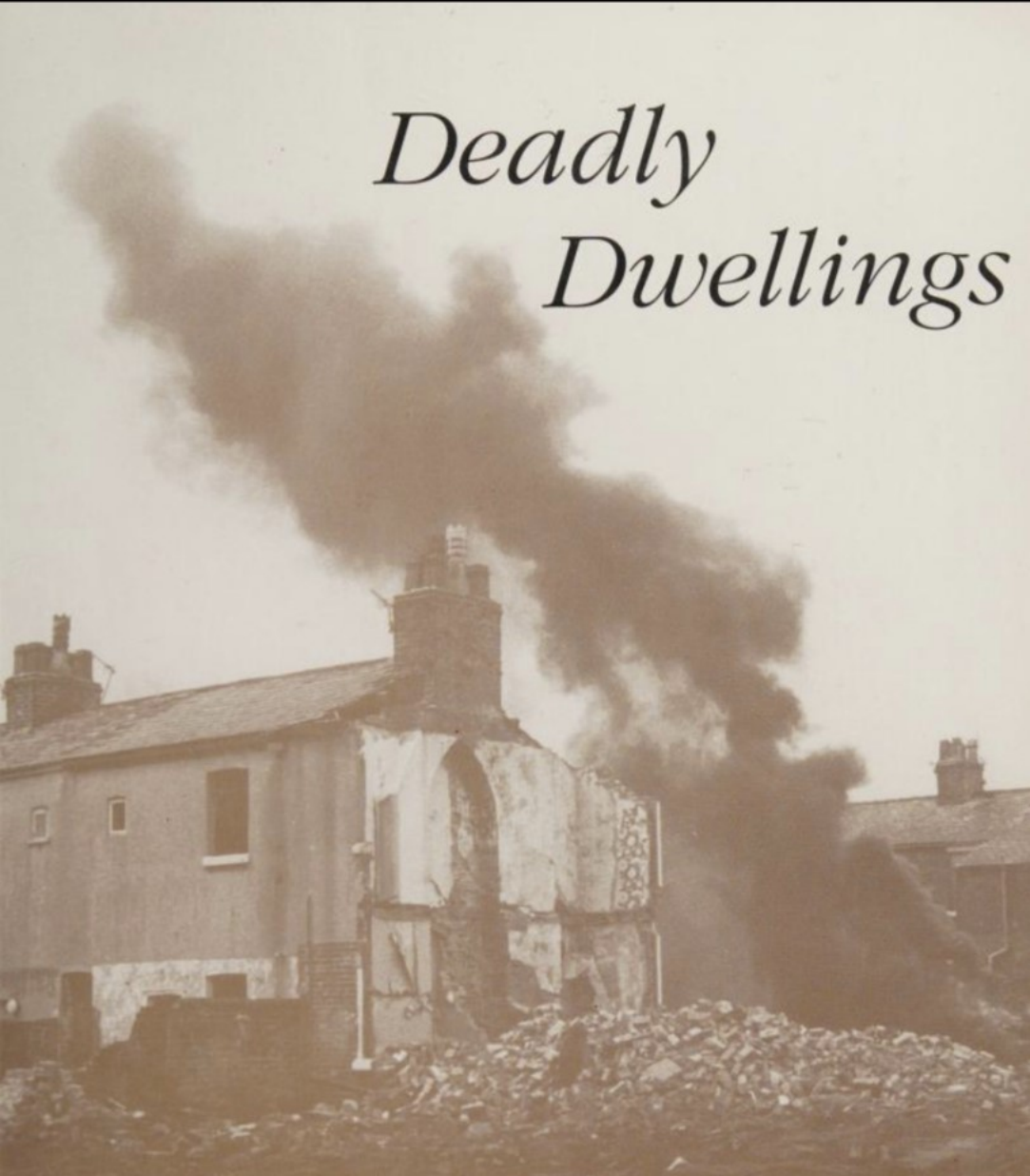
Deadly Dwellings



The Shocking Story
of
Housing & Public Health in a Lancashire Cotton Town

Preston from 1840 to 1914

Nigel Morgan

Preston in 1845, from the first edition of the 6-inch Ordnance Survey (scale slightly reduced).

Deadly Dwellings

Housing & Health in a Lancashire Cotton Town

Preston from 1840 to 1914

Nigel Morgan

Mullion Books 1993

In honour of

Celia Elizabeth Annette Morgan (née Blake)

sometime Sister of the Children's Ward,
Preston Royal Infirmary and Sharoe Green Hospital.
Born in Oldham 1935, died in Preston 1977

and

with deep gratitude to

Barbara Jennifer Morgan

Deadly Dwellings
Housing and Health in a Lancashire Cotton Town: Preston from 1840 to 1914
By Nigel Morgan

ISBN 1-873424 01 9

Published by Mullion Books, 207 Garstang Road, Fulwood, Preston. PR2 4JR
Printed in Preston by T. Snape & Company Limited, Boltons Court, Preston. PR1 3TY

CONTENTS

PREFACE iv
ACKNOWLEDGEMENTS iv
INTRODUCTION v

CHAPTER I *A Bit Behind: the Crisis of the 1840s* 1
CHAPTER II *The Local Board: People & Houses 1850-80* .. 23
CHAPTER III *Doubts and Disputes* 45
CHAPTER IV *Housing at the End of the Century* 59
CHAPTER V *Bread, Meat and Milk* 73
CHAPTER VI *Improvement* 81
CHAPTER VII *Housing and Health Assessed* 92

APPENDIX: TABLES OF STATISTICS 105
NOTES ON THE TEXT 107
NOTES ON ILLUSTRATIONS 109
NOTE ON THE AUTHOR 109
SOURCES AND BIBLIOGRAPHY 110
END-PAPER MAPS: *Preston in 1845* ..... front cover
Preston in 1895 ..... back cover

[*Note: Alan Godfrey Maps have re-issued, on a reduced scale, Sheet 61.10 of the 25-inch Ordnance Survey of 1909 which is an ideal companion to this book. The title is* Central Preston 1909 *(ISBN 0 85054 592 7). The adjoining Sheet 61.9 is due to be published early in 1994.*]

Errata

A slight incompatibility of computer software caused the loss of some lines of text from pages iv, v and vi of the book as printed. The author and publisher apologise for failure to spot these errors before going to press. Corrections are as follows:

ACKNOWLEDGEMENTS: the last sentence should conclude thus: "leave to design and correct the text".

INTRODUCTION: sentences at the bottom of page v and at the top of page vi have been accidentally so mutilated as to lose their meaning. They should read as follows:

"If the story told by this book has a moral (and it has) it is that there certainly *is* such a thing as "Society" – with a vengeance. We are all hostages to our neighbours' fortunes: to their economic fortune, their habits and their health."

The missing last line of the quotation at the end of the introduction is:

"It tolls for thee."

PREFACE

THERE MAY still be a few tattered copies of *An Introduction to the Social History of Housing in Victorian Preston* (1982) lving in teachers'cupboards in various schools in the Preston area, but I am told that they have been hard to find for several years. Perhaps I may be entitled to say that I hope they are now completely impossible to find, as I was the author of that little thing and have since become painfully aware that I "could do better".

Vanished Dwellings, the first phase of that attempt, made up for the complete inadequacy of my original treatment of the first half of the 19th century. The second phase of improvement does likewise for middle-class housing in the same perid, and will be published in 1994 (doubtless under a title in which the word "Dwellings" will be qualified by an adjective such as "Respectable" or "Comfortable").

The present book (theoretically the third phase of the operation – improving the best of the original text) has been both easier and more enjoyable for me to undertake than either of the others. Easier, because the original already contained a lot of interesting and useful material; and enjoyable because it also contains "a rattling good yarn" with a strong cast of characters speaking in their own voices.

If readers suspect that parts of it were made up for the sake of excitement, I must say that in the course of revising it I have sometimes suspected the same myself; but the fact is that it is all true. Those people really did those things which I say they did, and they really did say and write those passages which I have quoted: I have put in end-note references to the sources so that this can be checked. (I may have moved things around a little, but only to make the story clearer, not to deceive.)

The deceptive character of this book lies not in what it includes but in what it omits. Writing the original text at the Teachers' Centre in 1982, I had the immense advantage of being able to draw on previous research for my university thesis. That work, beginning in 1974 and concluded in 1980, is the bulk of the iceberg, and this book is only one of its visible tips. On the other hand, I realise that there must also be many unintentional omissions caused by my ignorance of the work of other historians, and for this I apologise. (Since 1982 I have spent too much of my time out of doors.)

It is a slim book. There are two reasons for this. One is that I believe that academics provide a better sevice to readers the longer they research and the shorter the books they write as a result; and the other is that as I begin to age I prefer thinner books with bigger print and more pictures.

Finally, a word on the title. My first idea for this was *A Pig in the Yard*, but a librarian advised me that computer cataloguing would classify such a title under Agriculture. So instead we chose this rather sensational alternative, as probably nearer to the general sense of the text.

ACKNOWLEDGEMENTS

THE THANKS which I am so happy to express here fall into four broad categories: to those who enabled me to begin and encouraged me to continue with my original research; to those who helped its progress at many points and in innumerable ways over the years; to those who have so kindly given their permission to quote from or use material in this book; and to those who made the last stages of this production possible, one way or another.

My interest in local history – properly speaking, history experienced locally – could not have developed at all had I not been given the time, opportunity and guidance to pursue it. So first of all I thank the Governing Body, Principal and Staff of S.Martin's College, Lancaster, for doing this not once but *three times*: Dr Hugh Pollard (the Principal) and Mr A.J.Cooper (Head of the History Department) and my colleagues Tom Timmins and the late Graham Brown, for granting me sabbatical leave in 1974-5; and Mr Robert Clayton (then Principal) for a term's sick leave in 1978 after Annette died, and for setting me at liberty once again in 1980, with the enthusiastic support of Mrs Margaret Shennan (then Head of History)

The list of those who have encouraged, advised and helped in practice is so long that I am bound to recognise that this book is largely the fruit of other people's efforts and kindnesses. There is space here to summon-up only a few names to represent the others: at the University of Lancaster, Dr John Marshall, Dr John Walton and Dr Elizabeth Roberts; at Lancashire County Record Office, Ken Hall (then County Archivist) and Barbara Sharpe; at the Harris Museum, Stephen Sartin (in 1982) and Sally Coleman; at the Harris Reference Library, Terry Shaw and Ann Dennison; at Preston Town Hall, John Fletcher, Peter Hadley and Colin Wilson; at the Teachers' Centre in 1982, Joy Wells (now Mrs Green) and my colleague Chris Snow; at the Central Lancashire Development Corporation in 1982, Mark Mallam, director of the re-development of Plungington, and John Hallam, archaeologist; at the University of Central Lancashire, Geoff Timmins (History Department) and Gordon Duerden (Computer Services); and at English Heritage Martin Robertson, Martin Cherry and Lucy Dewhurst. I also owe deep thanks to many people whose names I never knew, the people of Preston who showed me their homes.

I have received equally valuable though less immediate help from certain specialists in the field of architectural history: I thank Anthony Quiney (for his interest in 1984, and for *House and Home*), Stefan Muthesius (for *The English Terraced House* and for his epistolary conversation on the subject) and Mark Girouard (for his books which demonstrate that architectural history can be interesting, human, and a pleasure to read).

It will be obvious from the text and illustrations that this book could not have been written or produced at all without the kind permission of the owners and custodians of its sources, not only for me to use them for my research but also for me to quote from or reproduce them in the following pages. They are principally: Preston Borough Council, Lancashire County record Office, Messrs Fair & Rea (who deposited the Tomlinson papers in the Record Office), the Preston District Librarian, and the Harris Museum and Art Gallery.

For vital and indispensable help in the last few weeks I offer heartfelt thanks to my wife Barabara (in effect, publisher and editor), to my sons Edward Morgan and Guy Morgan for material assistance in various ways; and, finally, to my son Ben Morgan for giving up part of his annual

INTRODUCTION

The tragedy of the housing which is the subject of this book is that while it proved to be inadequate in Victorian times, the whole trend of domestic technology in the 20th century has been to make it ever more viable. Readers who follow the book through to the end might then consider what a cotton spinner's wife living in Plungington (for example) in the 1890s might have made of such things as central heating, electric light, a refrigerator, a shower, a washing machine, a water-closet, bin-bags – and contraceptives.

In a previous book, *Vanished Dwellings* (1990), I tried to reconstruct housing for which there was then no surviving architectural evidence at all, using pictures, maps and various documentary sources. The result was the discovery of a place which would be visually so unfamiliar to anyone who had not seen Preston before (say) 1950 as to be completely unrecognisable: a lost world.

This book, on the other hand, is about housing which is architecturally very familiar to Prestonians; but a way of life in it which was horrifically different.

If the main difficulty with the first book was that the buildings had vanished, the first great advantage for this one was that, at the time of the initial research in 1982, almost all the houses were still there; and large numbers of them, subject to "clearance programmes", were standing empty. As a result of this lucky coincidence I was able to explore houses which were then mostly unoccupied.

Unfortunately I must have been only half awake at the time, for I did not recognise the full significance of what I was seeing. Had I known then what I know now I would have tried to make a systematic archaeological record of the streets and houses in the clearance areas. I photographed many houses (sometimes forgetting to record their addresses); but I made only one measured survey, and that was of a house which was not in the main study area.

The lack of a thorough archaeological survey *at ground level* may not be too bad a loss, because in addition to large-scale Ordnance Survey maps there is an almost complete archive of builders' plans for the houses (though this is not to say that they were always constructed accordingly). The irretrievable loss is of information about these houses both *below* and *above* ground level: which of them had cellars (and how these were equipped) and which had extra bedrooms.

Other important information was lost when the houses were demolished. In two of the two-up-two-down houses I found the tiny space under the staircase had been converted into a bathroom – complete with bath. In other words, we have lost the structural biographies of these houses, which would have shown how later generations had adapted them.

The other great advantage which I enjoyed in the writing of this book was the discovery that there was a continuous story running through the whole period. It was Preston's own story, one so extraordinary that I would have thought it was fiction – complete with heroes and villains and dramatic confrontations.

Underlying this story, of course, is the national context, for in its attempt to come to terms with the completely new way of life of an industrial society, this town was fairly typical of the whole country.

In common with most other manufacturing towns, Preston grew very rapidly in the first half of the 19th century. A population of about twelve thousand in 1800 had increased to about fifty thousand by 1840. Unfortunately this growth, and the proportionate increase in the number of dwellings, had occurred without any corresponding change in the sanitary customs of the inhabitants or the services which were available to them. In 1840 most houses in the town still had no piped water supply and no drains or sewers.

In 1800 the fastest mode of transport was the same as it had been in the time of Attila the Hun: the horse. The canal between Preston and Lancaster had just been completed, the boats on it drawn by horses. About half-a-dozen small steam-powered cotton mills recently built in Preston were spinning cotton into yarn, and several thousand weavers were making it into cloth on handlooms in their own homes. The average age of death in the town at that time was about 30 years.

By the late 1840s newly-built railways linked Preston to Wigan and London, to Lancaster, to Fleetwood, to Bolton and Manchester, and to Blackburn. There were about 46 steam-powered cotton mills, some of them as big as any in Lancashire, and many now equipped with power looms which wove cloth at the rate of about 5 inches a minute or 200 yards a day. But the average age of death in the town had fallen from 30 to 19 years.

This was not the fault of anybody in particular. Like acid rain, the hole in the ozone layer and global warming in our own times, it was something which just seemed to have come about without anyone really noticing until it was almost too late. And when they did start to pay attention to the problem, there was the same sort of disagreement about the causes and remedies.

However, while it remains to be seen what the lessons of our own time will turn out to be, one would have supposed that at least we had learned those of 150 years ago. If the story told by this book has a moral (and it has) it is that there certainly *is* such a

fortune, their habits and their health. If our neighbours are too poor to buy the goods which we try to sell, we in our turn become poor. If our neighbours' homes become dirty and the harbour of vermin and germs, our own children die. If our neighbours cannot afford to use water to flush their toilets, we are just as vulnerable to cholera, typhus and dysentery as they are.

Having read the book, readers will quite easily imagine the author's reaction to the recent privatisation of water.

Any man's death diminishes me,
Because I am involved in Mankind;
And therefore never send to know
For whom the bell tolls;

CHAPTER I

A BIT BEHIND: THE CRISIS OF THE 1840s

The cry in cities and towns should be the same as if they were on fire, "Water, Water!"

THE REV. JOHN CLAY, ADDRESSING A MEETING IN PRESTON IN 1843

SUCH WORDS of warning were reasonable and realistic, for, as John Clay was one of the first to point out to them, the people of Preston were facing a mortal crisis by the mid 1840s. In this chapter I explain the nature of the crisis, because that was the start of my story.

At the time Mr Clay was speaking most people in Preston had no tap or drain in their homes, and hardly any had a water-closet. It is therefore very hard for us to understand even the most basic facts and ideas which they took for granted. We have benefitted from the cruel experience of our ancestors, and it would be no end of a shock for us to wake up among them.

In the remote world of the mid 19th century, ruled almost entirely by the spirit of private enterprise and the ideal of the free market, amazing inventiveness and extraordinary efforts were applied to profitable enterprises such as cotton spinning, coal mining and railway construction. Domestic necessities, on the other hand, such as the supply of water and the removal of dung, were not attractive business propositions, except as private services to those who could afford to pay for them. And besides, these things were traditionally women's work.

The casualty rate, meanwhile, was appalling.

Preston was not unique. What happened

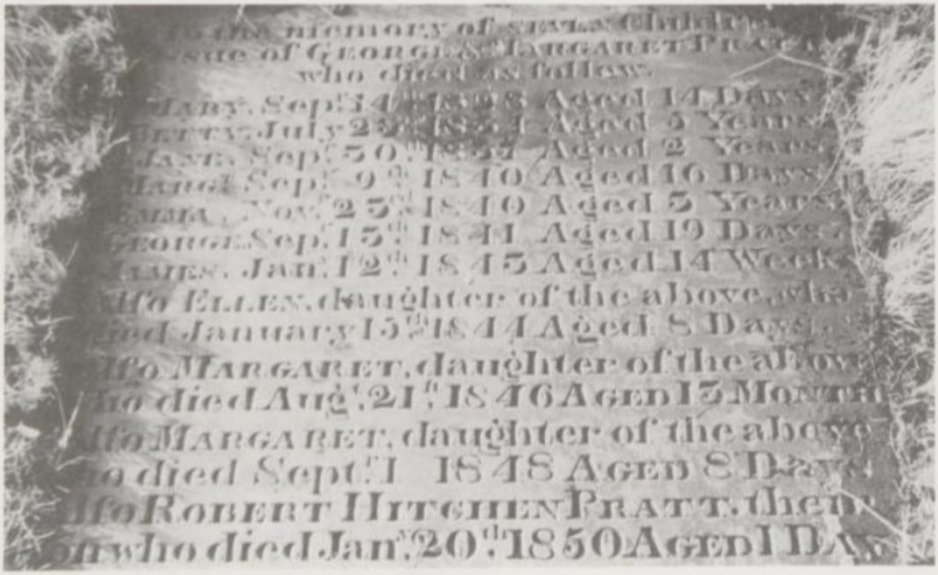


Fig. 1: The Pratt memorial stone in St Peter's churchyard (demolished c.1972).

here was typical of Britain's fast-growing cities and towns during the period; but because local government in the 19th century was largely local *self*-government, the responses and their timing were in some ways peculiar to this place, and contributed to the individual character of the town at the end of the century.

Underlying the whole experience were the efforts to find the right ways of thinking about life in large and dense populations. There was tension between the idea that an Englishman's liberty consisted in every man being free to hold any opinion of his own and to do as he wished with his own property, as long as he did not deprive others of the same freedom; and a belief that the purpose of law and government was to promote the greatest happiness of the greatest number, which might lead to interference with individual freedom. If a man chose to keep a pig in his yard, a few chickens in his cellar or a nice warm pile of manure in his stable, wasn't that entirely his own business, and nobody else's?

In the new circumstances of large industrial towns during the 1840s it became apparent that these ideas were incompatible. In practice, they were opposites. Experience in general, and outbreaks of cholera in particular, demonstrated that when 70,000 were gathered together in one place they had collective interests which could not be ignored and which demanded collective action.

This idea (as we shall see) was painfully accepted during the 1840s. What remained to be settled was what to do, how it should be done, and who should do it. There were no precedents for any of these questions, but it was a matter of life and death to find the right answers, and to apply them to bricks-and-mortar. Street design and construction, water supply, the disposal of sewage and corpses, all would have to be re-thought. And if an Englishman's home was his castle, the privacy of its curtain-wall was about to be undermined.

Water

Before the Preston Waterworks Company was formed in 1832, there were three public sources of water in the town. The most important of these was rain (with which the town is still generously supplied): two thirds of the houses were reported in 1849 as having rain water butts set up on wall brackets. The other sources were an antiquated and inadequate waterworks known as "The Folly", and a few pumps in the streets.

The Folly drew water from ancient springs at the bottom of Glovers Court and Mainsprit Weind, and pumped it by horse-gin through elm-log pipes to streets round the Market Place. Water flowed when the horse was set to work, an intermittent event heralded by a man walking round the streets with a rattle.

