tr>
<td>St. Bernard's</td>
<td>18.15</td>
<td>St. Cuthbert's</td>
</tr>
<tr>
<td>Broughton</td>
<td>17.71</td>
<td>Broughton</td>
</tr>
<tr>
<td>St. George's</td>
<td>16.25</td>
<td>Newington</td>
</tr>
<tr>
<td>Newington</td>
<td>15.84</td>
<td>St. Bernard's</td>
</tr>
</tbody>
</table>

1. Scotsman, 1 February 1893, 28 February 1894 reporting meetings of Public Health Committee 31 January 1893, 27 February 1894 respectively.

* For areas bounded by various wards, see Vol. 2, Map. A.
### APPENDIX XIX (see Chapter 11, p.246, footnote 3)

**LIST OF AREAS AFFECTED BY 1893 IMPROVEMENT SCHEME WITH NO. OF HOUSES TO BE DEMOLISHED IN EACH**

<table>
<thead>
<tr>
<th>AREA</th>
<th>DESCRIPTION</th>
<th>NO. OF SEPARATE DWELLINGS DEMOLISHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Campbell's Close, Canongate Cowgate</td>
<td>104</td>
</tr>
<tr>
<td>B</td>
<td>Between Cockburn St. and High St. School Yards</td>
<td>46</td>
</tr>
<tr>
<td>C</td>
<td>Between Cockburn St. and High St.</td>
<td>13</td>
</tr>
<tr>
<td>D</td>
<td>Between High St. and Cowgate</td>
<td>228</td>
</tr>
<tr>
<td>E</td>
<td>Potter Row</td>
<td>81</td>
</tr>
<tr>
<td>F</td>
<td>Between North Bank St. and Lawnmarket</td>
<td>85</td>
</tr>
<tr>
<td>G</td>
<td>Between Lawnmarket and Victoria St.</td>
<td>38</td>
</tr>
<tr>
<td>H</td>
<td>Between Candlemaker Row and Cowgate</td>
<td>2</td>
</tr>
<tr>
<td>J</td>
<td>Canonmills</td>
<td>19</td>
</tr>
<tr>
<td>K</td>
<td>Thornybank</td>
<td>202</td>
</tr>
</tbody>
</table>

**TOTAL** | 818 |

---

1. Scotsman, 16 February 1893, reporting evidence of Bailie Dunlop to Inquiry, over application of Town Council to Secretary of State for Scotland to make a Provisional Order under Housing of the Working Classes Act, 1890; ibid., 23 November 1895, publishing article on progress of 1893 Improvement Scheme.

* For map of areas affected by 1893 Improvement Scheme, see Vol. 2, Map D.
APPENDIX XX (see Chapter 11, p. 260, footnote 1)

TUBERCULOSIS DEATH RATES/1000 OF POPULATION IN VARIOUS EUROPEAN CITIES IN 1899

<table>
<thead>
<tr>
<th>City</th>
<th>Rate per 1000</th>
<th>City</th>
<th>Rate per 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edinburgh</td>
<td>1.91</td>
<td>Marseilles</td>
<td>1.88</td>
</tr>
<tr>
<td>Rome</td>
<td>1.88</td>
<td>Copenhagen</td>
<td>1.92</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>1.92</td>
<td>Elberfeld</td>
<td>2.31</td>
</tr>
<tr>
<td>Milan</td>
<td>2.38</td>
<td>Leipzig</td>
<td>2.44</td>
</tr>
<tr>
<td>Odessa</td>
<td>2.45</td>
<td>Cologne</td>
<td>2.55</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>2.65</td>
<td>Stockholm</td>
<td>2.73</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>2.73</td>
<td>Christiania</td>
<td>2.83</td>
</tr>
<tr>
<td>Munich</td>
<td>3.04</td>
<td>Brussels</td>
<td>3.13</td>
</tr>
<tr>
<td>Trieste</td>
<td>3.16</td>
<td>Breslau</td>
<td>3.41</td>
</tr>
<tr>
<td>Madrid</td>
<td>4.07</td>
<td>Nuremberg</td>
<td>4.12</td>
</tr>
<tr>
<td>Le Havre</td>
<td>5.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(all these cities had populations from 100,000 to 500,000)

TUBERCULOSIS DEATH RATES/1000 OF POPULATION IN NEW YORK, LONDON, PARIS BERLIN, VIENNA, 1884-94

<table>
<thead>
<tr>
<th>Year</th>
<th>New York</th>
<th>London</th>
<th>Paris</th>
<th>Berlin</th>
<th>Vienna</th>
</tr>
</thead>
<tbody>
<tr>
<td>1884</td>
<td>4.45</td>
<td>3.12</td>
<td>5.19</td>
<td>3.62</td>
<td>7.2</td>
</tr>
<tr>
<td>1885</td>
<td>4.26</td>
<td>2.9</td>
<td>5.56</td>
<td>3.61</td>
<td>7.23</td>
</tr>
<tr>
<td>1886</td>
<td>4.42</td>
<td>2.93</td>
<td>5.15</td>
<td>3.4</td>
<td>7.04</td>
</tr>
<tr>
<td>1887</td>
<td>4.06</td>
<td>2.71</td>
<td>4.93</td>
<td>3.16</td>
<td>6.42</td>
</tr>
<tr>
<td>1888</td>
<td>3.99</td>
<td>2.54</td>
<td>5.11</td>
<td>3.3</td>
<td>5.85</td>
</tr>
<tr>
<td>1889</td>
<td>3.86</td>
<td>2.56</td>
<td>5.26</td>
<td>3.02</td>
<td>5.85</td>
</tr>
<tr>
<td>1890</td>
<td>3.97</td>
<td>2.94</td>
<td>5.31</td>
<td>3.23</td>
<td>5.76</td>
</tr>
<tr>
<td>1891</td>
<td>3.56</td>
<td>2.81</td>
<td>5.13</td>
<td>2.96</td>
<td>5.5</td>
</tr>
<tr>
<td>1892</td>
<td>3.55</td>
<td>2.68</td>
<td>4.54</td>
<td>2.66</td>
<td>5.5</td>
</tr>
<tr>
<td>1893</td>
<td>3.51</td>
<td>2.65</td>
<td>4.92</td>
<td>2.72</td>
<td>5.16</td>
</tr>
<tr>
<td>1894</td>
<td>3.16</td>
<td>2.43</td>
<td>5.1</td>
<td>2.51</td>
<td>5.06</td>
</tr>
</tbody>
</table>