The pumps were more reliable, but they were few and scattered. There were fifteen public pumps in 1809, which the surveyor William Shakeshaft depicted on his map with little drawings: three in Friargate, two in

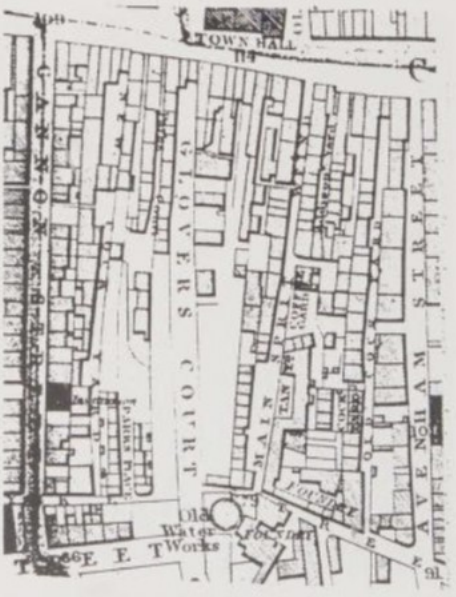


Fig. 2: The Folly as shown on Myres' map of 1836.

Church Street, one in Fishergate, and a few others in more remote places such as Crown Street to the north and Queen Street to the south. Other pumps were installed after this time, the most interesting of which gave its name to Pump Street (north of St. Paul's Church). This pump was worked by a small steam engine, and its enterprising owner distributed the water in carts, at a halfpenny per canful. Up to the 1830s, most of the inhabitants were entirely dependent on these public pumps and watercarts for their water supplies: not much, for a population already over 30,000.

Middle class folk seem to have found ways of providing their own private water supplies. G.T. Clarke reported in 1849 that there were numerous underground tanks, "chiefly in the premises of the richer classes". I have not yet found any physical evidence of them, but Samuel Leach, son of a draper who had built a house at the south end of Winckley Square, left a description of the arrangements which he remembered in his home there (No. 5 Camden Place) in the 1840s:

> *The scullery . . . had two pumps, one on each side of a sink stone, the one with water from the Water Company, and the other with rain water supplied from a very large reservoir underneath the flagged yard.*[1]

Such private reservoirs must have made a great difference to the comfort and convenience of houses in the Winckley Square area.

As the large-scale Ordnance Survey maps show, there were also private wells and pumps in that area. A well in the yard of a house in Camden Place was ordered to be closed up in 1878 (as a health hazard), and the outline of it is still visible, while a plaque dated "1832" on the yard-wall of a house in Ribblesdale Place marks the place where a pump used to stand (the date is significant). There is probably similar evidence in the yards and basements of other houses in the

Fig. 3: Public pumps in Friargate, 1809. (detail from Shakeshaft's map)

Fig. 4: site of well in yard at No.2 Camden Place.

vicinity, but the embarrassment of explaining the purpose of my enquiries to busy office staff has deterred me from further fieldwork in pursuit of this subject.

Not surprisingly, people who had such difficulty getting water used it sparingly. One thing they didn't do with it was simply pour it down the drain or the lavatory; because, of course, they had no drains and no water closet.

Rubbish

Householders who had no water closet certainly didn't want the lavatory inside the house with them. They had it outside, at a convenient distance, with a hole underneath where the contents could be covered over with a layer of earth or ashes. This earth closet was housed in a little outbuilding known as the privy. That is why the back yard was so important.

Fig. 5: A Preston privy photgraphed in 1982.

Other kinds of household waste were also deposited outside in the back yard, not only organic material such as peelings and pan-scrapings, but also the ashes and cinders from the fire. For this purpose a pit or enclosure of some kind was made, called an ashpit, middenstead, or boghole. The most convenient place for this midden was next to the privy, so that ashes for throwing into it were close at hand. The "privy-midden system" was all very well for scattered farmhouses and cottages in the countryside, but in a town like Preston, ever more tightly crammed with people and dwellings, it was a different matter altogether.

The problem was how to get rid of all this stinking rubbish and filth. In those parts of the town without sewers, in other words almost everywhere, there were two ways of getting rid of liquid waste. Some houses, or groups of houses and courtyard cottages, had a deep pit (perhaps covered over), into which liquid could drain through pipes. The idea was that water would naturally seep away through the sides and the bottom (presumably eventually polluting the drinking water drawn up by any pumps in the vicinity) leaving only solid matter in the pit. This was called a cess pit (an example in Turks Head Yard is mentioned in *Vanished Dwellings* [2]). The other way was to tip it into the street and leave it to find its own way home. Solid refuse from the privy, midden, or cesspit had to be dug out with shovels, loaded into a cart, and taken to some place where it would be more useful.

A very popular amelioration of these systems was to keep a pig in the yard. Pigs would eat almost anything, and when fattened they could be slaughtered and eaten in their turn. Later in the century officialdom turned against pigs, but the householders stoutly defended their tasty conveniences.

In Preston it was the job of a small number of men (fewer than 12) to come round and empty the middens and privies. These were the scavengers employed by the Improvement Commission (see below). Who were these brave fellows?

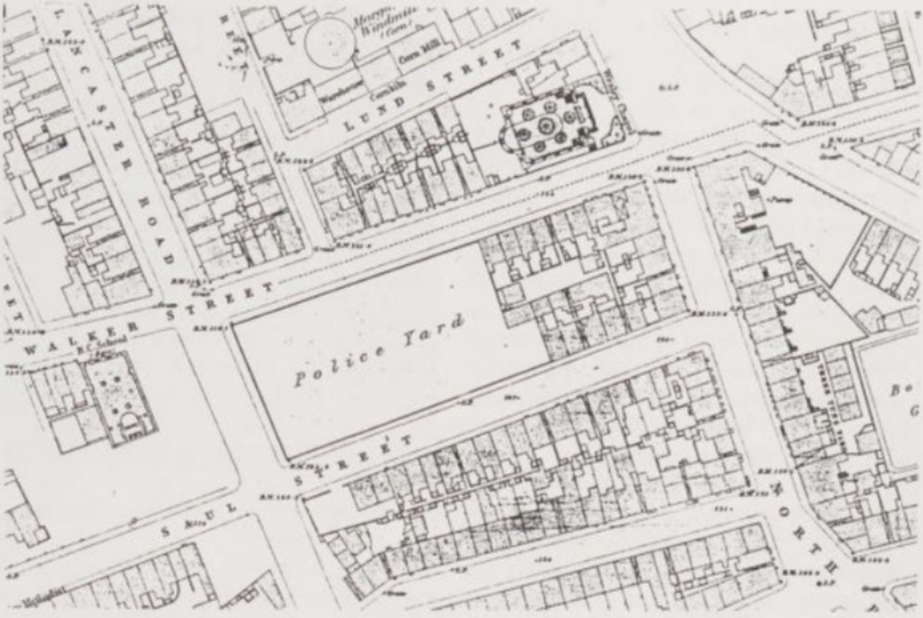


Fig. 6: The Police Yard (or "Manure Yard"), as shown on the 60-inch Ordnance Survey map of 1847. Note the various back yard arrangements of the neighbouring houses.

The labourers employed are for the most part paupers and elderly men, receiving low wages, and, as a class, not equal to the efficient performance of this kind of work.[3]

Early in the century the cartloads of human dung were distributed randomly to farmers for use as manure, but an improved system introduced in the 1830s had centralised the service on an enclosed plot of land on what was then the northern fringe of the built-up area. On the Ordnance Survey Map this land was labelled "Police Yard" – because the service was provided by the Improvement or Police Commission – but in ordinary speech it was known simply as "the Manure Yard". (Until recently this was the site of the Saul Street Baths, but as I write a new building for the Magistrates' and Crown Courts is rising in place of the baths; perhaps this new courthouse might display a plaque saying "Built on the site of the Manure Yard".)

The scavengers were required to do their work only at night, for the sake of decency rather than efficiency. It would have been impossible for a dozen young, fit, and highly-motivated men to keep pace with the necessities of a population rapidly rising towards 70,000 – even in ideal circumstances. The mere handful of elderly and infirm paupers, paid by the cartload (and therefore naturally inclined to avoid the difficult places) could hardly have done more than redistribute a fraction of this human manure or "night-soil" from their leaky carts (nick-named "treacle wagons"); and they were further handicapped not only by darkness but also by the physical arrangements of access to the privies and bogholes. These were as varied as the whims or expectations of their builders.

Back Yards

The back yard – or its equivalent outside space – was therefore not an addition to a house, like a garden, but an integral part of it, without a roof. In this respect houses in town were quite different from those in the suburbs or country. They were *town houses*, not cottages with small allotments attached. The essential functions of the backs had the effect of pushing the inhabitants out at the front, so that people were either indoors in private, or outdoors in public. This is why the few town houses with gardens had them at the front; communally in Winckley Square, and individually in Bushell Place, for example.

Because all back yards served the same function, regardless of differences of wealth and social status, it would have been very difficult for a person who had been led blindfold into any individual yard to know where he was in town. In Ribblesdale Place (for example) some of the yards are even smaller and more meanly contrived than those of many working-class streets.

Not that all dwellings had the same back yard arrangements. Some had no yards at all. Blind-back cottages built in courtyards had outside space only at the front, and usually very little of it. In blocks of back-to-backs only the rear cottage of each pair faced a yard, and this was usually communal. Even where there were yards, many completely lacked any kind of structural privy or midden, judging from the evidence of the 60-inch O.S. maps surveyed in 1847. One hesitates to draw the worst conclusion about the practical consequences of such a lack of provision, but it is correct: the inhabitants relieved themselves at random in the surroundings.

Through-houses had back yards, of course, but in many of the earlier rows the yard was shared or communal. In these, the privies were usually fewer than the dwellings, so they were shared also.

Numerous examples of such shared and communal back yards, and of groups of back-to-back cottages with no private outside space at all, are visible on the 1847 maps, especially in the two handloom weaving colonies: e.g. in Albert Street, Charlotte Street and Queen Street (to the south-east), and scattered throughout the north-western area.

Fig. 7: A communal back yard in Athol Street, off Wellfield Road.

The first public revelation of the consequences of these inadequacies came in 1831, when a cholera scare caused a temporary "Board of Health" (consisting of clergy and medical men) to tour the town and report on the danger areas. The following extracts relate to the subject of this section.

One principal source of complaint was the bad repair of Bog-hole walls . . . which, in many instances, were reported to be so dilapidated as to allow their contents to drain off into the streets, yards, or open spaces . . . so as to produce the most unpleasant effect upon the inspectors . . . Some of the Necessaries (i.e. privies) were said to be in such a filthy state that we can scarcely conceive how any human being could be induced by any consideration, to enter them . . .

Another ground of complaint was the quantity of human impurities that were

Fig. 8: Section of sheet 17 of the 60-inch Ordnance Survey of 1847, showing the variety of relationships between houses and their outside spaces in the handloom weaving district to the south-east of the town centre, built between 1790 and 1825.

(1) Back-to-back cottages without any yards (Charlotte Street and Back Charlotte Street).
(2) Communal yards (north end of east side of Albert Street, and Back Albert Street).
(3) Individual yards with midden-pan between two rows (William Street and Walter Street).
(4) Yards in pairs with access by through-lobby between houses (south end of Albert Street).

observed strewn about in the back streets A third was the heaps of ashes, and animal and vegetable matter, that were piled up beside the cottages, and allowed to undergo a process of decomposition . . .

A single privy frequently belongs to several houses, and perhaps this is the reason why it is usually in such a bad condition, each family throwing off the opprobrium of the nuisance . . . upon the neighbours.

Another circumstance with regard to Necessaries . . . is that they are so seldom cleaned out. This is perhaps in part owing to the police regulations which forbid the removal of manure during the day.

Every sense is shocked at witnessing women, who ought to be patterns to the ruder sex of modesty, cleanliness and gentleness, not only suffering but encouraging their children to commit impurities promiscuously around their dwellings.[4]

In view of the architectural arrangements, these women and children had no alternative: a fact which the reports do not mention.

Filthy and inferior though such deficiencies were for the inhabitants, they did not hinder the scavengers – if they came. Unfortunately, some of the houses which enjoyed the benefit of individual yards did present obstacles. Some had no means of access to the back yard except through the house. In such cases it was the responsibility of the householder to convey the contents of his privy and midden to the street in front, where it was left in a heap until the scavengers removed it. There was "a nuisance of this kind", wrote a correspondent to a local paper in 1847, "in one of the most respectable streets in the town, and opposite the house of an Improvement Commissioner."[5]

An apparent improvement was the provision of an alley about three feet wide between the backs of two rows of back yards. This alley, in reality a linear midden serving the dwellings on both sides, and known as a "midden-pan", was open at one or both ends to allow the scavengers to dig their way along (a feat which was rarely attempted).

All the arrangements so far described were either impractical or intolerable (though they were tolerated until the 1840s). There were only two tolerable ways of providing easy access to back-yard privies and middens while this system prevailed. The better – or less unsatisfactory – was a back road along which the scavengers' cart could travel while each privy-pail was removed through a small door in the back wall of the yard, and the midden (or ash pail) through a back gate. This meant allocating land for that purpose alone, which seems to have been acceptable in most English towns (except Leicester) but was evidently too extravagant for all but the better middle-class houses in Preston: Bushell Place, Stanley Terrace and Stephenson Terrace, for example.

The next best was the through-lobby between each pair of houses in a row. This took a little space from the ground floor of each house, but it was not as conspicuous a waste of valuable building land as a back road. By the late 1840s this method was evidently already being adopted as the general pattern, as G.T. Clarke implied in his description of examples in St. Peter's Ward:

In these new parts of the town the old plan of an alley between the back premises of each two rows of houses has been abandoned, and instead, a covered cross-passage introduced between every pair of houses, and common to both. The intention of this is to allow the soil and ashes to be removed without passing through the house.[6]

Such an elegantly economical solution to the problem appealed to the landowners and builders of Preston.

One reason for this, and for the smallness of the yards compared with other parts of

Fig. 9: Through-lobby houses in St Peter's Square. (Now the site of the University of Central Lancashire library).

England, may have been that a field pattern in the Avenham area, inherited from medieval times, had dictated it in that part of town. When the long, narrow strip-like fields in Avenham were sold for building (between 1815 and 1830), streets such Frenchwood Street and Great Avenham Street were laid out along the centre of these strips, so that the houses built on either side had just enough room for yards between their back walls and the hedgerows. The only way of providing access to the yards (other than through the houses themselves) was therefore to build a passage or lobby through each pair of houses from the street at the front to the yards at the back. Such a plan, adopted for middle-class housing in Avenham, then made a convenient model for working-class housing elsewhere.

Another reason may have been that building land in Preston was sold at a price per square yard of *area*, rather than per linear foot of *frontage* (as in the south of England).

Whatever the reason, it allowed Preston to take a complacent view of the privy-midden system in the second half of the century, as will be seen.

Despite the revelations of 1832, it was almost twenty years before effective responses to dangers, which were tragically obvious to almost every household in the town, were initiated. The reasons for this were: the lack of comprehensive information about the scale of the problem as a whole (rather than in individual experience); disagreements about whether the blame lay with individuals or with society in general (are my children dying because I am dirty, or because I am poor and my neighbours are poor and dirty?); and the lack of organisations with the power to deal with the causes. The next section examines the organisations which were available in the first half of the century.

The local authorities & the environment

In Preston in first half of the 19th century, as in most other boroughs of the time, there were three distinct bodies which we would call "local authorities", each serving a separate function: the Corporation, the Parish Vestry (replaced in 1838 by the Guardians of the Poor), and the Improvement Commission. The first two had no authority over the accumulating environmental problems of the town, and the third had some authority but not enough powers.

Until 1835 the Corporation was represented by a Town Council which had been self-electing and had had hardly any public responsibilities except looking after Corporation property (and drinking its wine). The Municipal Corporations Reform Act of 1835 replaced this ineffective and unrepresentative body with an elected Council composed of 36 councillors elected by "the burgesses" of the six wards, and 12 aldermen elected by the councillors. But the only significant power the Council then acquired was control of the police force, which was transferred from the Improvement Commissioners: a force of ten men in that year.

Before 1850 the Council had nothing to do with the condition of the town as a whole. This responsibility belonged to the

Fig. 10: The Town Hall, built in 1782. Parish Vestry, Improvement Commissioners and magistrates met in it, as well as the Corporation.

Improvement Commission (sometimes known as the Police Commission), which was established by the Preston Improvement Act of 1815, to light, pave and police the town; with powers to collect rates on property to pay for these services. Unlike those in some other places, the Preston Improvement Commissioners were not elected: all owners or tenants of property in land or buildings in the town worth £100 a year were qualified to act as Improvement Commissioners. In theory any or all of these wealthier citizens could turn up and vote at the meetings held monthly in the Town Hall. In practice, there was usually a core of between 15 and 30 public spirited regulars, mostly members of the shop-keeping middle class rather than the upper crust. Unusually important items on the agenda, especially in the 1840s, attracted 50 or 60 members; but the record attendance of 72 was provoked by a proposal which threatened the privacy of Winckley Square (it was defeated).

One of the obstacles to the effectiveness of the Improvement Commission was therefore that conscientious members were easily swamped by defensive property-owners. Joseph Livesey, ever a progressive reformer, used to walk round the town a few days before each meeting, to see what needed to be done. In his own words:

> *I would often go ahead of my coadjutors, and but for them holding me back, I should have incurred more expense than was justifiable . . . by such alterations as I thought the town required, especially in the back streets . . . Many a dirty corner I got cleaned out – pig styes and other nuisances removed – but when you have parties to deal with who are conservators of dirt, and . . . persons who are afraid of incurring expense, you can only get on slowly.*[7]

Another difficulty was the limited powers provided by the original Improvement Act. This handicap was recognised as early as 1838 by Isaac Wilcockson (proprietor of the *Preston Chronicle*) who tried, but failed, to persuade his fellow commissioners that they should apply for a new act of parliament to give them increased powers to control building and drainage.[8]

Legal power was not all they lacked. They also lacked money and staff. The scale of local administration in that period was puny. Laying rates of about 6d in the pound, for each of the two branches of their service (lighting and paving) the Commissioners' annual turnover in the mid-1830s was about £3000 for lighting and £2500 for paving; and in 1846, £3000 and £7500 respectively. For comparison, the profits of the cotton firm Horrocks, Miller and Co. were over £30,000 in 1836 and over £16,000 in 1839.

As for the staffing of local government in that period, it was not until late in the century that even major offices such as Town Clerk and Treasurer became full-time salaried jobs; these duties were performed part-time by professional gentlemen in private practice. The only full-time salaried officers of any consequence in the first half of the century were the superintendents of the Police and of the Fire Brigade, employed by the Corporation; and the Surveyor employed by the

Improvement Commissioners.

The Surveyor in the 1840s, Mr Stuart, a person of advanced age and declining powers, was not in the habit of keeping records of the works which he directed. If he built sewers, for example (see below), the only map of their location was in his own head, so that his death would mean the total loss of such useful information. Anxiety about this imminent danger was probably one reason why Lyon Playfair, the inspector reporting on the state of the town to a Royal Commission in 1845, "observed several recently made excavations in the streets, and on inquiring the cause I found that the Commissioners had been in search of the sewers." His general comment on sewerage in Preston was as follows:

> *Preston, distinguished for the rural beauty of its town, and for the activity of its authorities, has been strangely negligent in its endeavours to procure a systematic sewerage . . . There are no specific regulations for draining the town or its vicinity. A large extent of the town is entirely without either under drains or sewers, the water from the houses flowing along the channels upon the surface . . . The Rev. Mr Clay states that almost all the new streets in Preston have been planned and built without any attention to drainage and sewerage, and it is evident that legislative interference is needed to compel due provision of these subjects.*[9]

It would have been difficult to construct an integrated system for the whole town in any case, because there were no proper surveys showing levels from a common datum.

The main difference between these "sewers" and what we would know by that name was that in some places they were not underground, but ran in open gullies.

Such sewers as existed had been built piecemeal, based (in the traditional manner) on the existing water courses: the Swillbrook, which ran from the prison, through Samuel Horrocks's garden at Lark Hill, and formed a southern boundary to the Avenham area before disgorging its contents into the Ribble near the end of Avenham Walks; Airham-Syke, running on the northern side of Avenham through the centre of Winckley Square and thence to the river below Fishergate Hill; and a more complicated system of drainage serving Fishergate and Friargate on one hand, and Meadow Street and Walker Street on the other. The last of these discharged into two open pools on the Marsh (now the dock estate) which were "widely known and complained of by all around, as Snuff Mill-dam", and drained into the river through "300 yards of filthy open ditch"[10] Linked into these arteries was a maze of secondary covered sewers of miscellaneous size and design, which in 1849 served about a quarter of the total length of streets in the town.

Within these limitations the Commissioners were fairly active. They lit the principal streets with gas lamps, and paved them with boulders and pebbles (i.e. cobbles); and did the same for new streets when they were adopted after houses had been built on both sides (Avenham Road and Frenchwood Street, for example, in 1839). Boulder paving was a great deal better than the mere tracts of mud which it replaced, but its irregular crevices did tend to harbour the overflow and

Fig. 11: Boulder paving in Bowran Street, c.1982.

remains of the dung heaps which were dumped on it. (For this reason the Commissioners resorted to wooden paving round the Town Hall.) They managed the scavenging, and removed "nuisances"; or ordered their removal; or, if on private property, such as Lord Derby's slaughter houses in Bolton's Court, *recommended* their removal.

Recommendation was all too often the limit of the Improvement Commissioners' power, as they were forced to recognise in their first attempt to control the design and construction of new streets, in March 1841. Their minute book contains an elaborate list of carefully-worded specifications, bye-laws in every respect except that they are introduced by the words: "It is therefore *recommended* that all parties laying out streets should observe the following conditions . ."[11] The best summary of the progress of the Improvement Commission up to the mid 1840s was given in a meeting of 1844 by one of themselves, the millowner George Smith, in reply to another who claimed that they needed no new powers because they had "moved on":

> *They had undoubtedly moved on, and so did a man with one leg; but it was no less certain that they might have moved better with two.*[12]

"Moving on" – Water Supplies

Recognising the booming demand for water, a number of enterprising citizens had got together to form the Preston Waterworks Company in 1832. This company, consisting of sixty proprietors holding £50 shares, began modestly but learned fast. Their initial estimate of the cost of their works was only £15,000, which enabled them to build a small reservoir beside the Longridge road at Gamull Lane to the east of the town, with gathering grounds in Grimsargh and Alston; and to lay water mains to supply piped water in town.

Compared with the previous total lack of these things, and with the standards of comparable waterworks in other places, the achievement of the Waterworks Company was remarkable. It provided a constant supply of water under high pressure, which was not only more convenient but also cheaper for all concerned than the intermittent supplies at low pressure in other towns (such as Liverpool, Manchester, and Bolton); and it responded to the very rapid increase of the town in the next twenty years by increasing its capacity even faster, building a series of much bigger reservoirs further east towards

Fig. 12: George Smith, millowner, councillor and council comedian.

Fig. 13: The first reservoir of the Preston Waterworks Company, at Gamull Lane (1st edition of 6-inch OS map, 1845).

Longridge. The 7 million gallons of the first reservoir would have lasted only 14 days of drought; by 1840, total capacity of 60 million gallons would have been sufficient for 78 days, and by 1849, 167 million gallons enough for six months (assuming that all houses were connected, which they were not).

Unfortunately, the nature of this vital public service, and its extent, were conditioned by the fact that it was provided by a private enterprise. Laying on water to a house cost between six and ten shillings (for a lead pipe and one tap). Then there were the annual charges, calculated on a sliding scale in proportion to rent. Houses renting at £5 and under were charged 1s 3d per quarter, for example, those at £10, 2s 6d per quarter (and so on upwards). In 1849 ninety percent of the consumers were at or under £10 rental, and therefore paid between five and ten shillings per year for their water.

It was up to the landlords to decide whether to have their houses and cottages connected, and it was for the tenants to decide whether to filter it themselves or to consume it in its natural biological state (having been gathered from fields grazed by cattle). Shrewd landlords realised that the expense of connection paid for itself by increasing the demand for their houses. One owner of 80 or 90 cottage dwellings reported in 1844 that laying on water solved the problem of his own vacant property, to the detriment of a neighbouring landlord who had not supplied water:

> *The consequence was, that many of his tenants left him, and came over to me immediately that I laid on water, although his houses are rather better than mine in other respects.*[13]

On the other hand, the owner of several houses in Pleasant Street in 1849,

> *declines laying on water, referring tenants to a pump at the street end, which is placed in a manure depot.*[14]

The guiding principle of the system was therefore "you pays your money and you takes your choice".

Such free-market mechanisms had brought piped water to half the houses in the town by 1845. Those without naturally helped themselves from their neighbours, but if they were caught they were prosecuted for the crime of water-stealing. In the words of Mr Clarke,

> *it is often found that the inhabitants of a whole street draw their water clandestinely through that of a single customer, who in some cases sells the water.*

The magistrates were obliged to take a similarly poker-faced attitude to an offence which might have been as amusing as apple-scrumping if the reasons for it had been as trivial.

A far more serious deficiency of the private enterprise approach to water supply was

Fig. 14: Tap and slopstone, c.1840, Cross Street.

STEALING WATER.

To the Editor of the Preston Guardian.

SIR,—I had occasion to go down a court where there are a number of cottages, but all without any supply of water. "How do you get water?" said I to a widow, being in one of the houses. "We steal it," was her reply. "We get it from ——— ———, and we run as hard as we can for fear of being seen." Another argument thought I in favour of cheap water. Cottages paying 1s. 3d. per week rent would not mind paying a 1d. per week for water; but can such be expected to afford 12s. a-year?

ONE WHO WANTS THE WATER TAX TAKEN OFF.

CAUTION TO WATER STEALERS.—Yesterday, Elizabeth Stubbs appeared before the magistrates at the Town-hall, charged with taking water from one of the taps supplied by the Preston Waterworks Company, she not having made any contract with the said company so to do. The case being fully proved against her, she was ordered to pay a small penalty and costs.

SEASONABLE BENEVOLENCE.—Forty poor families in the

Two newspaper references to the new crime of water stealing in 1844 (Preston Guardian).

that the Company thought in terms of a mass of individual customers, rather than of the collective needs of the town as a whole. They estimated consumption as about 45 gallons per day per house, thinking only of the water going *into* the house, not of what happened to it when it came *out* again, which was not their responsibility. Before 1850 it was taken for granted that water supply was the business of private enterprise, drainage the concern of builders and landlords, and sewerage the responsibility of the Improvement Commissioners: the three functions were not yet conceived together as a single water-driven system. If they had been, 45 gallons of (unfiltered) water a day to each house would have been seen as inadequate. (Today's daily domestic consumption of about 35 gallons *per head* is more than double this.)

The Chastening Rod

Tis good for us most gracious Lord
To feel thy chastening rod.
Afflictions make us learn thy law
And bring us near to God.

(Inscription on memorial stone of the Harrison family, St. Paul's churchyard, Preston.)

In the mid 1840s, when there were taps in half the houses and sewers under at least some of the streets, Preston was better equipped than it had been in the later 1830s but it was becoming an ever more dangerous place to live, and the finger of Death was tapping on middle class shoulders.

Some idea of what families were going through in this period can be gained from memorial stones in the few remaining churchyard burial grounds in the town, especially St Paul's and St Peter's (now Red Rose Radio

Fig. 15: The Holland family memorial in St Paul's churchyard.

Fig. 16: The Emery family memorial in St Peter's churchyard.

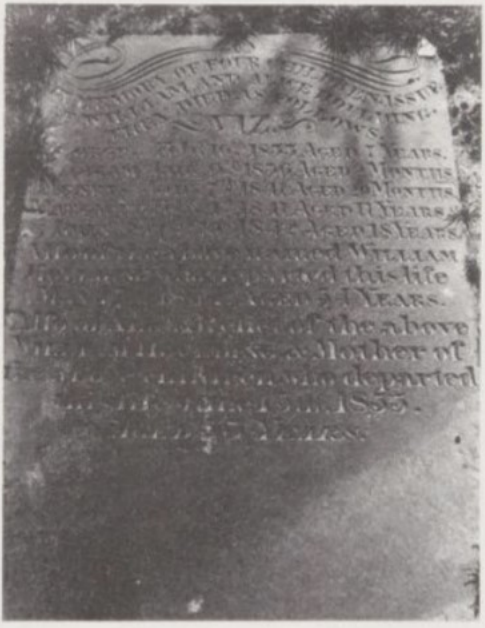


Fig. 17: The Houlding family memorial in St Peter's churchyard.

and the University Arts Centre, respectively).

Bad though some of these cases appear, they nevertheless under-represent the scale of the calamity, in two ways. First, families who could afford a memorial in addition to the immediate expenses of a funeral (even when subsidised by membership of one of the numerous Burial Clubs), were obviously not as poor as the majority of the population. Second, pauper families – those who were supported wholly or partly by poor relief – had to submit to burial in a public pit in the churchyard. St Paul's, St Peter's and St Ignatius' churchyard contained unmarked mass graves of this kind, in which coffins were stacked in layers until each pit was full. The east end of St. Paul's churchyard alone received about 7,000 pauper corpses in twenty years; with unpleasant effects on the surrounding houses, as the letter from Mr John Catterall to Mr.G.T. Clarke shows.[15]

Sickness and death in the family, especially the death of young children, had become such a normal part of experience that anyone who could possibly afford it enrolled in a Burial Society – or, better still, a Sick and Burial Society. Many such local Friendly Societies had sprung up in Preston in the 1820s and 1830s. Some were associated with churches or Sunday Schools, others with particular trades or mills, and many more were centred on pubs. For a penny or ha'penny per person per week, members were entitled to a lump sum to pay the expenses of funerals (sometimes including the price of liquor). Commonly between £5 and £10, this was a lot of money – for some people the equivalent of a month's wages – and it appears to have had the effect of making some families quite resigned to the death of their children.

Fig. 18: Window in Tenterfield Street (now removed).

> *St Paul's-square, Preston, May 29, 1849*
>
> *Sir,*
>
> *I have lived in St. Paul's-square two years and four months. We had not resided here more than one month before my wife and daughters began to complain of a very nauseous smell. At first they thought that this noxious stench must arise from some dead dog or something of the kind on the Moor near our dwelling. After being satisfied this was not the case, we at once ascertained most satisfactorily that this perceptible effluvium was from the overcrowded churchyard at the east end of St Paul's burial-ground opposite to our dwelling. We have at times been compelled to leave the parlour and retire to the back kitchen on account of the deleterious and health-destroying gas which constantly contaminates the atmosphere. . . .*
>
> *I am, &c*

Rising death rates were widespread during the 1830s and 1840s, in Preston as in all other other mushrooming industrial towns; but a national investigation then began to convert helpless suffering into understanding and action. This was greatly helped by a the flow of statistics published since 1837 by the new office of Registrar-General for births, deaths and marriages. Individual and local experiences could now be counted and compared.

The stream of figures for births and deaths, for each area of local government as well as for the country as a whole, coincided very usefully with investigations of the relationship between disease and living conditions carried out by men such as James Kay and Edwin Chadwick on behalf of the Poor Law Commission. Chadwick, organiser of the New Poor Law and one of its commissioners himself, noticed that death and disease led to

increased claims for poor relief, and were therefore a charge on the poor rates. Quite apart from its cost in human suffering, disease was simply uneconomic.

In the course of proving this, not only to himself but to the Poor Law Commission, to Parliament, and to the public at large, Chadwick organised a massive enquiry which he published himself in his *Report on the Sanitary Conditions of the Labouring Population of Great Britain* (1842). This was an instant best-seller. It provoked a second and more thorough investigation by a "Royal Commission for Inquiring into the State of Large Towns and Populous Districts", which published its discoveries in 1844 and 1845.

Apart from the mountain of horrifying facts contained in them, the importance of these reports was that they gave a context for understanding local experience; but perhaps equally important locally was the *experience of being investigated*. In 1842 the evidence for Preston was assembled and presented to Chadwick by a local man, the Rev. John Clay. In 1844 the Royal Commission sent a visiting inspector, Mr Lyon Playfair, who was covering the whole county. Playfair's very presence in the town attracted attention to the reason for it, and his comparative perspectives lent extra authority to his opinions. As one of the Addisons of Winckley Square put it, at a crowded meeting of the Improvement Commission,

> *during the past year or so the state of the town has received the attention of men of enlarged views and scientific experience.*[16]

John Clay's report to Lyon Playfair in 1843 demonstrated that there had been a lethal deterioration in the condition of the town since the late 18th century. Whereas the average age of death in 1783 had been about 31 (which was bad enough), by 1811 it had sunk to under 20, and in 1841 it was 19.54. By detailed calculations of the direct and indirect costs of sickness and death – Sick and Burial Club subscriptions, poor relief, funerals, etc. – he hammered home Chadwick's point that this level of mortality was *uneconomic*.

To understand the causes of death, it was necessary to go beyond the general average figure for the whole population, which gave a very false impression (suggesting that most people died at about the age of 20). For this

Fig. 19: Yhe Reverend John Clay.

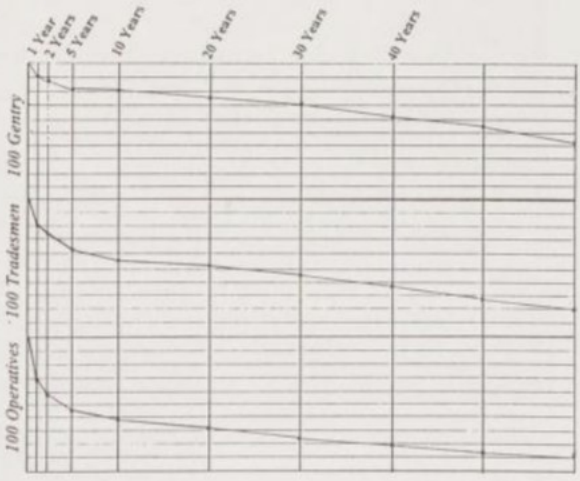


Fig. 20: The "Streams of Life" (from birth to age 40, adapted from Clay's chart).

purpose he used the registrations of death to find out who died and at what ages, sorting the deaths into three crudely-defined social classes: "gentry and professional men", "tradesmen", and "operatives". Not surprisingly, this proved that gentry had the best life expectancy and operatives the worst. But the shocking revelation was that these variations by class were "almost entirely experienced among the under fives": gentry families lost about 18% of their infants and small children, tradesmen about 38%, and operatives 55%.

To make the point clear, Clay displayed the results of his calculations in graphs which he called "Streams of Life", based on the ages of death in Preston for the six years since registration began in 1837.

He also showed that the level of infant mortality varied between one locality and another, according to the "cleansing, draining, and ventilation of the dwellings, and of the streets, courts, etc., in which these dwellings are situated". In "ill-conditioned" streets about 70% of all deaths occurred among children under five, which was almost exactly double the proportion in "well-conditioned" streets.

The causes of disease and death were therefore most likely to be found in the ill-conditioned localities, to some of the worst of which Mr Clay then turned his attention:

There is in the "lowest deep a lower deep"; and in the "districts of the worst kind" there are certain streets and courts etc. the worst of the district . . . The names of these . . . are Canal-street, Back Canal-street, Hope-street, Holden's-square, Holden's yard, Edward-street, Buckingham-street, Clarence-street, Poplar-street, Willow-street, Queen-street, and Savage's-court.

In these places, he said, there were "many causes of disease and death operating simultaneously", which he identified as: dirty streets and houses; over-crowded rooms and beds; filthiness of persons, clothing, and bedding; "prevalence of damp yet want of water"; pigs inside or too close to dwellings; "and, pervading all, sickening smells – signs of the presence of an atmosphere destructive of health to all who breathe it".

We now know that while such obnoxious

Fig. 21: A "lower deep in the lowest deep": the Canal Street area as shown on the 60-inch OS map of 1847 (scale reduced). Formerly a colony of cellared handloom weavers' cottages, the area was mostly cleared in 1884–1900, and part of it is now the site of the University of Central Lancashire.

circumstances provide the conditions where diseases can flourish, they are not themselves the causes of them. The problem in the 1840s was that nobody knew what the true scientific causes were, but because sickening smells made themselves obvious to the senses, and disease was common where smells were worst, people assumed that the cause was the smell – a "miasma" of infection in the air. Even the doctors did not know how infectious diseases were spread, and could recognise and accurately identify only a few of them. The only diseases named by the doctors quoted in Chadwick's or Clarke's reports were: smallpox, "scarlatina" (scarlet fever), dysentery, whooping cough, measles, and typhus; otherwise, they referred vaguely to "fever", "diarrhoea", "febrile catarrh" and so on. When asked the causes, they described the physical conditions of places where diseases occurred most frequently.

Nowadays, a high level of infant mortality is regarded as a symptom of the overall poverty of a society, especially in the "underdeveloped" countries which we call the Third World. That there was a "Third World" within the borough boundary of early Victorian Preston seems to have been recognised by John Clay, almost unconsciously. At the end of his report, he referred to the "barbarism in which thousands in this town, as in others, are shrouded", continuing:

> *We endeavour to civilise distant people . . . the same measures are needed at home, where the moral and intellectual extremes of society are as far asunder as if separated by untrodden deserts or untried seas.*

He did not mention poverty; but the *Preston Chronicle* did, in an editorial comment on his lectures:

> *There is a source of disease and death . . . which cannot be removed by the application of the broom and the bucket . . . The source is simply destitution, poverty, a want of the necessaries of life, of proper food and clothing . . . That destitution . . . is, if not the only, certainly by far the most copious source of epidemic disease, seems clearly proved by a host of facts elicited by the enquiries of many eminent medical men . . . Starving people have but little inclination for washing and scrubbing, and little heart for keeping their persons tidy and clean.* [17]

How this problem was to be solved the *Chronicle* thought it difficult, if not impossible, to suggest.

The localities named in the reports, and these rare references to general destitution, bring us back to the handloom-weaving colonies purpose-built between 1790 and 1810[18], because the worst conditions were found in these districts: within half a century they had become industrially redundant and structurally obsolete slums.

> *A favourite situation for the diseases in question is the district west of Friargate, between Heatley-street and Fylde-street . . . Another is . . . Snow-Hill and Back Lane . . Singleton-row, Crown-street. . . . Atkinson-street . . . Back Charlotte-street, cellars in Vauxhall-street, Top Albert-street. . . . Queen-street . . .* [19]

Semi-rural in their origins, these places had been built to rural standards at a time when handloom weaving was prosperous. They had

TO BE SOLD BY AUCTION,

At the house of Miss Hunt, the Theatre Tavern, in Preston, in the county of Lancaster, on Monday, the 3rd day of September, 1849, at seven o'clock in the evening, subject to such conditions as will be then produced,—

THE Fee-simple and Inheritance of and in all those Six MESSUAGES or DWELLING-HOUSES, situate in Mount Pleasant, in Preston aforesaid, and near to the "Jolly Sailor," numbered respectively 3, 4, 5, 6, 7, and 8, and now occupied by Thomas Knowles, Mark Connelly, Michael Warmley, Robert Coulthurst, and others; together with the Six CELLARS at the back of the said Messuages or Dwelling-houses, and now occupied by George Cummerlich and others.

For further particulars apply to Mr. Dodd or Mr. Ascroft, Solicitors, Preston.

Preston, Aug. 3rd, 1849.

TO BE SOLD BY AUCTION.

On Wednesday the 21st day of June next, at the White Horse Inn, Friargate, Preston, at seven o'clock in the evening, and in the several Lots following, or otherwise, as may be agreed upon at the time of Sale, and subject to such terms and conditions as will be then declared and produced,

LOT 1. ALL those SIX MESSUAGES or DWELLING HOUSES, with the Cellars, Yards, and conveniences belonging thereto, situate on the East-side of Snow Hill, and near to Upper Walker-street, within Preston aforesaid, and which said Messuages are numbered respectively (commencing with that which adjoins Upper Walker-street) 1, 2, 3, 4, 5, and 6, and are now in the several occupations of Gilbert Sewell, Robert Blackburn, William Howson, Richard Seed, and ——.

LOT 2. — All those FOUR MESSUAGES or DWELLING HOUSES, also situate on the East-side of Snow Hill aforesaid, with the Cellars, Yards, and conveniences to the same belonging, and near to High-street, and which said Four Dwelling Houses are numbered 24, 25, 26, and 27, and are in the respective occupations of Catherine Riley, John Marshall, and ——.

Also, all that MESSUAGE or DWELLING-HOUSE fronting to, and on the north side of High-street, with the Cellar thereunder, and the BAKE-HOUSE at the back, respectively in the occupation of Margaret Heaton and James Kirby, and distinguished by the Nos. 1 and 2.

The Cellars attached to the houses in Lots 1 and 2, numbered 1, 2, 3, 4, 25, 26, and 27, having distinct and exclusive entrances from the front of the street, are capable of being let and enjoyed either with or without the houses to which they belong.

Both Lots are Leasehold for an unexpired term of 1000 years, created by an Indenture dated the 1st day of October, 1794, and the Property comprised in each, will be sold subject to the yearly Ground Rent of £6 5s.

LOT 3.—Four several LEASEHOLD RENTS or Annual Sums of £3 15s., £3, £2 2s. 6d., and 17s. 6d respectively secured and charged upon other Property situate in Snow Hill aforesaid, of adequate value, the details and particulars of which Rents and the Securities for the same will be stated at the time and place of sale.

Further information may be had on application to Mr. M. SATTERTHWAITE, Currier and Leather Dealer, Friargate; to Mr. BENSON, jun., Grocer, Church-street; or at the Office of Mr. HAYDOCK, Solicitor, 4, Lune-street, Preston.

Preston, May 26, 1843.

been overwhelmed by an urban environment and their inhabitants pauperised. The characteristic feature of the houses – their damp cellar loomshops – had become a social menace:

In High-street are many cellar dwellings, low and close-built for hand-loom weaving shops . . . The number of cellar dwellings in Preston is considerable. They were built for hand-loom weavers, and have since been let out as dwellings.[20]

The auction notices reproduced here show this change of use in progress.

By 1843 Preston was in a state of crisis, aptly defined by John Clay during a lecture to the Literary and Philosophical Institute:

The cry in cities and towns should be the same as if the town were on fire, "Water, water" [21]

Yet eight years of measurable personal tragedy slowly unrolled between Chadwick's report and the start of any effective remedy in Preston. The basic reason was that an appropriate organisation, with adequate powers and funds, did not exist. Preston's fate was merged with that of other large towns, which were dependent on the crystallisation of expert opinion nationally, and on the slow processes of parliamentary debate and legislation.

Unfortunately, expert opinion about causes and remedies was divided. Some blamed dwellings, some drainage or lack of water, others poverty. The implications of viewing them all together were alarming, but Edwin Chadwick realised that it was essential that all the physical problems should be dealt with together. Each town must be equipped with water pipes, drains, and sewers forming a single underground system, with streets and houses (built to controlled standards) sitting on top. Such massive engineering works (for which there were no modern precedents and little comparable experience among civil engineers) meant revolutionary changes in organisation and expenditure.

While the outlines of national public health legislation were only beginning to be worked out, in Preston the Improvement Commissioners tried to start action. In November 1844 they decided it was time to apply for a new Borough Improvement Act, and to purchase the Gas and Water Companies (setting up a committee to make recommendations). In the end, they did neither, partly because some members thought it would be cheaper to wait for general legislation, and partly because the committee seems to have been "nobbled" by the members of the Water Company; but newspaper reports of their meetings[22] show why the majority

now accepted the idea of radical action:

The health and comfort of all depended on it. All were vulnerable to contagion.