Average, 1884-88: 3.68, 2.68, 5.1, 2.86, 5.53

Average, 1889-94: 3.6, 2.68, 5.1, 2.86, 5.53

1. Report of the Public Health Committee on prevention of tuberculosis (Edinburgh, 1900), pp. 25-7
2. Ibid., p. 55
APPENDIX XXI (see Chapter 11, p. 266, footnote 3)

MUNICIPAL HOUSES BUILT BY 1900

56 houses (2 tenements) at High School Yards; 12 houses in South Back Canongate; 64 houses at Tynecastle; 105 houses in area between High St. and Cowgate. (TOTAL C: 237).

MUNICIPAL HOUSES IN COURSE OF ERECTION IN 1900

81 being built in Allan St.; 56 in Portobello; 37 in Potter Row; 61 in West Port (TOTAL OF 235).

1. Scotsman, 26 July 1900, publishing annual report of Burgh Engineer.
2. Ibid., 31 October 1900, reporting meeting of Town Council, 30 October 1900.
APPENDIX XXII (see Chapter 11, p. 267, footnote 1)

NUMBER OF HABITABLE UNOCCUPIED HOUSES FROM YEAR TO YEAR

<table>
<thead>
<tr>
<th></th>
<th>NUMBER OF HABITABLE UNOCCUPIED HOUSES AT ANNUAL RENTS OF £6 AND UNDER</th>
<th>NUMBER OF HABITABLE UNOCCUPIED HOUSES AT ANNUAL RENTS OF £6 TO £10</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHITSUNDAY 1892</td>
<td>802</td>
<td>712</td>
</tr>
<tr>
<td>WHITSUNDAY 1893</td>
<td>666</td>
<td>519</td>
</tr>
<tr>
<td>WHITSUNDAY 1894</td>
<td>623</td>
<td>431</td>
</tr>
<tr>
<td>MARTINMAS 1894</td>
<td>246</td>
<td>94</td>
</tr>
<tr>
<td>WHITSUNDAY 1895</td>
<td>407</td>
<td>206</td>
</tr>
<tr>
<td>MARTINMAS 1895</td>
<td>76</td>
<td>20</td>
</tr>
</tbody>
</table>

NUMBER OF HABITABLE UNOCCUPIED HOUSES, WARD BY WARD, MARTINMAS 1895

<table>
<thead>
<tr>
<th>Ward</th>
<th>UNDER £6</th>
<th>£6 AND UNDER £10 (ANNUAL RENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALTON</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>BROUGHTON</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ST. BERNARD'S</td>
<td>14</td>
<td>-</td>
</tr>
<tr>
<td>ST. GEORGE'S</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>ST. STEPHEN'S</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>ST. LUKE'S</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>ST. ANDREW'S</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>CANONGATE</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>ST. GILES'</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>ST. CUTHBERT'S</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>GEORGE SQUARE</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>ST. LEONARD'S</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>NEWINGTON</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>76</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

EXTENT OF SUBDIVISION

1,131 houses subdivided between 1889-90 and 1894-95 of which 185 in 1894-95. These 185 were divided, ward by ward, as follows:

<table>
<thead>
<tr>
<th>Ward</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CALTON</td>
<td>5</td>
</tr>
<tr>
<td>BROUGHTON</td>
<td>12</td>
</tr>
<tr>
<td>ST. BERNARD'S</td>
<td>7</td>
</tr>
<tr>
<td>ST. GEORGE'S</td>
<td>-</td>
</tr>
<tr>
<td>ST. STEPHEN'S</td>
<td>7</td>
</tr>
<tr>
<td>ST. LUKE'S</td>
<td>10</td>
</tr>
<tr>
<td>ST. ANDREW'S</td>
<td>24</td>
</tr>
<tr>
<td>CANONGATE</td>
<td>16</td>
</tr>
<tr>
<td>ST. GILES'</td>
<td>13</td>
</tr>
<tr>
<td>ST. CUTHBERT'S</td>
<td>6</td>
</tr>
<tr>
<td>GEORGE SQUARE</td>
<td>46</td>
</tr>
<tr>
<td>ST. LEONARD'S</td>
<td>28</td>
</tr>
<tr>
<td>NEWINGTON</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>185</strong></td>
</tr>
</tbody>
</table>

These all concerned houses with rents under an annual figure of £10.

1. Scotsman, 23 November 1895 publishing article on return of Burgh Engineer on housing situation; ibid., 20 December 1895, publishing same.
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