The filthy state of the streets was transferred to . . . manners and morals.

Was it not to be lamented that in Preston poor people were continually brought before the magistrates on charges of stealing water?

The charge for water was extravagantly high.

Such reasons, expressed in November 1844, were pragmatic, but in July 1845 the emphasis had shifted to matters of principle:

The supply of water in every town should be in the hands of public bodies and not private companies.[23]

The transformation of attitudes during the 1840s was remarkable. In 1841 the *Preston Chronicle*'s comment on a ParliamentaryBill for the drainage of towns concerned the importance of "not interfering with the right of every man to manage his own property in his own way", and with avoiding "anything that is meddling, expensive, or vexatious".[24] But in 1848, faced with Lord Morpeth's Health of Towns bill, the same paper wished "*to make sanatory improvement compulsory*" and to see "the establishment of a central board of supervision and direction".[25]

By 1848 all the most active and alert members of Preston's Improvement Commission and Town Council had been so chastened by the rod of recent affliction that they grabbed at the Public Health Act in self defence – especially since it left management of the necessary local works in local hands (their own). Then the rod was raised again in its most fearsome form: cholera broke out in other parts of the country in the autumn of that year. It reached Preston in 1849: cases were reported in widely scattered areas during August, several of them fatal. Cholera (like typhus) was spread by food and water contaminated by the contents of leaking

CASE OF CHOLERA.—We regret to have to state that a case of malignant cholera, which proved fatal, occurred in this town on Tuesday last. The victim of the disease was a glazier, 48 years of age, of the name of James Holden, residing in a cellar, No. 9, Vicar-street. He was seized at two o'clock in the morning, and died about noon the same day. Mr. Fearnside, surgeon at the Dispensary, attended upon him. Through some neglect, as we are informed, on the part of the persons who ought to have apprised Mr. Williams, the nuisance inspector, the body was not interred until the following day. Immediately after the interment, he proceeded to examine the premises, and found them in an abominable state of filth. Since then they have been subjected to cleansing and whitewashing. This case, albeit a solitary instance, will surely be a warning to the owners of houses to see that they are kept in a clean and sanitary state, by draining, whitewashing, and removing all malarious causes. The sooner, therefore, that they put their houses in order the better. It will be too late, as the saying is, to lock the stable door when the horse is stolen.

CASES OF NUISANCE.—The inspector of nuisances, on Monday last, reported to the committee 23 cases, 17 of which had been removed by whitewashing, in Leeming and Back Leeming-streets, Laurel-street, Lailac-street, and Greaves's-street; by the removal of pigs from Floyer-street and Feeble-street; and also by draining in Feeble-street. The remaining six that had not been attended to were to be served with 24 hours' notice. We trust the inspector will continue his useful exertions, and shall be glad to find that he receives efficient support under them from the magistrates and the Sanitary Committee. It will be seen from our report of the meeting of the Board of Guardians, that the attention of that body has been directed to the subject by the General Board of Health.

NUISANCE IN WINCKLEY-SQUARE!—Yesterday J. Gorst, Esq., deputy-clerk of the peace, presented himself at the Town-hall, and complained to the magistrates of a quantity of filth that had been scattered in Winckley-square, whereby such an intolerable stench and nuisance had been caused in that fashionable vicinity, as to be perfectly intolerable to those residing in it. The filth had been brought out of Oxford-street, and as a near cut had been taken through Winckley-square, and Winckly-street. He (Mr. Gorst) was a large ratepayer, and he had a right to have such nuisances removed. Mr. Banister stated that the nuisance referred to, arose from some night-soil which had been carted by a man named Vickers, and that owing to his cart being unsuitable for conveying it, it had been scattered up and down these two streets, for which a summons had been issued against the offender who then appeared. Vickers being asked by Mr. Gorst why he did not go through Avenham-street, replied, "I did, sir." Mr. Gorst:—Then you divided your favours? Ordered to be more select in his route on another occasion, and to pay, together with the costs, 2s. 6d. to the poors' box.—Mr. Gorst appeared also in reference to another matter: he said, that seeing the superintendent, and inspector of police present, he would not take any undue advantage, but in their presence and hearing would bring under the notice of the mayor the conduct of the night constables, whom he had several times seen stopping [illegible]

privies and cesspools – as many of Preston's wells must have been. Cholera killed quickly and nastily: it caused such intense diarrhoea that its victims, in great pain, shrivelled up from loss of body fluid.

Cholera is a health inspector that speaks in a language which nobody can misunderstand. [20]

At the first news of cholera, the Council and the Commissioners formed a joint Sanitary Committee to direct an emergency clean-up of the town (23 October 1848). They called in the police force, appointing one of the sergeants as Inspector of Nuisances (at a wage of 23 shillings a week), and instructed the constables to report "nuisances" in a book at the police office. And they eagerly accepted the offer of a Mr Daniel Vickers "to get out 80 tons of night soil per night and carry it away by canal each evening, free of charge".[21] As the newspaper extract (on page 21) shows, Mr. Vickers was a man of dashing enterprise.

The other task of this Committee was to send a report to the General Board of Health, pointing out that the average death rate in Preston over the last seven years was 28 per thousand – well over the limit of 23 per thousand which made it compulsory to implement the Public Health Act – and asking foran inspector to be sent as soon as possible. That inspector was Mr G.T. Clarke, whose reports, which I have already quoted throughout this chapter, concludes:

I therefore recommend that the Public Health Act be applied to the Municipal Borough of Preston.

The next chapter shows how Preston's Local Board of Health coped with cleansing their Augean stables in the next thirty years.

CHAPTER II

THE LOCAL BOARD OF HEALTH

People & Houses from 1850 to 1880

THESE THIRTY years made a tremendous difference to housing conditions in Preston, both then and from that time to this; with effects which were by no means all good.

The Local Board of Health presided over a period when the Preston' population grew by just over a third, but the number of houses almost doubled. This basic improvement is clear from maps and Census Reports.

From the Census Reports of 1851 and 1881 we learn that while the population rose from about 69,500 to 96,500, the number of houses increased from 11,500 to 20,710. In other words, by 1881 about 9 thousand more houses and 27 thousand more people, or one new house to every three new people. This greatly reduced the *average* level of crowding in the town, though, of course, it doesn't mean that houses which were already overcrowded became less so. Crowding of people into houses in Preston had never been worse than it was in 1851, when there were 6 persons per house; but by 1881 the average had fallen to 4.5 persons per house.

There is another difference, which quite suddenly makes the historical investigation of housing in Preston much easier than in any earlier period. In August 1850 the Town Council became Preston's Local Board of Health, taking over responsibility for streets and houses from the Improvement Commissioners, and keeping much fuller records of its activities.

The Local Board of Health

The Local Board kept written records of all its meetings, and of all its committees, which

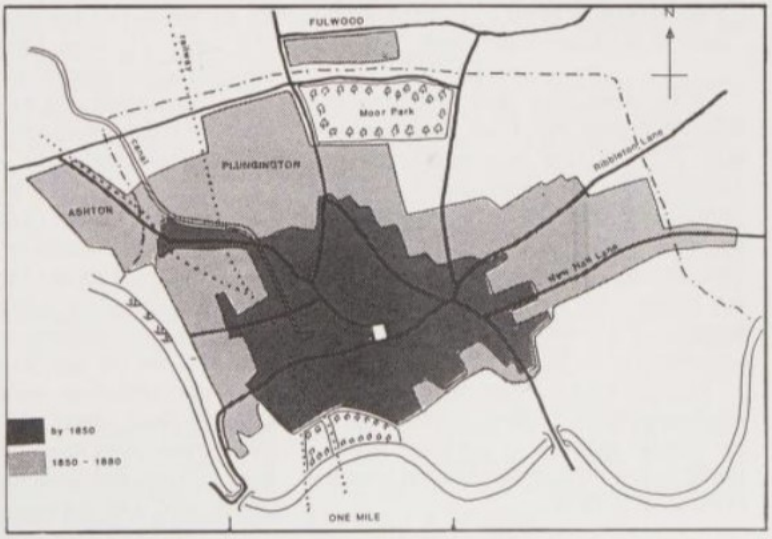


Fig. 22: Sketch map to show the expansion of the built-up area of Preston between 1850 and 1880 (main roads indicated by black lines, main railways by dotted lines)

Fig. 23: Minute Books of the Local Board of Health.

Fig. 24: A few of the of the early Building Plans submitted to the Local Board of Health.

are available in the County Record Office. It also made a decision (recorded in its first Minute Book) which is very useful to us:

> *That all plans be made on drawing paper in order to be preserved as records.*[1]

These plans have been kept from 1850 until the present day. Plans for houses built after 1850 but later demolished have been transferred from the Town Hall to the Lancashire Record Office. This means that to find out about houses built after 1850 we are not dependent only on the evidence of maps and a few photographs, aided by well-informed imagination: if a house is no longer standing, we can probably find the plans for it.

From their own Minute Books, and from newspaper reports of their meetings, we can see how the members of our Local Board of Health got to work on the dreadful condition of the town in 1850.

Who were the members of the Council which was also the Board of Health? There were 48 members of the Council: 36 were elected by the "burgesses", two for each of the six wards, two at a time each November. The other 12 were aldermen who were elected by the councillors themselves, and normally remained until they either died or resigned of their own accord.

Since the Municipal Corporations Act of 1835 the law laid down that only men who owned property worth £1,000 were qualified to be elected as councillors. (An ordinary terraced house cost about £85 to £100 to build). So, in the first place, members of the Local Board were all relatively rich men. Second, until 1853 the law said that only people who paid rates themselves could vote in council elections. Since almost all houses at that time were rented rather than owned by those who lived in them, and since the tenants of small houses (who were the overwhelming majority

TO THE BURGESSES
OF
ST. JOHN'S WARD.

GENTLEMEN,—The period for which I was re-elected to represent you in the Town Council being about to expire, I again beg to offer my services and to solicit your suffrages, and if again elected I shall endeavour to assist to the best of my abilities and judgment to carry out the sanitary measures now pending, and other contemplated improvements, with as little expenditure as is consistent with the best interests and general well-being of the town,

And remain, as heretofore,
Gentlemen,
Your most obdt. servant,
RICHARD THRELFALL, Jun.

Preston, 24th Oct., 1850.

TO THE BURGESSES
OF
ST. JOHN'S WARD.

GENTLEMEN,—It is now nearly three years since you last entrusted to me, for the fourth time, the honour of representing you in the Town Council.

The period for which you then elected me being about to expire, allow me sincerely to thank you for your confidence during the last twelve years, and at the same time again to tender to you my services as a Candidate at the approaching Election.

If you should be pleased to re-elect me, you may rely upon my best exertions being used to promote your interest and the town's welfare, by a faithful discharge of the duties entrusted to me, and by having a due regard to economy, which will now become a matter of no small importance.

I have the honour to be, Gentlemen,
Your obedient servant,
RICH. ED. WATERWORTH.

Preston, Oct. 24th, 1850.

Councillors' electioneering letters in local papers, 1850.

of householders) "compounded" their rates with the rents they paid to their landlords, the "burgesses" were few. In 1850 they numbered about 2,000: 3% of the total population, or about 14% of adult males. When the law was changed in 1853 to allow "compounding" householders to vote in council elections the number was increased to about 4,500: about 6% of the whole population, or one third of all adult males.

This system might seem unfair; but perhaps it was an advantage when the town faced the huge cost of cleaning up from the past, because the poorer the voters were, the less inclined they were to vote for expensive works which would increase the rates. Building a system of sewers, for example, would cost a great deal of money, so it was just as well that the people in charge were rich men who would not be bothered over much about a few pence on the rates. In 1858 one of these men said "as to heavy taxes, it is necessary that they must exist", while another told voters in his ward that

> *he would not talk claptrap about economy . . . he believed it the duty of the members of the corporation to promote the health of the inhabitants.*[2]

The printed books of Council Proceedings give the names, addresses and occupations of the councillors elected. From these it is clear that in 1850 the Local Board was dominated by "the great and the good" of early Victorian Preston, many of whom lived in or close to Winckley Square. Eighteen of them were millowners; sixteen were lawyers, surveyors or doctors; and eleven were merchants or the more prosperous of the specialist shopkeepers. (In the years to come, as municipal responsibilities and *rates* increased, the occupational centre of gravity of the elected council was to shift heavily towards the shop-keeping class.)

From the Minute Books of their General Purposes Committee we learn which of them worked hardest to clean up the town, and how they did it. This committee included men who had already been trying to improve the condition of Preston, and especially of the poorer people in it.

The mayor in 1850 was James German, nephew of one of the leading millowners, a lawyer by profession but already making a name as a tireless public health reformer. (His political career in Preston was a tragedy in the classical meaning of the word. Elected councillor at the age of 25 in 1846, alderman in 1849 and mayor in 1850, he did much good for Preston; then became ambitious and decided – against all advice – to put himself up as third Liberal candidate in the parliamentary election of 1852, splitting the vote so that the Liberals lost the election. He resigned his seat as alderman in 1853, played no further part in public affairs in Preston, and went to live in Sevenoaks in 1869.[3])

Fig. 25: Robert Ascroft.

Fig. 26: John Goodair.

Fig. 27: William Birley.

James German was so appalled at the conditions in which people lived that in many long speeches which he delivered on various occasions he hardly ever spoke of anything else. In 1848, almost single-handed he had persuaded the Council to build the first public Baths and Wash-houses. This is an example of the sort of argument he used:

> *They saw a woman washing in dirty water, and the child or the father laying ill of typhus fever . . . it might actually be seen only forty or fifty yards from the door of their own Town Hall. Those were facts, and it was high time that something was done . . . it was a subject upon which the poor man could not help himself.* [4]

Robert Ascroft, another lawyer, thought it was a scandal that so many people were dying from diseases which could be prevented. In 1848 he had said:

> *the town was in one of the most healthy situations in the country, and yet they found the mortality frightfully great. A public body should not be so supine and neglectful as not to take notice of it.* [5]

Robert Ascroft was one of the most influential men in Preston from the 1840s until his death in 1876: a councillor from 1846 to 1852, he then resigned to become Town Clerk from 1852 to 1875. (Throughout these years the minute books of the Local Board are filled with his brisk and busy handwriting; and he was also to become chairman of the Board of Guardians of the Poor from 1859 to 1866 – a period which included the Cotton Famine).

Another member of the General Purposes Committee who worked very hard to establish the new system was the surgeon Thomas Monk. A founding member of the reformed council and alderman from 1835, he attended 53 out of the first 55 weekly meetings of this committee alone, not to mention other Council and Local Board committees. (Unfortunately his career came to a sticky end in 1858 when he was found guilty of forging a patient's will, and sentenced to penal servitude for life – an affair which caused quite a stir at the time [6]).

Also busy with Local Board business was John James Myres, the architect and surveyor who had drawn the first really good maps of Preston. Whether his activity on this committee was directed solely to the good of the town is doubtful. From 1850 to 1852 he had the Improvement Commissioners' maps in his possession, refusing to hand them over to the Board's surveyor [7]; and, in parallel with his

role as a leading member of the Local Board, he was land agent for the owner of one of the largest estates in the town (see pages 33-5 below, and chapter III).

Three cotton mill owners were also very regular and conscientious members of the General Purposes Committee: John Goodair (Brookfield Mill), John Catterall (Park Lane Mill, which is now occupied by Askews Book Suppliers), and William Birley (Fishwick Mills, known as "the Big Factory"). John Goodair, having founded his business in the foot-slogging trade of "putting-out" to hand-loom weavers in the country districts, built his first mill about 1842, and by dint of hard work, astute judgment and good relations with his workers, never looked back He applied the same talents as councillor for St Peter's ward.[8]

One committee member who attended none of the meetings in the first year was the greatest mill owner in Preston, Thomas Miller, who was running Horrocks Miller & Co.

On Friday 29th August 1850 these men sat together in the old Town Hall to begin to carry out the provisions of the Public Health Act.

The Local Board and the Public Health Act

First they formed a Committee for General Purposes "empowered to do all things necessary for that purpose".

At their first meetings, early in September 1850, this committee began to do those things which the Public Health Act said they should do. It was a very long document, but the main points are quite simple. There were some things which the Act said the Local Board "*shall*" do, and others which it only said they "*may*" do, if they wish.

First, they had to appoint several officers to do their work: a Surveyor, an Inspector of Nuisances, a Clerk, and a Treasurer. The Town Clerk (the elderly Richard Palmer) and the Corporation Treasurer (Philip Park) took the last two jobs, but still both of them worked only part time on their public offices, because they had their own private practices. Inspector Williams, a policeman until 1848, when he was told to start sniffing out "nuisances" rather than crimes, was appointed Inspector of Nuisances, at a wage of 25 shillings a week.

The really important officer was the *Surveyor*. At first, the committee thought whoever they appointed should be paid a salary of £250 a year, but soon changed their minds and reduced it to £200. Then they advertised the post in Lancashire and London newspapers. Six candidates were interviewed early in November, and the man who got the job was *Henry Wrigg*. Before he was sacked in 1857 this man had not only laid the basis of the sewer system and the water supply which we all take for granted nowadays, he had had a great influence on the way Preston's houses would be built in the future. It is a pity that

BOROUGH OF PRESTON.

LOCAL BOARD OF HEALTH.

WANTED, IMMEDIATELY,

A SURVEYOR for the Borough of Preston, under the Public Health Act, 1848, at a net salary after the rate of £200 per annum. He will be required to devote the whole of his time to the duties of the office, and be held responsible for carrying the Public Health Act into effect within the borough of Preston, except for the duties of Clerk, Treasurer, and Collector.

He will be called upon to find sureties, pursuant to the 139th section of the Public Health Act, 1848, in such amount as may be required by the Town Council, for devoting the whole of his time to the duties of the office, and for the faithful execution of such office or employment, and for duly accounting for all moneys which may be entrusted to him by reason of his office.

Sealed applications and testimonials, under cover, must be directed to the Town Clerk of the Borough of Preston, endorsed, "Application for the Office of Surveyor," and must be sent in on or before Saturday, the 26th day of October instant.

And also WANTED immediately,

An INSPECTOR OF NUISANCES for the Borough of Preston, under the Public Health Act, 1848, at the salary of 25s. per week. He will be required to Superintend the Scavengers, and devote the whole of his time to the duties of the office, and to act by the direction and under the control of the Surveyor of the Local Board of Health for the Borough of Preston.

Sealed applications and testimonials, under cover, must be directed to the Town Clerk of the Borough of Preston, endorsed, "Application for the Office of Inspector of Nuisances," and must be sent in on or before Saturday, the 26th day of October instant.

RICHARD PALMER, Town Clerk.

Preston, 8th October, 1850.

Advertisement for a Surveyor and an Inspector of Nuisances, printed in the Preston Guardian.

we know only a little about him, apart from his work in the town. The census enumerator's returns for 1851 show that he lived at No. 2 Ribble Place (a short terrace of late Georgian houses facing the river on Broadgate), and record that he was a civil engineer, that he was born in Cheshire and was now 37 years old, that his wife was Irish and the first five of his seven children had been born in Ireland, the sixth (aged 4) in London and the toddler Lionel in Salford. The household included Mrs Wrigg's mother and sister, and one young housemaid, also Irish.)

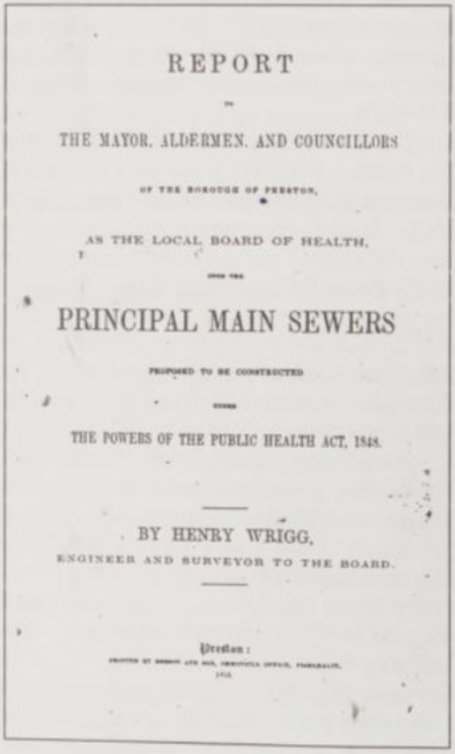
Next, the Local Board "*may . . . if they thing fit*" appoint a doctor to be Medical Officer of Health. Preston's Local Board did not, nor was the topic even debated at this time. It was put off for a quarter of a century (see chapter III).The next forty sections of the Act which the committee read were about drains and sewers, street and house planning, and water supply. All these were matters which needed the advice and work of Henry Wrigg, who was a qualified civil engineer.

Sewers

The Act said that the Local Board "*shall*" repair and make sewers necessary for effectively draining their district. But when it came to the supply of water needed to carry the dirt out through the sewers the Act was not so helpful: the Local Board "*may*" contract with a Waterworks Company to supply water; or they "*may*" supply the water themselves, and make their own waterworks; but only if no private water company was able to lay on water "*proper and sufficient for all reasonable purposes*".

Henry Wrigg was busy in his first three years. He had to design and build the sewers. To do this he needed to find the few sewers which had been built before, by digging holes in the streets to look for them, and he needed accurate maps on a large scale, showing the levels of the land and the streets. The Local Board thought the Ordnance Survey's charge for this was too high, so he had to get the surveying and mapping done himself. For this purpose the Local Board found him an office, and allowed him to employ assistant surveyors and draughtsmen. It was a long job. Not until 1853 was he able to present his Report to the Local Board, with detailed plans and estimates of costs. (This report is in the Harris Library, and the large scale maps, known as Sewer Record Plans, were still being used in the Town Hall in 1988.)

Then the Board had to obtain government permission to borrow £52,000 to pay for the construction of the sewers. Building them would have been difficult anyway, because they had to go under existing streets and houses, but the difficulty was increased by disagreements in the Local Board and its committees about details of the construction of sewers: should they be of brick or glazed



REPORT

TO

THE MAYOR, ALDERMEN, AND COUNCILLORS

OF THE BOROUGH OF PRESTON,

AS THE LOCAL BOARD OF HEALTH,

ON THE

PRINCIPAL MAIN SEWERS

PROPOSED TO BE CONSTRUCTED

UNDER

THE POWERS OF THE PUBLIC HEALTH ACT, 1848.

BY HENRY WRIGG,

ENGINEER AND SURVEYOR TO THE BOARD.

Preston:

PRINTED BY ROBINSON AND SON, CHRONICLE OFFICE, FISHERGATE.

1853.

The title page of Henry Wrigg's report on the sewers, 1853 (much reduced).

earthenware pipes? What sort of bricks were necessary? Who should make the bricks, and how much should they cost? By 1857 only about a third of the work had been done, and it was not finished until 1865.

Water

Sewers were no use without water, as Wrigg's report told the Local Board:

> *It is impossible to urge too strongly, the importance of the water question – in fact, means of drainage, and water supply, must be provided together – one being incomplete without the other.*[9]

The Local Board could order occupiers of houses to obtain a proper supply of water, but they could not compel the Waterworks Company to supply it. Mr Wrigg pointed out that for sanitary purposes he needed to use water "not *sparingly*, as heretofore, but I may say *extravagantly*": at least 30 gallons of water per day to each inhabitant in the town. To have enough water in the reservoirs to supply a population of 70,000 for 100 days (in case of drought), the waterworks should store 210 million gallons. Even with the new reservoir which they were building at Grimsargh the Waterworks Company could store only 160 million gallons. And besides, that reservoir was only fifty feet above the highest part of the town, which would not give enough pressure to reach the top storey of the highest buildings. (The pressure was required not for taps but for fire hoses; and the highest buildings the members of the Local Board had in mind were not houses but cotton mills.)

For two years Mr Wrigg and the Water Committee of the Local Board battled with the Waterworks Company. With the help of experts called in to examine the problem he finally proved that the supply of water by the Company was not "proper" in the sense of the Public Health Act. After long negotiations, and a special Act of Parliament, the Local Board bought the Waterworks from the Company, and then told Mr Wrigg to plan and build a much larger system. This tremendous new work was full of difficulties and uncertainties, which caused disagreements, and would eventually lead to Henry Wrigg's dismissal.

Fig. 28: Reservoirs built by Preston Local Board; at Dilworth and, in the distance, Alston. (Preston at the right hand end of the horizon).

Water-closets and Privies

There was another battle which Mr Wrigg seems to have had to fight at the weekly meetings with members of the Committee in his office. He assumed that all houses in Preston would now be equipped with *water closets* instead of earth closet privies, ash pits and cesspools. Unfortunately the Public Health Act did not give him enough support on this question. It said only that the Local Board, on the advice of their surveyor,

> *may order waterclosets to be erected in houses whether built before or after this Act, [and that] It shall not be lawful to erect any House without a sufficient Water Closet or Privy and Ash Pit.*

This was therefore a question for the Local Board to decide. The sub-committee on the Water Closet question – John Goodair, Robert Ascroft, and Miles Myres (J.J. Myres' older brother) – came to the conclusion that

> *parties cannot be compelled in all cases to make Water-Closets in Dwelling Houses.*[10]

Considering the difficulty of getting adequate water supplies, and the long task of building sewers, this was the only decision possible at the time, unless the Local Board were to forbid all house-building until water and sewers were ready. Unfortunately the result was that Mr Wrigg's successor, John Newton, was still reporting in 1857 that:

> *The filthy channels, the foul cess-pits, and the sickening smells are evidence which require no comment.* [11]

The layout and design of cheaper houses built in Preston from 1850 to 1900 – in other words, almost the whole of the Borough as it stood until after the Second World War – was influenced by this decision that builders could not be compelled to make water closets in houses. They therefore had to have yards which were easy to reach.

Houses

The Public Health Act gave to the Local Board (and therefore to Mr Wrigg) a power over house building which was clearly stated, but did not go very far. It said that any person intending to build a new house must give written notice to the Local Board at least fourteen days before starting to build, and that it would be illegal to begin building until the plans had been approved; but it did not say what sort of plans should be approved or forbidden. Control of the standard and methods of building the houses themselves did not come until 1876 (see chapter III), and by that time the general form of houses in Preston was already established. The most that Mr Wrigg and the Local Board of Health could do in the 1850s was to issue a public notice embodying the main points of the Act, and to require all builders to submit those "plans on drawing paper". This was all; but at least it gave them the power to decide which plans to approve.

Of all the different kinds of house and yard layouts which had been tried before 1850, one in particular was suitable for the convenient removal of waste from yards, without making builders afraid that they were also wasting valuable land. As early as 1836 the Tomlinson family, owners of the Adelphi estate (through their land agent, Mr J.J. Myres) had been selling building plots there under particular conditions, which included:

> *An entry or passage to made between every two houses.*[12]

It is probably no coincidence that this was the model adopted for approval by the Generel Purposes Committee of the Local Board (of which Mr Myres was an active member).

The details might vary, but the essential feature was always the same until almost the end of the century. Every pair of houses had

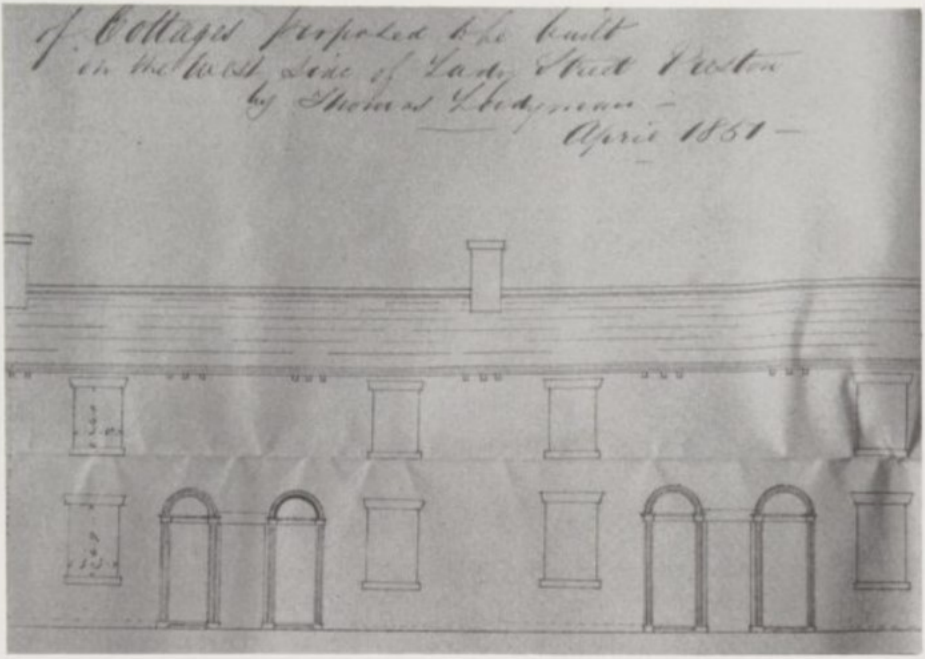


Fig. 29: A front elevation, unusually included on one of the earliest building plans submitted to the Preston Local Board of Health, showing the design typical of hundreds of houses between 1850 and 1880.

their front doors close to one another, with a small door to the passage between them: this passage led to the back yards of both houses.

This was the pattern of almost all the houses built in the so-called "terraced streets" in Preston from 1850 until about 1900. Southerners and other outsiders, taking a quick look, wrote descriptions like this by Charles Dickens:

> *It was a town of red brick, or of brick that would have been red if the smoke and ashes had allowed it; but, as matters stood it was a town of unnatural red and black like the painted face of a savage . . . It contained several large streets all very like one another, and many small streets still more like one another, inhabited by people equally like one another, who all went in and out at the same hours, with the same sound upon the same pavements.*[13]

The rest of this chapter looks in detail at the way "many more streets still more like one another" were built by the Tomlinson estate: housing which was typical of the whole town in the period of the Local Board of Health.

The Building of Plungington

Plungington is a roughly rectangular area about a mile north of the town centre. It lies north of the Moor Brook valley and south of the Blackpool Road, with the main railway line on its west side, and the A6 (the old Garstang Turnpike road) on the east side. In 1850 it constituted almost the whole of the Moor Hall Estate, about 175 acres, which belonged to Mr Henry Myers, a Buckinghamshire gentleman.[14] It was in a rather undeveloped condition, to judge from recollections of the district of Emmanuel Church

Fig. 30: Bedford Street, off Adelphi Street, c.1960: typical Tomlinson houses of the 1840s. Note that the nearer pair, with cellars and moulded doorcases, is superior to the further pair, showing that these houses were built for upper working class or artisan tenants. Note also that front pavement is used for "playing out". (Site now occupied by the Adelphi Building of the University of Central Lancashire.)

Fig. 31: The Plungington area in 1840. (from Tithe Award map)

Fig. 32: Aerial photograph of Plungington c.1960.

Fig. 33: J.J. Myres.

Fig. 34: Bundles of Agreements for Sale (Tomlinson Estate).

written in 1869:

> *nearly the whole of the land in that direction was a mere waste – a chaos of little hills and large holes, relieved with clay cuttings, modified with loads of rubbish, and adorned with innumerable stones – a barren, starved-out sort of town common, where persecuted asses found an elysium amid thistles, where neglected ducks held high revel in small worn-out patches of water, and upon which rambling operatives aired their terriers, smoked in gossiping coteries, and indulged in the luxuries of jumping, and running, and tumbling . . .* [15]

Thomas and William Tomlinson bought this estate in 1855, and the chaos was breathed upon by their land agent, councillor Mr J.J. Myres, who took a ruler and drew a rectangular pattern of streets across it. Mr Myres, according to Anthony Hewitson, considered "that a single little bird in the hand is worth two dozen big ones in the bush".[16] Instead of taking the risk of building houses on this land themselves, the Tomlinsons left that to other people. Mr Myres arranged it all on their behalf. He used the same methods as he had done in developing the Green Bank and Ox Heys Estates, on the south side of the Moor Brook. The land was sold to anyone who wanted to build houses, but only on certain conditions.

To make the sales quickly, clearly and easily, Mr. Myres, a methodical man, had forms of agreement printed, with spaces for the name of the purchaser, and details of the land and the prices to be filled in. All these forms, folded, numbered in chronological order, neatly tied in bundles of fifty (and still coated with a thin film of coal dust when I untied the bundles in 1982), are now kept in the County Record Office.[17] Together with the building plans submitted to the Local Board, they tell us a great deal about the building of houses in the Plungington area in particular; and by implication, in other areas of Preston as well.

Between January 1855 and December 1869 (though the process was far from finished even then) Mr Myres arranged the sale of land in Plungington in more than 300 separate building plots in streets south of Ripon Street. Most of these were sold between 1858 and 1863.

A typical example is one of the first. In April 1855 a "Mr John Livesey, Bricksetter" agreed to buy 770 square yards on the north side of Villiers Street. The price he had to pay

was the same as for all the other plots for houses (except those facing Garstang Road): it was 4s. 2d. a yard; the total of £160 8s. 4d. to be paid by November 1860. Until the full sum was paid Mr Livesey was to pay £8 a year interest. He also agreed to pay the Tomlinsons £8 a year ground rent for the land. This meant that even after selling the land the Tomlinsons still had an income from it, whoever owned the houses. (If they sold the whole 175-acre estate on the same terms, the total ground rent would have been about £8,500.)

The other conditions in the agreement referred to the building of the houses on the plot. Mr. Livesey had to build and complete before the 2nd August 1855, "not less than four good substantial dwelling houses ... each Dwelling House not to be of less value than seven pounds per annum". The printed form also defined how the houses were to be built:

> *the Buildings shall be at least eighteen feet high from the Threshold to the square, and shall not comprise . . . more than two stories, and shall be at least fifteen feet in width in front, and shall be finished with stone cornices, stone Door Cases, and with stone steps, stone Window Sills and Heads.*

Other conditions were imposed to prevent "any disagreeable smell which may be considered inconvenient or detrimental to the neighbourhood" – this referred to any buildings used for factories or trade. Finally, there were conditions which show that the Tomlinsons and Mr Myres were determined to ensure that this new suburb was better than the older parts of the town:

> *no Buildings shall be erected and finished as back and front houses, and every house shall be for the accommodation of one Family only, and no Cellar shall be inhabited as a separate Dwelling, nor for the purpose of Weaving.*

By the beginning of 1860, 45 building plots had been sold on such terms. Only eight of them were for five houses or more. Most were for either two houses or four houses. Some of the men who bought them were in the building trades (joiners, bricklayers, stonemasons, flaggers and slaters, and so on), but many others were not: one was a provision dealer, another a greengrocer, two were cotton mill workers, and one was a coal merchant. The only land sold to cotton mill owners in the area was for the building or extension of one or two cotton mills on the fringes of the estate. The houses of Plungington were not built by rich men, but by relatively poor men, who lived in just the same kind of houses themselves. Where and how did they get the money to buy the land and build the houses?

We don't know how they raised the money to start building; but two letters to Mr Myres, luckily folded in with the agreements for sale, show that in these cases, at least, the builder had borrowed the money from his solicitor, on a mortgage. (Studies of other towns suggest that this was the normal practice.[18]) One of these letters was written on August 5th 1856 by John Livesey, whose purchase of land is described above, and it was folded in with his agreement dated April 1855.[19] I have transcribed it exactly as it was written.

Other builders seem to have got into similar difficulties, because some of the agreements for sale are marked "Cancelled", and others have agreements to transfer the land to another builder written into them.

A small number, however, were obviously taken by men with plenty of capital, who could afford to buy the whole of one side of a block between streets, and to build a whole row of houses at once. In Barlow Street there were several large blocks: William Exton built a row of 20 houses on the north side in 1860, and on the south side, immediately opposite, ten more were being erected at the same time by a certain John Livesey – but whether nephew or uncle or some other John Livesey, I cannot tell.

After buying the land – or, rather, agreeing to buy it – the builder had to decide how

Preston August 5th 1856

Messrs Myers & Vevers

I write a fue lines respecting that plot of land in Villiers Street I sent the land agreement to Mr. Turner Solicitor so that he could make out the Mortgage Deed on the houses as he promised to Lend me Cash to Build 8 houses on the Land and because I engaged uncle John and him treating Me in the way he did caused Mr. Turner to turn is face from Me and Not let Me have Money to Buid the houses with as he ad promised and at the time I had Houses Built on Mortgage for 680 pounds wich cost 837 pounds and he demanded is Money in again wich I could not get all at onest and in Consequence of that the property was taken from Me and Me left Minus of 157 pounds I ordered the land agreement to be livered up again to you in consequence of Me Not being able to Build on the land and I find it ad Not bein given up to you and Know I send it Myself and am Sorry I have to do I am compeled to live in Lodging know through My Insolvency. Uncle John was My downfall

Yours respectfully

John Livesay

to use it. This was not difficult, because the plot for each house was so small that there was little room for choice (except at street corner sites). The distance between two parallel streets was 72 feet, plus a few inches: therefore each building plot was only 36 feet deep, from the front wall of the house to the back wall of the yard. Each house had to be at least 15 feet wide, which meant that it was normally exactly 15 feet wide, plus half the width of the passage to the yard. The illustration overleaf shows a typical plot and a typical plan for building four houses.

After drawing his plan, the builder had to take it to the office of the Local Board's Surveyor, so that it could be considered at the next committee meeting. Most of these plans were "passed over", which seems to have meant that they were passed to the Surveyor's assistant, the Inspector of Nuisances, who then went to the home of the builder to explain what alterations were required. But quite often the plans were "disapproved" when first presented and passed a couple of weeks later: the reason is not clear from the plans, which usually show no sign of alteration.

From these plans, and from the evidence of the buildings themselves (before they were demolished) it is clear that there were basically just two different kinds of houses built in the Plungington area.

The simplest, cheapest and most numerous were through-houses built in pairs with a through-lobby between them, two rooms downstairs, two bedrooms upstairs, and a small back yard with a privy. In some of these pairs the space over the lobby was used to provide a small extra bedroom for one of the houses (as one can tell from the outside when there are three upstairs windows). The front door opened directly into the front room, though usually there was a small wooden screen or spere, with a curtain, to protect the room from draughts. The plans show that in this type of house the front room, with a large fireplace, was both kitchen and living room (labelled on the plans "living room", "kitchen", "front kitchen" or sometimes "front dwelling"); and that the back room (labelled "scullery",

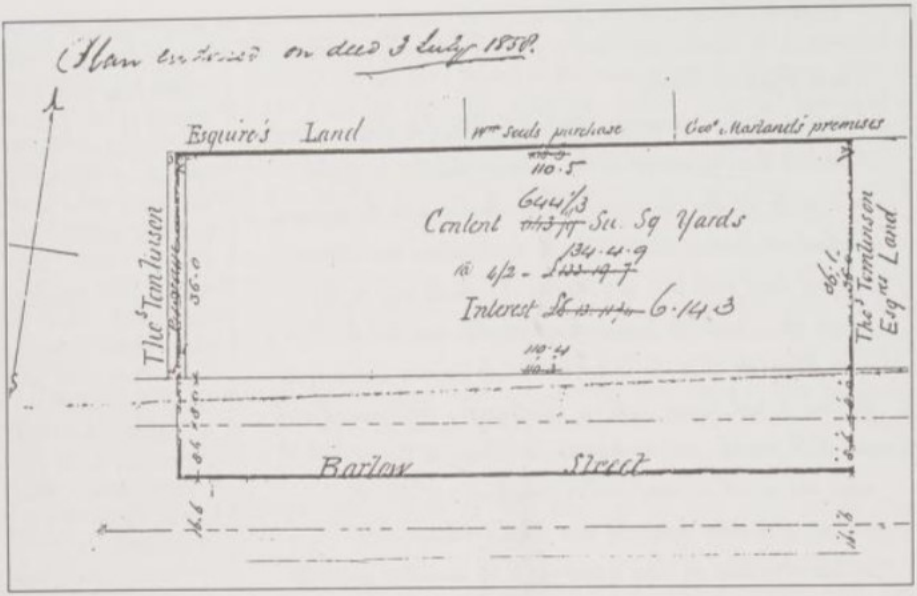


Fig. 35: Building plot for ten houses on Barlow Street, 1858.

"scully" or "pantry") usually had a small washing boiler in one corner and a dog-legged staicase in the corner by the back door. (See examples opposite.)

The other type, though built on plots of much the same size, had an extension at the back, containing a scullery downstairs and a small extra bedroom upstairs. In this type there was an entrance hallway with the staircase running up from it, the front room, with a small fireplace, was labelled "parlour" and the back room, with a large one, "kitchen". These features made a much bigger difference to family life than the apparently small differences on the plans suggest: the small extra room on each floor made the effective accommodation of a "parlour house" at least fifty percent greater than it was in a "two-up-two-down" cottage. A very few of these three-room houses also had a cellar: this was a most significant improvement on merely "working class" standards of living, because it not only provided a place for storage – of food or coal, for example – but also made it possible to do some of the household chores, such as washing, away from normal family space.

Gradually, over a period of about twenty years from 1855 to 1875, the streets of Plungington up to Ripon Street were filled up with new houses. (See diagrammatic map on page 44.) The total was about 1,800; three-quarters of them were two-up, two-down cottages, in which there was just enough room for a small family to live independently, and as decently as was possible in those days.

What they were like, and how they were equipped at that time, I try to illustrate in the following section, which is based on my explorations of houses in Plungington and elsewhere in the town which have since been demolished.

This research, which deals with the beginning of the life of these homes, was undertaken at the end of their lives, during the clearance programme in 1982. A house, however old and small, can be beautiful when it is cared for and loved as a home; but as soon as

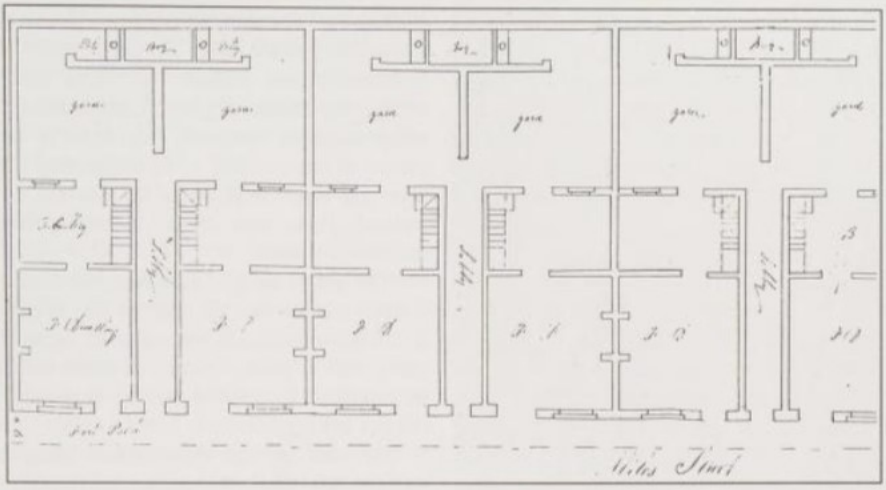


Fig.36: Two-up-two-down cottages: part of a building plan for 8 cottages to be built by Richard Livesey in Miles Street. (Plan 1157, dated 23 March 1859)

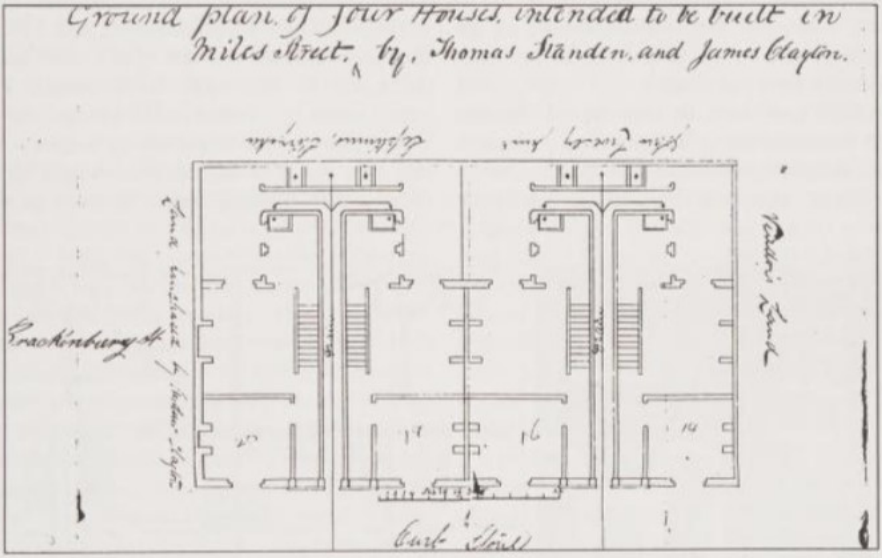


Fig. 37: Parlour houses: a building plan for four houses to be built by Thomas Standen and James Clayton in Miles Street.

it is deserted, it ages in a terrible and depressing way, and very quickly. Much of my fieldwork on these houses had to be done when the heart had gone out of them, and no home fires burned in their hearths. On the other hand, removal of carpets, cupboards and pictures, revealed the stone-flagged floors and cast-iron fireplaces with which they were first built.

A house in Plungington

A "Plan of 4 Houses proposed to be built by Mr John Berry Provision Dealer of 9, Plungington Road" was submitted on 16th January 1870, and "passed over". This plan matches No. 65 Miles Street, Plungington, which I explored in March 1982.

On the ground floor it had a front room entered directly from the footpath, and a backroom or scullery with a door opening into the backyard, where the privy was. The floors downstairs were made of flagstones laid on sand, exactly like those in the backyard. Stairs ran from the back wall of the scullery, next to the back door, to two bedrooms on the upper floor.

Each room had one large sashed window, and there was also a little window in the rear wall to light the staircase.

There were two fireplaces in the house. One was in the front room, where there was a rectangular opening about four feet wide, framed with stone slabs. The other was in the bedroom above, which was fitted with a pretty little cast-iron grate. There was also a water boiler, or "set-pot", built into the inner corner of the scullery – or rather there had been, but only the shape of the flue for it remained. There were three chimney pots on the chimney stack.

The only storage space was provided by built-in-cupboards each side of the fireplace in the front room, and a cupboard under the stairs. This is an important part of the accommodation in any house (as we shall see in chapter seven).

The vital services required in a house are water supply, drainage, heating and lighting.

Water Supply

The water supply for this house was through a lead pipe rising beside the window of the scullery. In this house, as in all the others like it, there was one tap, placed at the sink by the scullery window. The tap would have been connected to the water main (under the street) either by its own particular pipe, or by a pipe shared with neighbouring houses – in this case the flow of the water would have been rather unpredictable. There was no

Fig. 38: No.65, Miles Street.

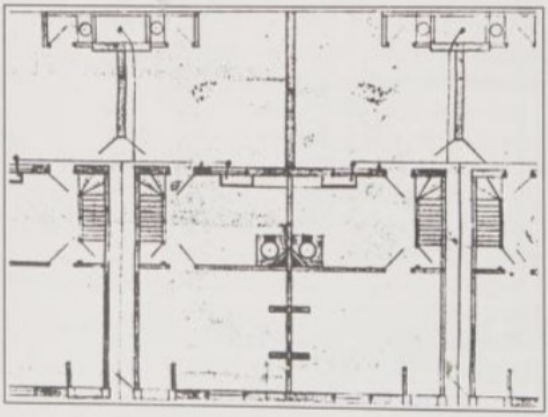


Fig. 39: Part of a plan for 4 houses in Miles Street, by John Berry, provisions merchant; January 1870.

water tank in the house. Evidence from other houses shows that originally, in the place of the modern ceramic sink, there would have been a "slopstone", a stone slab with a shallow hollow in its upper surface on which wash-pails and buckets were stood. (See figure 14 on page 13 above).

Drainage

We know the house had drains – the plans show them – one outside the scullery window, the other behind the back of the privy in the yard, shared with the privy next door. What we don't know is whether this privy was built with an earth closet or some kind of water closet. (Some plans show "w.c." in the privy of one house, and "petty" and "bog" in the privy of the next house). The drains from the privy ran into the same drainpipe as the drain from the house, which went out under the lobby or passage between two houses. Earth closets and "middens" or "bogs" were still normal in most Preston houses in the 1880s. (For a useful insight into such matters the reader should refer to the descriptions of the area written by an eye-witness in 1861, quoted on page 43 below.)

Heating and Cooking

There was a small grate for a coal fire in the front bedroom of this house, but none in the back bedroom. Much more important, though, was the fireplace in the front room downstairs, (often marked "kitchen" on the plans). The fireplace here was used for both heating and cooking. Finding out what sort of grate or cooker was originally in this fireplace is very difficult. When small modern fireplaces are pulled out during demolition we can see that the stone-framed aperture for the fire is always about four feet square, so whatever was originally put in it must have needed plenty of room.

Some illustrations for stories, depicting the inside of working-men's homes in the 1830s and 1850s, show a simple basket-shaped iron grate (called a hob-grate), with iron casing either side, and a hook for hanging pots over the fire (see figure 40 overleaf).

Fig. 40: A hob-grate in the front room of a two-up, two-down cottage.

Photographs, and old people's memories, tell us that by the early 20th century the iron cooking range, with fire, hob, one or two ovens, and maybe a water boiler as well, was the centre of domestic life in the homes of working people. But who had exactly what? And when? Those are the difficult questions. We know that ranges were to be found in the homes of the middle and upper classes by about the middle of the 19th century, but we don't know whether they ever reached all homes, or when they reached most homes – if ever.

This is an important question because without an oven in the house a family was quite restricted in what it could cook for itself – presumably by boiling or frying. Evidence can be found in buildings still standing which suggests that while some houses were well equipped, many people were still dependent on cooking which was done outside the home, at a public bakehouse (see below).

By searching empty houses before they were demolished in 1982 we found a few

Fig. 41: The oven-and-boiler cooking range in the front room of No.6 Disraeli Street, (1982).

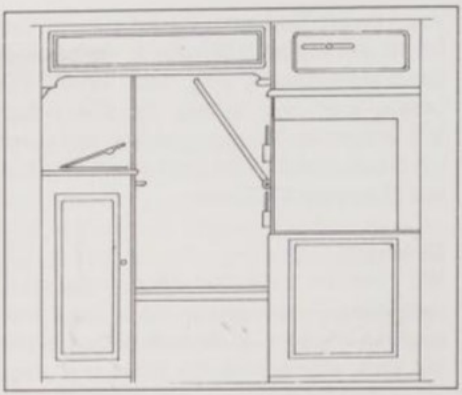


Fig.42: A measured drawing of the range at No.6 Disraeli Street.

long-disused cooking ranges in houses just like our example in Plungington, hidden, all rusty and sooty, behind boarding and wallpaper. One was in a house in Disraeli Street (Fishwick) built in 1875, and another, just like it except that the parts on the left and right sides were the other way round, was in a house built slightly later in the next street. The pictures above show what the the one in Disraeli Street. On one side of the grate for the fire was an oven about 15 inches deep from front to back, and above this was a sliding plate which could be pushed in or pulled out to regulate the amount of hot air circulating round the oven. On the other side of the fire was a tall narrow iron box, containing a water tank, with a small hinged lid on top through which water could be ladled with a "lading can". For cooking over the fire, or boiling a kettle, there was a hinged rack or hob fixed on hinges at one end so that it could be parked vertically against one side when not in use.

If these ranges were installed when the houses were built, then it would be clear that by the 1870s some houses, at least, had a simple but workable cooking range. One other similar discovery suggests that at that time they might have been quite a modern improvement.

In the cellar of a shop in Plungington Road, built as a bakehouse in 1860, is a similar range which has one very interesting difference: instead of a hinged hob for pots to stand on, it has a notched arm with a hook at the end, from which they were hung. This seems to be a more primitive and therefore probably earlier version of the kitchen range.

The bakehouse is one of the reasons for believing that the inhabitants of this and similar houses did not do all their own cooking. Another is the recollections of old people, still living, who remember taking their hotpots and bread tins to the nearest bakehouse while setting off for work in the mills early in the morning and collecting them, cooked, at dinner time. This must have been a long-standing tradition because the memories of an old man, printed in 1892 (shown

BACKWARD GLANCES AT OLD PRESTON. – III. At Syke-hill there was a public pump, with wood stoops in a large circle around it. At that time near by all the streets and footpaths were composed of round boulders, brought in boats to the Old Quay from Lytham. In Paradise-street and Vauxhall-road were public bakehouses, for not much cooking was attended to at home. There was one also at the bottom of Pleasant-street. To these places bread and dinners were taken from the neighbourhoods, and what we now call yeast was then barm. I remember seeing scores of children waiting in line for half-pennyworths at six in a morning at a beerhouse at the corner of William-street.

Fig. 43: The front room of a two-up, two-down house in Red Cross Street, c.1950. Such photographs are rare, and the details they contain consequently extremely valuable. Note the gas light, the cupboard door, the kettle parked on top of the boiler, the objects on the mantle – and the wallpaper. (Red Cross Street, built before 1840, was north of the site of County Hall, close to the railway embankment. Another photograph shows that the houses were built of stone.)

above[20]), include this reference to such customs between 1830 and 1850. (For more information on this subject and also about the supply of milk and meat, which was very different from today, see Chapter V, "Bread, Meat and Milk".)

Washing

There was no hot water system in these houses. Hot water could be obtained in only two ways: one was from the small water tank in the cooking range, if there was one in the front room. The other was by using a special water boiler built into the corner of the scullery. This was a large brick structure, usually square, with an iron bowl in the top covered with a wooden lid; and a small fireplace at the bottom under the bowl (see figure 44 overleaf, which shows a curved one). This thing was called a "set-pot", "copper", or washing boiler. The fact that set-pots were built in the back room suggests that at first there was no cooking range in the front room.

To wash oneself thoroughly, or to have a bath, a large tin bath would have been required. These are sometimes shown in photographs hanging on a nail in the wall of the yard. The bath would be placed on the floor in either the front or the back room, and partly filled with hot water from the set pot or the range. It would have been difficult to have a bath in privacy; and impossible to have it on impulse.

For washing clothes the same method of obtaining hot water was necessary, but the washing was done, not in a sink, but in a large vessel like a metal beer-barrel, called a "dolly-tub". The articles being washed in the dolly-tub were agitated by using a wooden "dolly-posser" which was like a three legged stool

Fig. 44: Washing boiler or set-pot, Cross Street 1982.

on a long handle. White clothing and material was boiled in the boiler. Drying the laundry after washing was usually achieved by first using a mangle to wring the water out (see figure 81 below) and then hanging the damp stuff on a washing line in the passage or lobby – a luxury not available to the inhabitants of back-to-back houses, who had to string it across the street. The last stages of drying could be done in the front room, on a "maiden" in front of the fire or a clothes rack hanging on pulleys in the ceiling.

If ironing was done at all, it was with a pair of flat-irons, heated in turn on the casing of the fireplace or range.

Keeping clean, therefore, was quite a difficult task. It depended on supplies of coal, as well as of water. It would have been harder in summer than in winter, because in hot weather people would not usually have a fire burning except for cooking.

For people who lived close to the town centre there was an alternative to bathing and washing at home: the Public Baths and Washhouses, built by the Council in 1850, in Saul Street. Unfortunately the habit of using them did not spread as widely as it should have done, and in any case they were a long trek for families in Plungington and other new suburbs of this period.

Lighting

I do not know how these houses were lit when they were new because there was no evidence remaining from that time; but I can make an informed guess from other evidence.

When we inspected No. 6 Disraeli Street just before it was demolished in 1982 it still had no electricity at all. It had been lit by gas until the last day it was lived in: but the gas pipes were not sunk into conduits in the walls, they were attached to their surface, showing that gas had been installed some time after the house was built in 1875. (See also figure 43 above.)

Gas had been used for lighting streets and factories in Preston since 1815, but this was in a primitive naked-flame form (known as the bat-wing jet). Efficient domestic lighting by gas was not available until after 1884, when the incandescent mantle was invented. Before then most houses must have been lit only with oil lamps or candles. (Twenty-two "tallow chandlers" were recorded in Preston by the census of 1851.)

The Inhabitants of Plungington

Whether they liked it or not, the people of Plungington lived close to their neighbours. This had its pros and cons, but one thing is certain: it would have been very difficult to stay aloof from the neighbours and mind one's own business, and in some vitally important ways it was impossible. The local environment was all against it, as the extract of eye-witness description in the panel shows.

The census enumerators' records tell us who lived in the Plungington area. The short answer is that cotton mill workers did. Even in the best houses, near Garstang Road at the east side of the area, there were cotton workers in most houses.

At No.1, Hammond Street, George Marland "Brick Layer and Maker", aged 50, lived in a house which he had built himself in 1858.[21] His wife (aged 49) kept house; his two grown-up daughters Ann (22) and Margaret (20) were power-loom weavers, and his son George (17) was a brick layer; two younger children were "scholars", and there was also a young lady boarding with them,

Dec.14, 1861

The Builder

Condition of out Towns: the Black Parts of Preston

We wend our way to get a nearer view of the houses of the factory workers. To do this we cross the plain and pass rows of houses building, with old brick-bats taken out of rubbish heaps, on the old unhealthy plan of digging a pit in the earth for the kitchens; others, in Spring-row, already built with pigsties, pits, and water-butts on higher ground behind them, so that all overflowing and percolations must filter through the houses, the floors of which are below the level of the soil in the rear, common privies in front of the houses, muddy coal-ash roads, and clothes hanging out to dry. Will this generation never learn the absurdity of placing floors below the level of the surrounding soil and then of placing water-butts, privies, and pigsties close to them with no drainage? ...Placards are being pasted up as we walk: they concern the ward elections. "Voters, go in for Ware" "Ware, and no interference with the poor man's pig."

[Near St Walburge's Catholic church] the next row of houses is called Maudland Bank: their contracted yards and crowded ashpits overhang the steep bank of the canal. The view from the canal bank is ghastly. There are a few wretched, decayed trees on the banks, and the overhanging privies and dung middens have discharged their surplus filth over their boundary walls on these banks; below, sewers empty themselves into the canal; and the water has the appearance of a stagnant sheet of fluid with a thick oleaginous crust on it. ...

Cotton-mills and weaving sheds have taken possession of a vast tract, or moor, originally quite out of town. Here are Goodair's, Gardiner's, and Adam Leigh's factories. Many others are newly built, and still more are building; and the rows of factory dwellings keep pace with these erections. The latter are built after the same model, – no drainage, the smallest possible yard, with a privy and ashpit and water-butt not 3 feet from the backs of the houses, or none at all ... An exception to this state of things has been attempted by Mr Tomlinson, a barrister-at-law and landowner here. He provided his houses with drainage and water-closets; but, unfortunately, the want of playgrounds obliges the children to play where they may, and the closets soon got out of order; and this pioneer movement was abandoned, and the reign of the cesspool system resumed.

who was a power-loom weaver. Next door lived a "book keeper" (i.e. accounts clerk) in a newspaper office, whose wife was a power-loom weaver; and next-door-but-one a cotton spinner had two teenage children who were power-loom weavers. Further along was a widow whose daughter, two sons, and a grandson were all power-loom weavers; and another son was a "self-actor minder" (i.e. a spinner).

West of Brackenbury Street, at No. 8 Hammond Street, was a household composed of a man and wife in their fifties, two sons who were cotton spinners, two unmarried daughters who were power-loom weavers, a widowed daughter who was also a power-loom weaver and had a one year old child; and a married son and his wife who both worked in cotton mills: a total of nine adults plus an infant. This house had a small rear extension, providing a third bedroom.

By 1871 a small area between Garstang Road and Plungington Road north of Barlow Street (Enumeration District 45 in the Census) contained a total of 1,600 people, inhabiting 321 houses. This gives an average of 5 people per house. Most of them were cotton workers.

Summary of this Chapter

Under the rudimentary controls of the Local Board of Health between 1850 and 1880 the number of houses in Preston had doubled. The characteristic gridiron-patterns of streets, lined with rows of standardised cottages – laid out by private surveyors and land agents such as J.J. Myres, and built by small speculative builders like John Livesey – spread northwards over St Peter's ward and eastwards in Fishwick, creating little towns-within-a-town, and adding the smoke of another ten thousand hearths to that of the mill chimneys. But the larger and darker reality thus created was already exceeding the limited capacities of the Local Board of Health to control it.

Fig. 45: View of Villiers Street, looking east (1982)

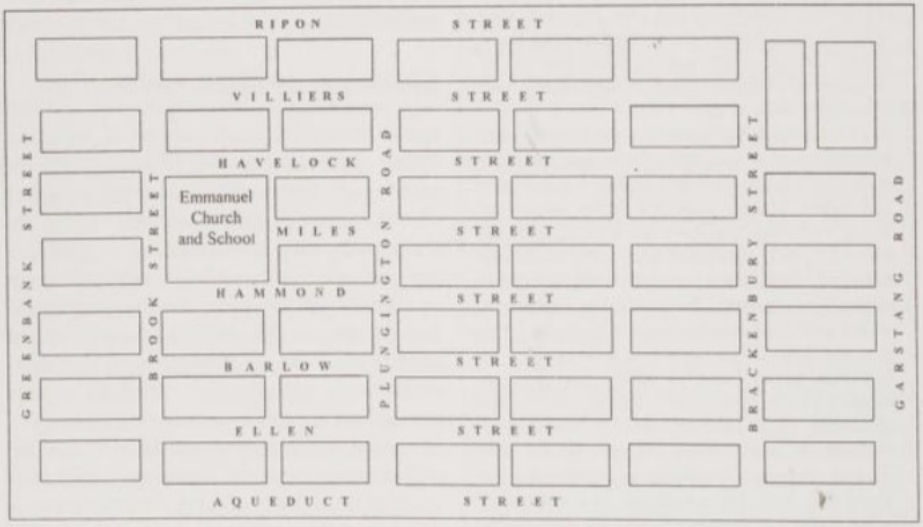


Fig. 46: Diagrammatic map of streets in Plungington built between 1855 and 1875.

CHAPTER III

DOUBTS AND DISPUTES

I SAID at the start that the houses of early 19th century Preston were built for a way of life which nobody had known before, and which in some ways nobody understood. By 1880 the people of Preston had plenty of experience of town life, but they still did not understand it.

What puzzled them most was that after all their efforts to make sewers, supply water, and control the building of houses, the town's death rate was as high as before. If anything it was rising. The average number of deaths per thousand inhabitants in the ten years before the Local Board of Health began work in 1850 had been just over 28; in the ten years after 1850 it was 30.08; and by the early 1870s it had risen to 30.26.[1] By 1875 the members of the Town Council were being given even more disturbing information. Alderman James Hibbert said:

> *Let us see what facts state. Facts state that the rate of mortality is higher in the closely-packed newly erected dwellings – say in St Peter's ward for instance – than in the oldest parts of the town. The death map in the Surveyor's office shows this irrefutably.*[2]

Unfortunately, this information helped to convince some men in the town, who had reasons of their own for resisting any more control of building, that efforts to improve the health of the town by local government interference were a waste of time and money. For a few years in the 1870s they even used the rising mortality as a reason for *opposing* the authority of Acts of Parliament. The measures which they resisted were the introduction of Building Bye-Laws, and the appointment of a Medical Officer of Health. What were proposed as necessary reforms show what reformers believed to be the causes of unhealthiness; and what was said in opposition – mostly by builders – shows why unhealthy conditions continued.

The Proposed Bye-Laws of 1862

In 1858 the system created by the Public Health Act of 1848 was greatly altered by Parliament. The General Board of Health was abolished. The sections of the 1848 Act which gave Local Boards the right to see and approve all plans for buildings and streets were repealed, and instead the Local Boards were given the permissive authority (they *may*, not they *shall*) to give themselves powers for these purposes by making local Bye-Laws.

Preston's Local Board continued to use the system it already had, while slowly and cautiously working out a set of Bye-Laws. In about 1860 the Bye-Laws Committee gave copies of the draft bye-laws to all the builders in the town, for their comments. According to Alderman John Goodair, "there were no remarks or objections concerning them at the time", so in March 1862 the Local Board proposed Bye-Laws which were "nearly, if not exactly, similar to them".[3]

Unfortunately this was a very bad time to appear to be laying any extra burden on the building trade. In 1862 Preston's economy was already severely affected by the appalling depression known as the Cotton Famine; since the autumn of 1861 many of the 71 mills in the town had closed down completely, others were working short time and the rest were forced to cut wages. By the spring of 1862 over 10,000 of the 25,000 people who normally worked in the cotton mills were totally unemployed, and faced destitution.[4]

The outlook for builders must have been

grim (sales of building plots in Plungington plunged from 47 in 1861 to 20 in 1862[5]), so perhaps we should not be surprised that the prospect of having building bye-laws imposed on them now caused an immediate and very angry reaction.

The builders held a special meeting at the Stanley Arms to agree to send a written protest to the mayor. The leader of this meeting was Mr Richard Veevers – one of the partners in the firm of Myres, Veevers and Myres, who were land agents and architects for so much of the recent new building, especially in the Plungington area. Mr Veevers said that the builders had "got to a certain stage at which it was impossible for human patience any longer to submit". The builders, he said, had suffered much annoyance from the objections which the Local Board made to their Building Plans, while "strictly speaking, the Local Board had no law on which to act to enforce the objections". One builder told this meeting that "he had made up his mind years ago that he would never build a house in the borough while he lived"; Preston's houses, he said, were very good:

there was scarcely another town where there were the same conveniences in cottage property as in Preston . . . he had never built a house in Preston but had a back yard, a petty, and every convenience, and he thought property was superior even to the model houses of Prince Albert. He thought it was a great pity Prince Albert had not seen the model houses we have here.

And a certain Mr J. Bamber said:

I think these laws are not framed according to the laws of England. They seem more like the laws of Russia than English laws.[6]

There was a long letter of protest in the *Preston Chronicle* from "A Prestonian" who:

had watched with particular interest by which a code of by-laws has been in process of hatching, with a python-sort of eagerness, for some years past, fruitlessly as well as needlessly. The town stands in danger of one of the greatest evils that can befall it, to stop its growth, to damage the interests of investors, to check, control and annoy the building business, to terrify the ignorant workman, to strike the intolerant glance of power at every sort of individual at all interested or desirous to see Preston pursue its destiny of a thriving, healthy, and model manufacturing town.[7]

So what was proposed in these dreadful bye-laws? There were twenty-three, and I have summarised the most important of them in the table on the opposite page.

The "memorial" which the Local Board received from the builders' meeting at the Stanley Arms said that these measures were "of great prejudice to the building trade", asked the Board to reconsider them "in reference to the true interests of the borough"; and warned the Board not to pass any bye-laws which "will inflict a lasting injury upon the town or upon any particular trade".

The members of the Local Board discussed the matter for an hour or more. John Goodair, the chairman of the committee which proposed the laws, argued valiantly that they were only a reasonable precaution to prevent the worst sort of building, and another senior alderman said that some bye-laws were absolutely necessary for the health of the town; but, after Alderman Edmund Birley had said they were wasting their time with further discussion, the Board wearily agreed that the committee would have to try again.[8]

Nothing more was heard of Preston's Building Bye-Laws for the next twelve years.

"Disraeli Street": the Halfway House of Reform in the 1870s

I think it unlikely that Preston would ever be graced with any "Kinnock Street", or

Building Bye-Laws proposed in 1862 (summarised from *Preston Guardian* 29 March 1862)

* Every new street should be at least 30 feet wide [*No.1*].
* Every dwelling house should have an open space exclusively belonging to it of at least 150 square feet [*No.5*].
* Rooms should be at least 8 feet high [*No.7*].
* Every habitable room should have at least one window, equal in area to one tenth of the floor area and half of it to open [*No.8*].
* Drains should be of glazed stoneware, connected to the sewers with water-tight joints, and constructed so as to keep the sub-soil dry [*No.12*].
* There should be foundations of rammed clinker at least 12 inches deep beneath the floor of any house built on maiden soil [*No.13*].
* Water closets should be ventilated; and their situation and construction should be approved by the Local Board [*No.14*].
* The position and construction of cess-pools and ashpits should be approved by the Local Board [*No.15*].
* Building plans should be drawn on a scale of 8 feet to the inch, with a block plan to show the site, and should be submitted at least 14 days before building [*No.18*].
* The Surveyor should have the right to say how streets, sewers, and drains were built, to inspect them before they were covered over; and to forbid any house being occupied until he had approved it [*Nos. 3,4,19,21*].

"Thatcher Drive"; but we have a Cobden Street and a Gladstone Terrace, and until 1982 we had three streets named after members of the Conservative government of Lord Derby in 1866. Disraeli Street and Pakington Street and Walpole Street lay south of New Hall Lane, on land sold by Lord Derby to the Conservative millowners Swainson, Birley and Co. for the building of houses. Swainson & Birley developed this land just as Tomlinson developed Plungington, with just the same sort of housing.

Hundreds of new houses in Preston might be said to have been built in a metaphorical "Disraeli Street" of compromise between what ought to have been done and what it was politically possible to do under laws passed by Disraeli's government: principally the Public Health Act of 1875. This has sometimes been regarded as a most important advance in 19th century social legislation. It happens to have been introduced, though not designed, by Preston's most successful politician, Sir Richard Assheton Cross of Red Scar, who was Home Secretary in Disraeli's government. The immediate effectiveness, or otherwise, of the building and health reforms of this period of housing in Preston can perhaps be summed up by a quotation from Section 37 of this Act:

> *Any enactment in force within the district of any Local Authority requiring the construction of a water closet shall be deemed to be satisfied, by the construction, with the approval of the Local Authority, of an earth closet.*

From the point of view of the health of the inhabitants of the houses, there was quite a large difference between water closets and earth closets. This difference could be measured in the numbers of little coffins carried to the cemetery each week.

The trouble with most of the new laws on housing at this time was that they left it to local people to decide whether to apply them or not. This was liberal and democratic

perhaps, but it allowed too much influence to local men who were either not particularly intelligent, or who did not approach in a public-spirited fashion the choice which they were given between their own immediate interests and the well-being of the whole town.

The Changing Composition of the Council

In 1880 the law governing the election of town councillors was changed, doing away with the property qualification established in 1835. From 1880, a man was qualified to be elected a councillor as long as he was qualified to vote in council elections. This obviously had a theoretical effect on the composition of Preston Town Council after 1880; but it only re-inforced a trend which had already begun in practice. The grandees of the cotton industry and the legal profession, who together had dominated the Local Board in 1850, formed a dwindling proportion of the councillors from the 1870s onwards. Where there had been eighteen millowners in 1850, there were ten in 1875, seven in 1880, four in 1900 and only one in 1912.

In their place was a growing phalanx of "butchers, bakers and candlestick makers" – men of such diverse occupations that I can count them only under the general heading of "Trade". About 1880, for example, they included a patent agent, a leather merchant, an oil merchant and a rope manufacturer, all of whom were probably partly dependent on the cotton industry for their business; a grocer, a cheese factor, a wine merchant, a confectioner and a preserve manufacturer (jam-maker); two innkeepers and a maltster; a boot and shoe manufacturer; and a pawnbroker. Altogether "Trade" supplied twenty of the councillors, or 42%; a proportion which rose to 44% by 1900.

To counter-balance such a weight of small-business opinion there was a minority of professional men, mostly lawyers, architects and surveyors (nine in 1875 and eleven in the other years which I counted up to 1912); plus a very small number in the medical professions (none in 1875, two in 1880 and six in 1912).

Part of the trouble in these years was that the breadth of view of the councillors was shrinking before the professional scope of the Town Hall staff had expanded. Indeed, one of the goals of the councillors in the mid 1870s seems to have been to *prevent* any further expansion of council staff. They still had to be persuaded by facts and experience. The difficulties of persuading them are shown by the struggles over the appointment of Preston's first Medical Officer of Health, and the Building Bye-Laws in 1874–6.

The Medical Officer of Health

Gladstone's Public Health Act of 1872 had made one important change which affected all England. It divided the whole country into either Urban or Rural Sanitary Districts. In each Sanitary District it appointed whatever was the most appropriate existing form of local government as the Local Sanitary Authority. All these Sanitary Authorities were responsible to a Local Government Board in London (which had its own part to play in Preston's housing history, being within easy reach of Mr Tomlinson's London home). In Preston the Town Council did not change its other title from "Local Board" to "Urban Sanitary Authority" until November 1874, but carried on just the same as before. But the 1872 Act contained one clause which ought to have made an immediate difference to Preston:

> *It shall be the duty of every urban sanitary authority to appoint a medical officer of health, being a qualified medical practitioner.*

Preston evaded this legal duty for nearly two years.

When the Council debated the matter in 1874 the attitude of some of its members was

different from the enthusiasm of their predecessors when the Local Board had been created in 1850. In January 1874, Alderman Robert Watson (a solicitor) proposed that the Council should appoint a part-time Medical Officer of Health at a salary of £100 a year, but he made his opinions quite clear: though forced by the Act to appoint a Medical Officer, he disapproved of it. The £50,000 spent on sewerage had made no apparent difference to the death rate:

> *In his opinion the office of Medical Officer of Health was a superfluous one, and entirely unnecessary. But then the appointment of such an officer was compulsory. He should be glad, if by open rebellion, they could evade such an appointment.*[9]

After hearing the arguments on the other side, he described the Public Health Act (1872) as "the most preposterous piece of legislation that emanated from St. Stephens" (i.e. parliament) and said "the majority of our legislators were utterly ignorant of the principles which ought to govern the country". And Alderman Thomas Edelston – son of a handloom weaver, office lad, joiner, errand-boy to a firm of solicitors, and finally a qualified solicitor himself – thought that:

> *to enforce sanitary reform was almost like trying to make a man religious by Act of Parliament.*[10]

Public health was only a matter of individual cleanliness, in his judgment.

On the other side, Edmund Birley and C.R. Jacson, millowners and members of old ruling families in Preston, and the architect James Hibbert (who later designed the Harris Museum) tried to persuade the Council that a full-time Medical Officer of Health, paid a proper salary of £600 a year, was absolutely necessary. As Mr. Jacson pointed out, if the

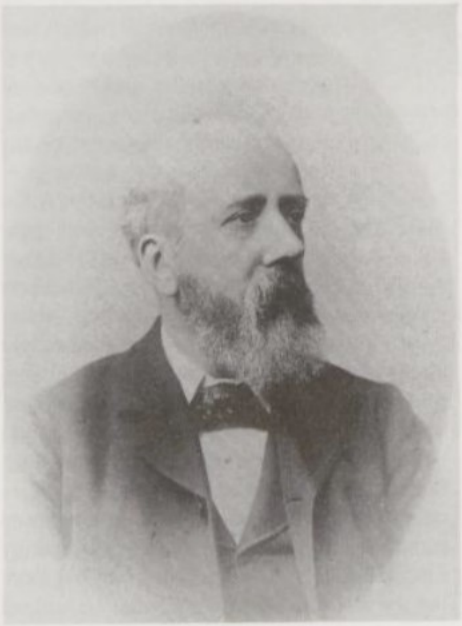


Fig. 47: Councillor Thomas Edelston.

Fig. 48: Alderman C.R. Jacson.

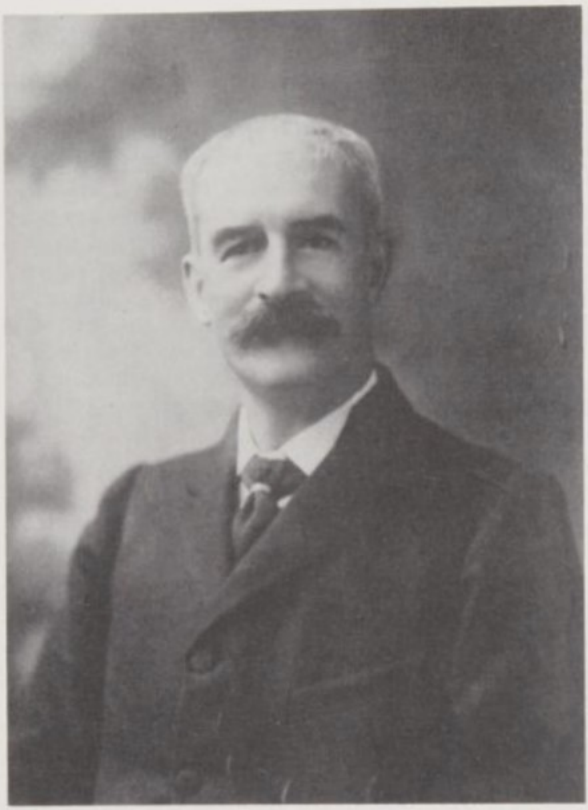


Fig. 49: Dr H.O.Pilkington, Medical Officer of Health for Preston, from 1874 to his death in March,1920.

death rate had not been affected by previous sanitary improvements,

> *what better argument could be brought for scientific investigation? In one word, the duty of the medical officer was prevention – not merely to wait at home until the epidemic had arisen and then be called upon for advice, but to make scientific investigations and make suggestions to the local authority so that they could prevent such outbreaks.*[11]

The voting was 22 for a part-time and 10 for a full-time officer.

The same battle was fought again in June, when the Council voted to appoint Dr Henry Ormerod Pilkington as Medical Officer of Health. They had just finished discussing the health of the town, and had been told that the average level of mortality since November 1873 was 39.07 per thousand. Astonishingly, Mr J.J. Myres argued that because this exceptionally high figure was due to epidemics of smallpox, scarlatina and measles;

> *the truth was that we were improving. He believed that Preston was a most healthy town; but it was their own filthiness, and their own carelessness, and recklessness that had brought them into such a state.*[12]

Mr Birley made one last impassioned plea "to put the Health Act in force in true spirit, and to do all in their power to decrease *the death rate of Preston, which was greater than in almost any part of Europe*",[13] but the great mass of shopkeepers, publicans, manufacturers, and other ratepayers on the Council were more easily persuaded by the down-to-earth common sense of Thomas Edelston: £50,000 had been spent on drainage in the last twenty years "and they seemed to be worse off than ever". What was needed was just personal cleanliness. Twenty seven voted for this point of view, and only nine against it, so Dr Pilkington had to begin his part-time job as Medical Officer of Health for £100 a year – about as much as a Sergeant of Police got. His contract was renewed from year to year for the next eight years. Not until August 1882 did he begin to devote the whole of his time to this vital duty, for £450 a year. The importance of his work for the housing of the town can be judged from the results of his investigations, described in the rest of this book.[14]

Making the Building Bye-laws

The first in a completely new job, like Henry Wrigg in 1850, Dr Pilkington had to invent his own system as Medical Officer of Health: "A large portion of the time", he reported after his first two months, "has been taken up in trying various methods of sanitary inspection, in arranging the form of books to be kept by the Inspectors and deciding other matters of equal importance."[15] Together with the Sanitary Committee appointed in July 1874, he began to expose the realities of Victorian Preston.

Dr Pilkington's monthly reports drew attention to:

the need for every person to have a plentiful supply of pure air . . . if domestic animals, as pigs, cows, or donkeys, be kept in the yard or cellar of a house, the inmates are deprived of their proper share of pure atmosphere;

to the high level of infectious diseases around Avenham Lane and New Hall Lane; to the importance of ventilating the sewers; and to the obvious connection between warm, weather and infant deaths from diarrhoea. He pointed out that 60% of all deaths in the town were of children under five years old.

As soon as he began, he decided to keep records of the incidence of deaths in the different wards of the town, and in September 1874 these tables showed that 16 of the 22 deaths from scarlet fever that month had occurred in the wards where most new houses had been built: St Peter's (which included Plungington – 12 deaths) and Fishwick (4 deaths). He also began a system of house-to-house inspection, recording especially the state of the backyards and privies, the way the slopstone pipes were connected to the drains, the amount of ventilation, and any "nuisances" in the vicinity.

By this means, in the course of time, an accurate register will be obtained of the exact condition of each separate dwelling house, and the sanitary condition of the dwelling houses and population of one quarter of the town may be compared with that of those situated in another ward. It will also then be clearly seen whether the death rate is high or low in those parts of the borough which are respectively clean, open, and well ventilated, or dirty, confined, and situated near nuisances injurious to health.

(There were about 18,000 houses in the town at this time.)

All this information was necessary and useful. It was useful in meetings of the Council and its committees, where men like Jacson and Hibbert used it to persuade the more ignorant members that improvements in Preston's houses were essential. Small but vital improvements in existing houses could begin immediately, but improvements in new houses depended on regulation by bye-laws.

By comparing what the Medical Officer wrote in his reports with what was said and done by members of the Sanitary Committee and later the Bye-Laws Committee, we can see that he had a great influence on housing in Preston. For example, after the report of the terrible mortality of children, mostly from diarrhoea, in the autumn of 1874, Councillor J. Andrew said that:

the facts stated by the medical officer of health were so patent to them that . . . it was quite sufficient justification for them to put their shoulders to the wheel, and to lessen the rate (of mortality) if possible.[16]

The Sanitary Committee had started a programme of work to have the sewers ventilated: and the Council agreed that there was something badly wrong with the way outlet pipes from slopstones were connected directly with the sewers:

. . . if there was an escape from the main sewer, they would have the gas thus

Fig. 51: Alderman James Hibbert.

escaping coming in the dwelling-houses or in the back-yard. Such a communication must be prejudicial to the health of every inhabitant.

In November 1874 James Hibbert easily persuaded the Council to set up a committee to draft suitable bye-laws for future building. One reason he gave was that, without such laws, the public "seem to think they ought to be permitted to do as they like in respect of the construction of new streets and buildings: they appear to doubt whether we can really prevent them from so doing". Another reason was this:

As a general proposition, no owner of land within the borough had a right to lay out his land for building, nor has any individual a right to build theron in such a manner as may be detrimental to the health of the inhabitants. In short, the object we wish to secure is stated by Jeremy Bentham as the object of all wise government, – "The greatest happiness or good of the greatest number." [17]

This was a principle which everybody could agree with in theory, but the difficulties and failures of the next two years came from trying to put the theory into practice. Alderman Hibbert sensed that people would already be asking "what particular powers do you want from bye-laws that you have not got already?" – so he told the Council what he had in mind:

The answer is, we want to prescribe a minimum of open space in the rear of buildings to secure a free circulation of air; to ensure that buildings shall not be erected upon ground that has been fouled; to ventilate the drains; to order the direct connection of all waste pipes with the drains to be cut off to prevent the entry of sewer gas into our houses . . . and other points which will present themselves when the subject is properly considered.

It took the Bye-Laws Committee six months to work out the first list of proposals. There were 39 bye-laws in the first version, and there were 29 in the final version. There were public meetings. There were Council debates. There were many letters to and from the Local Government Board in Whitehall. Mr W.E.M. Tomlinson came rushing up to Preston by train, he wrote letters, he even visited the Local Government Board Office to discuss the matter in person. The Local Government Board wrote to the Town Clerk about Mr Tomlinson's visits, and sent copies of his letters to the Council in Preston. A deputation of builders attended a meeting of the Bye-Laws Committee, "and made certain suggestions". The Bye-Laws Committee accordingly made certain revisions. The newspapers wrote comments on them, and printed anonymous letters about them. And what was all this fuss about? It was all about *back yards*.

Not that back yards were the only point of disagreement. They were not. Some people – Mr Veevers, for example – were more worried at the power of discretion which the bye-laws left to the Council and the Surveyor. But it was the back yard question which caused landowners, especially Mr Tomlinson (claiming that the interests he was defending were those of his mother – he expected to inherit the Plungington estate from her) to put up such a great opposition that the whole business dragged on for nearly two years. In the end the best intentions of reformers like James Hibbert were disappointed.

What they wanted was a thorough improvement in the way streets, houses and yards were laid out, and by June 1875 they thought they had got it. So did the *Preston Guardian* (see below). This paper specially welcomed the first Bye-Law, "which requires that to all streets hereafter laid out between which dwelling-houses are intended to be erected back to back, there shall be a back-road at least 12 feet wide between the yard walls, &c" [18]:

> We greet this regulation with pleasure; for we have often seen and felt that the present mode of erecting cottage property is detrimental in the last degree to the health and comfort of working-class families, and cannot doubt that it is one of the chief causes of the excessive mortality ... The men, the women, and the children cooped in the factory and the workshop so many hours daily ought not to find themselves still more closely pent and crowded together when they reach the locality of their homes.
> *Preston Guardian* 23 June, 1875

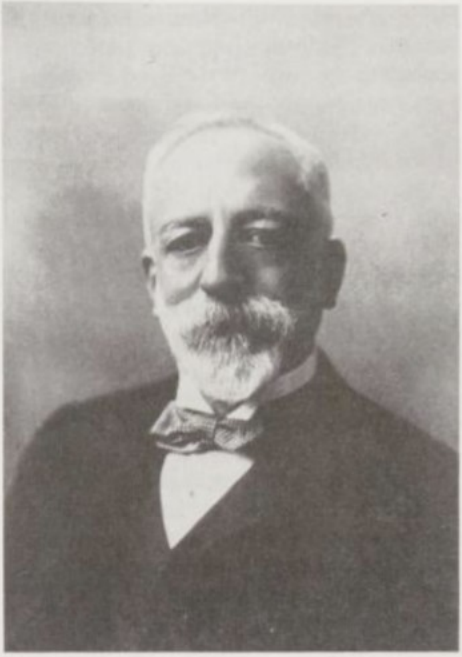


Fig. 52: Mr W.E.W.Tomlinson.

Mr Tomlinson, receiving a copy of the proposed bye-laws at his residence, 3 Richmond Terrace, Whitehall, did not share James Hibbert's belief "that the good of the few must give place to the good of the many". He went hot-foot the same day to see Mr Danby P. Fry, Assistant Secretary, Local Government Board, Whitehall, and on the following day took a train to Preston in time to attend a meeting of "Landowners, builders, and ratepayers" in the Bull Assembly Room. His contribution to the discussion included the following observation.

> *If the first clause were brought into operation, he believed it would revolutionise the future system of building in the borough and very seriously impede building operations in the streets which had already been sanctioned by the Corporation ... Referring to the proposal to form a back passage between dwelling houses built back-to-back, he said there were a great many plots of building land in the borough where it could not be carried out without great sacrifice of space, and also additional expense in the erection of buildings themselves. Another important objection he had was that the clause was probably illegal.*[19]

This really put a spanner in the works. The Builders' meeting sent a "memorial" of protest to the Mayor, written out and signed

by its chairman, Mr Thomas Edelston. It formed a "Builders' Committee", which then appears in the pages of the Bye-Laws Committee minutes:

23rd July 1875: A deputation attended consisting of Messrs W.E.M. Tomlinson, J.J. Myres junior, R. Veevers, Jos. Harding, W. Alston, Gillett and Dickson, and made several suggestions with regard to the proposed Bye-Laws as to New Streets and Buildings. Resolved, that the alterations and additions proposed by the deputation be printed with the clauses agreed by the committee and further considered . . .[20]

When this was announced at the next Council meeting a few days later, C.R. Jacson had to admit that it was "not in accordance with what was done at the last Council meeting", but he believed it would be for the best. Mr John Andrew and James Hibbert suspected a compromise. Hibbert objected to any compromise of the matter: "he hoped they would not have to bring forward an emasculated list of Bye-Laws." But they did.

In September 1875 Mr Hibbert found that a cause which he deeply believed to be right was on the brink of defeat. An imaginative man of strong and passionate nature (to judge from his long love affair with a French woman, whom he eventually married [21]), James Hibbert would not be beaten. He now spoke to the Council with all his conviction, and at length.

First, he explained the whole purpose of the bye-laws in relation to the actual condition of the town:

The main object of these bye-laws is to provide and secure the erection of a class of dwellings for the mass of the population of a somewhat healthier description than what the present practice affords . . . Under the prevailing system of erecting long rows of houses back to back, with the ends of the blocks closed in by transverse dwellings, we have a result that is very nice and orderly to look at, extremely; but which, if you will penetrate into the rear, you will find

Fig. 53: Back yards of Nos 48 to 76 Miles Street and Nos 57 to 81 Havelock Street (demolished 1982).

anything but satisfactory. You will discover that in the three-roomed cottages the people live principally at the back, where the spaces are so confined and crowded with buildings as to prevent a free circulation of air. There is not sufficient room to get a chance of fresh air. In addition to the main walls of the rear of the double rows of houses not being sufficiently apart, the narrow space is further crowded upon by the jutting out of scullery buildings, with rooms over; in effect . . . you have nothing but a series of stagnant wells of impure air – air that is rendered still fouler by emanations from badly constructed and unfrequently emptied middensteads and which . . . the people who inhabit these dwellings must breathe.[22]

Seeing these defects, the committee had come to the conclusion that:

to provide facilities for frequent scavenging [refuse removal], by day as well as by night, and also to secure a sufficient distance apart of the parallel rows of buildings back to back; that back streets . . . should be compulsory on land newly laid out for building purposes. It was obvious that by these means whole rows of middens could be emptied at a time without inconvenience to the tenants, and that back ventilation would be ensured.[23]

Fig. 54: Back yards of Nos 26 to 40 Miles Street (left) and Nos 33 to 49 Havelock Street (right). (Demolished 1982)

But the builders had got legal opinion that to make back roads compulsory was legally questionable, Mr Tomlinson had obtained the same sort of support from the Local Government Board, and the outcome was that the compulsion of back streets had been abandoned. The next best thing was to make landowners and builders provide larger back yards. The committee had decided that instead of the usual area of 150 square feet, they would have to insist on 180 square feet as a minimum. Mr Hibbert did not think 180 square feet was enough.

In investigating the causes of the high death-rate in Preston for so many years past, the share contributed by these closely-packed back-to-back dwellings has been almost entirely overlooked . . . Let us see what facts state. Facts stare that the rate of mortality is higher in the closely-packed newly-erected dwellings – say in St. Peter's Ward, for instance, –

Fig. 55: The relationship between houses and yards in various blocks of housing in the Plunginton area. (Detail of 126-inch Ordnance Survey, 1892.)

than in the oldest parts of the town. The death map in the Surveyor's office shows this irrefutably . . . I find that for diseases whose origin is mainly filth and foul air Preston stands at the top of the tree.[24]

He also proved that in the amount of open space provided for houses Preston stood at the bottom of the tree. The areas in other towns were greater: Blackburn 270 square feet, Barrow 450, Bristol 270, Hanley 220, Sunderland 473, Huddersfield 240, and so on.

If my remarks are of any value, do they not point to the necessity of this Council exercising such powers as it has to secure that in the future the dwellings for the labouring classes shall not be backed together so closely as they have hitherto been? One-half the borough yet remains unbuilt upon. It is a duty we owe to those who come after us not to leave them the fruit of unwisdom on our part . . . Although landowners and speculative builders are entitled to their due share of consideration, yet their number is infinitesimally small compared with the labouring population, whose interests we are here to guard. They cannot help themselves. They must . . . live in such dwellings as are provided for them.[25]

By these arguments James Hibbert won back something of what had been lost. The Council agreed to his alteration, "that instead of 180 feet, 240 feet be required" for back yards, if there was no back roadway between them. The Bye-Laws which were then agreed upon, to be sent to the Local Government Board for government approval, did not say that back roadways were compulsory, as Mr Hibbert had wanted, but they did say that

where streets were laid out with a back roadway, such back road should be at least 12 feet wide; and that where there was a back roadway 12 feet wide, then the yards of the houses had to be at least 150 square feet. The Local Government Board was not particularly helpful in its attitude to the Bye-Laws as a whole, but at least it did not take much notice of Mr Tomlinson's further complaints and suggestions. Mr Tomlinson's letters to the Board stated that streets need not be 36 feet wide, 33 feet being sufficient, and that backyards of 240 square feet were "considered excessive". Such things would mess up his plans, make his streets crooked, and raise the cost, and therefore the rents, of the houses.

Mr Tomlinson had the interests of the people in mind, of course. Oh, yes, "they were considering the interests of the great masses of the population", as he had told the meeting of builders in the summer of 1875:

> *The fact of those laws increasing the rents of cottages was a question for serious consideration. Cheap and wholesome houses were of great necessity for the working population, and it was to the interest of the ratepayers and builders alike to promote that object.* [26]

At least he never used the argument of one correspondent to the papers:

> *. . . back streets are always the filthiest thoroughfares in every town; they are simply harbours for vagabonds, gossips, burglars and other bad characters. No one can feel their house safe with such nuisances behind them. If servants are kept where such exist they are out continually.* [27]

Summary and outcome

The Council had to make Bye-Laws because the Public Health Acts of the age of Disraeli left them without any power to control building unless they made the regulations themselves. The Medical Officer of Health, appointed against the wishes of most of Preston's councillors, underpaid and working only part-time, quickly made it obvious that the basic reason for Preston's very high death rate was the existing system of building houses. From his evidence some members of the Council, led by James Hibbert, realised that the system ought to be changed, so as to provide more air and easier ways of clearing out filth. The method they chose was back roads and bigger back yards. Builders and landowners forced the Council to compromise. In the Bye-Laws which were finally confirmed in 1876 back roads were not compulsory, but bigger yards were.

Just four years later, however, James Hibbert's arguments won: in the Preston Improvement Act of 1880 the law on back yards was the same, but the law on back roads was firmer. It said:

> *. . . there shall be (except the Corporation otherwise expressly permit and unless the plans . . . shall have been approved before the passing of this Act) a backroad not less than twelve feet between the yards of the dwellings . . .*[28]

To find out whether this made any real difference to the houses built in the last twenty years of the century – in other words, whether the Council and the builders fulfilled what James Hibbert described as "a duty we owe to those who come after us" – we have to look at the houses they built then.[29]

[*Postscript*: in 1882 Mr W.E.M. Tomlinson was elected Conservative MP for Preston against the wishes of the Preston Conservative Executive. He achieved this through his influence as "a large local landowner", especially in the Plungington area, which was described as "the very heart of Mr. Tomlinson's residential estate"; and by the support of working men organised by the Conservative Working Mens Club. He remained MP for Preston for nearly 30 years.]

Fig. 56: A pair of houses in Villiers Street (built c.1860) with one of the last residents and his companion, photographed in the summer of 1982. Note that the house on the right has a third bedroom (and its original 4-pane sashed windows).

CHAPTER IV

HOUSING AT THE END OF THE CENTURY

WAS PRESTON'S housing "revolutionised" (as Mr. Tomlinson feared it would be) by the Bye Laws of 1876 and the Improvement Act of 1880, which Mr Hibbert had fought so hard to achieve? The short answer is that most *new* housing was, and that it was good enough to have survived to the present day, still mostly in reasonably good condition; but there was not very much of it compared with the huge stock of houses already standing – which, as we shall see, were not revolutionised at all.

To assess the matter as a whole I used three main kinds of evidence: maps, the buildings themselves, and local government records – especially the Reports of the Medical Officer of Health.

The street map printed with Anthony Hewitson's *History of Preston* in 1883 compared with the Ordnance Survey 25-inch maps of 1912 identifies the areas of new streets which were built in this period. The Ordnance Survey maps also show where rows of houses were provided with a back road: which was to Mr Hibbert the essential, and to Mr Tomlinson the revolutionary change. The results are shown in simplified form on the sketch map below.

Surviving houses themselves are naturally the most important historical evidence of all,

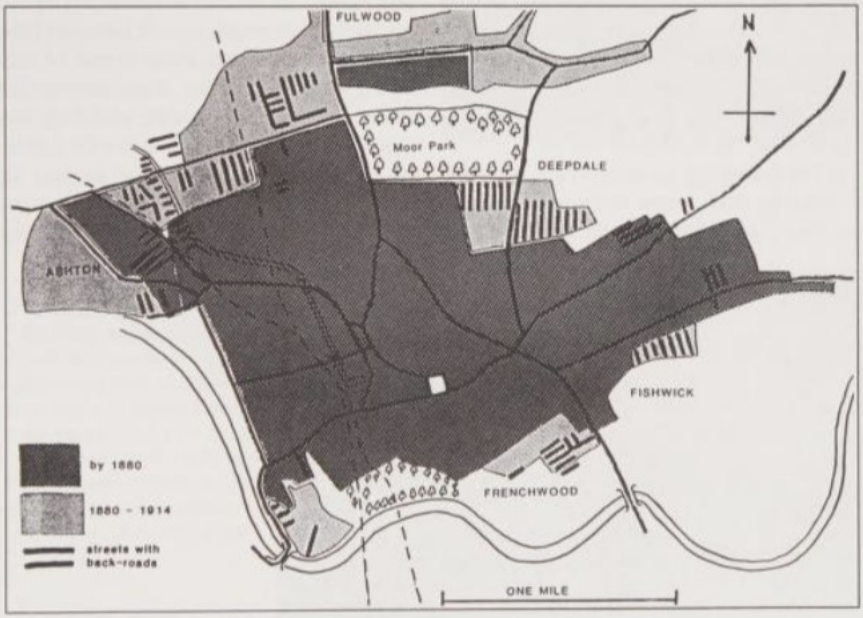


Fig. 57: Sketch map showing main areas of housing built between 1880 and 1914; streets with back roads indicated by black lines.

but even when their structure is still complete much of their historical nature is quite invisible to us. To see them as they were, and to understand the way they were lived in, we need the evidence of eye-witnesses; and this is where local government records are so important.

The Reports of the Medical Officer of Health are the most exciting source of evidence; but they are not as objective a source as maps are. They were written by one individual, Dr Pilkington, who saw things in his own way, and decided in his own fashion what to put in and what to leave out. His reports were designed to help him to achieve the purposes for which he was working. We are fortunate that Dr Pilkington was a man who seems not to have minded saying what he was unsure about, when he was unsure; but also to have been willing to tell the blunt truth. On the other hand, he appears to have been strongly aware that he was working for elected councillors, and to have taken some care not to offend them. There was a period in the 1880s when his efforts to improve the domestic environment were handicapped by what he called "other concerns" of the Corporation: he meant the expense of building the new dock, but he did not say so.

In the following sections I deal with the new housing first, rather briefly, in order to leave plenty of room for what Dr Pilkington has to tell us about domestic conditions in the town as a whole.

The New Housing

The effect of the new building regulations was not as widespread as those who made them thought it would be. Nor was it as neat and thorough as our first glance at the maps suggests. This becomes clear when you visit some of the areas where streets with back-roads are shown on the map, or where building was in progress in the 1880s. A few examples will show what was actually happening.

Right on what was then the north-east fringe of Preston, north of Ribbleton Lane, is a group of new streets, built with back-roads: Fletcher Road, Dodgson Street and Raikes Road. These are fine, wide streets, with well-constructed terraces of houses, and plenty of air and light. They were designed by Myres, Veevers and Myres, and built in 1885 and 1886.[1]

But connecting Raikes Road with Ribbleton Lane are several short streets of houses which look much older. They have no back-roads, their yards are small, and they are arranged in the traditional way with a lobby between each pair of houses. In fact these houses were built *after* those in Raikes Road. The Ordnance Survey map of 1892 shows

Fig. 58: Raikes Road. Housing designed by Myres, Veevers and Myres, 1885–86. A long row of single-fronted 2-up-2-down houses, plus a pair at the right-hand end which evidently have a third bedroom over their front doors. Note the absence of lobby doorways, since the back yards are reached by a back road (shown opposite).

this quite clearly. Here building on the old pattern continued, presumably because the streets had already been laid out by 1880. At exactly the same time as they were designing improved houses in Raikes Road, Myres, Veevers and Myres were also designing houses of the old- fashioned kind – Calverley Street between Ribbleton Lane and New Hall Lane, contains some examples, designed in 1886.

Even more surprising are a group of houses just to the west, on Isherwood Street, Lutwidge Avenue and St Chad's Road. On the map these are indistinguishable from any other streets built on the traditional pattern of parallel rows of houses back to back. One glance at the houses themselves is enough to prove that they were built long after 1880, perhaps even in the 1920s.

Finally, if we return to Mr. Tomlinson's territory in Plungington, we discover just what it was that his visits to Preston and to the Local Government Board achieved for him. At the northern end of the Moor Hall Estate, between Ripon Street and Blackpool Road, is an area where the streets run north-and-south, at right-angles to those south of Ripon Street, but otherwise their pattern is the same. Most of the houses in these streets (such as Wildman Street, shown here) were built after 1880, as a datestone in Trafford Street proves: "North Terrace 1888". They should have been built either with a 12-foot back road or with back-yards of at least 240 square feet. But Mr. Tomlinson (or, more probably, Mr. Myres) had ensured that the plans for the streets had been approved before 1880.

Fig. 60: Houses in Wildman Street.

Fig. 59: The back road between Raikes Road and Dodgson Street. Note the plastic refuse sacks, which show that this road is still serving the purpose for which it was designed.

Fig. 61: Lulworth Avenue, off Blackpool Road: a very orderly street of terraced houses built on an outlying part of the Tomlinson estate about 1900.

In other respects the houses built after 1880 show the marked effect of new building regulations. They are higher, because the regulations increased the minimum height of ground floor rooms to 9 feet. Windows are much bigger. Building materials, such as Accrington brick (for the facades anyway) generally seem to be more durable: the regulations of 1880 had given the Corporation the right to control materials and workmanship. The new houses were also drier: although a rule included in the 1876 Bye-Laws for providing a damp-proof course was left out of the list in 1880, the new regulations insisted that the ground floor of every new dwelling house should be at least 6 inches above the level of the ground.

A good bird's-eye view of improved terraced houses can be obtained from the bridge where the Blackpool Road crosses the main railway line, at the north-west corner of the town. These streets were not called "street" but "Road" or "Avenue". (See the photographs of Lulworth Avenue above.) "Tomlinson Road" nearby is a reminder that this area was also, like Plungington, once part of the Tomlinson Estate.

The best illustration of the difference which the Bye-Laws and the Improvement Act made to the pattern of house-building in Preston is the long rectangular block of streets between Garstang Road and Deepdale, bounded by St Thomas's Road and St George's Road just south of Moor Park. St Paul's Road divides this area into two parts which are almost equal in size but very different in character. The larger part to the west of St Paul's Road, centred on an east-west axis formed by Lovat Road and its continuation Charnock Street, was built in the 1870s. As the map shows, the layout of the houses is just the same as it was in Plungington: with very small back-yards served by lobbies through the centre of each pair of houses, instead of back roads.

The area to the east of St Paul's Road, where the axis is continued by St Stephens Road, was part of the ancient commons of the borough and still remained open land until 1880. Then in 1882 the Corporation applied to the government for permission "to sell on lease, for terms of 999 years at yearly ground rents, the land lying between St Paul's Road and Deepdale Road, and between St George's Road and St Thomas's Road".[2] So here was a large building estate, similar to the Plungington estate of Mr Tomlinson except that the "landlord" developing it was also the body responsible for building standards and public health: the Town Council in its role as the Urban Sanitary Authority. Its intention to prove that it was now on the side of the

Fig. 62: The back road between Lulworth Avenue and Murdock Avenue.

angels, or at any rate the saints, seems to have been expressed in its choice of names for these new streets; and the whole area is still known colloquially as "the Saints".

To find out what sort of control the Council exercised over building houses in "the Saints" I tried a random sample of the Corporation deeds. The following example is typical. The deed for sale of one plot on the east side of St Cuthbert's Road in 1888 dictates that the lessee shall build three houses "of not less than £10 yearly value" and that they shall be "of such elevation and description as may be fixed upon or approved by the Corporation".

"The Saints" was evidently a model development; and the same model was carried over to the east side of Deepdale shortly after. Here the streets were named after birds, so that the area became known as "the Canary Isles".

Since the demolition and re-development of much of Mr Tomlinson's Plungington in the 1980s, the best way of understanding the "revolution" in Preston's housing (such as it was) is to stroll eastwards along Lovat Road and its continuation Charnock Street; and then to cross St Paul's Road and continue along St Stephen's Road: crossing St Paul's Road, one is passing from the old era of "Tomlinson-land" into the new era of "Hibbert-land".

Fig 63: Tomlinson-land" housing in the Lovat Road/Charnock Street area, and "Hibbert-land" housing in "the Saints".

The sad thing about the "revolution" which this represents is that it had begun much too late. Back roads were required for sanitary purposes, assuming that earth closet privies or removable pails would continue to be used, rather than water closets. The latter *should* have been the case in these streets, and given the long programme of conversion from one system to the other in the older streets, one would suppose that it was not even necessary in areas like the Saints and the Canary Isles; so I was quite astonished to find the following remark in the Medical Officer of Health report for 1906:

> *even in the newer districts, those provided with a twelve foot passage, a receptacle in which for months is stored the excreta and refuse of a household, situated at not more than a few feet from the back door, must be a nuisance and a danger to the inmates.*[3]

So it would appear that even the new model housing could be something of a whited sepulchre.

The work of the Medical Officer of Health during this same period was directing attention to the domestic conditions of the rest of the town.

The Older Housing

Local patriotism may fairly claim that in some ways Preston has excelled all the other large towns of England. There was one particular league in which Proud Preston was champion fifteen times in the twenty years from 1880 to 1900, and runner-up three times. This was the league table which showed, for every thousand registered births, the number of babies who died under twelve months of age. Preston usually won by a comfortable margin. Leicester was the only rival from 1880 to 1890; Blackburn, Liverpool, Burnley and Salford were the nearest competitors from 1890 to 1900, but Preston won in every year except 1899.

Infant mortality is a good yardstick for assessing the health (or otherwise) of a whole society, or of communities within it; but premature death did not confine its attention to infants. The best way to appreciate what the experience of family life in the community of later 19th-century Preston might have been like is to take a stroll through the older parts of the cemetery at the far end of New Hall Lane. This place was opened in 1855, following an Act of Parliament which banned town centre burial grounds. Reviewing its regimented rows of headstones, we meet thousands of individual families who lived and died in Preston's terraced streets. It is quite a disturbing experience.

Admittedly, Dr Pilkington, in his Reports as Medical Officer of Health, did point out that Preston suffered a statistical handicap when compared with many other towns: while most other large towns had extended their boundaries to include the comfortable middle class suburbs where infant mortality was much lower, Preston had been unable to persuade the small number of commuting citizens of Fulwood, Walton-le-Dale and Penwortham to throw in their lot with the ratepayers of the Borough. Only Ashton-on-Ribble and Ribbleton had been incorporated in the Borough. The truth of some other large towns was therefore veiled by their suburbs, whereas in Preston it was left naked for all to see.

While in all other large towns the mortality of infants under one year old averaged almost 170 per 1,000 registered births (i.e. 17%), in Preston it was well above 200 (or 20%) in all but two of these years. Between 1880 and 1900 the average for Preston was 227, with peaks of 264 in 1889, 268 in 1893, 263 in 1897 and 225 in 1899. To put these figures in a modern perspective, the rate of infant mortality for the Preston District in 1991 was about 12 per thousand (1.2%). [See appendix]

When you consider that the towns which killed fewer babies included such places as Salford, Manchester, Birmingham, and Wolverhampton – none of them exactly health

resorts at the end of the 19th century – you are bound to wonder what was so specially unhealthy about Preston. So did some members of the Council, who formed a sub-committee in 1899 to enquire into the matter. What was particularly disturbing to them was that while the general death rate had been falling during the previous 25 years, infantile mortality was actually *rising*. Dr Pilkington's report in 1900 contained a table which proved this.

Year	General Death Rate	Infantile Deaths per 1,000 Births
1876–80	27.42	...
1881–5	24.73	208
1886–90	26.23	229
1891–95	23.16	235
1896–1900	20.8	236

In general mortality (that is, including all ages) Preston was less obviously a bad place to live: top of the league only eight times in 20 years. It was the babies who died in Preston. Why?

Dr Pilkington offered some social explanations. One was that the mothers worked in the mills almost up to the time of birth, and as soon as possible afterwards, leaving other women to look after their new-born infants. When the Labour MP Keir Hardie visited Preston to campaign for the Independent Labour Party in 1893, he said that there were parts of Preston where the death rate was higher than in the poorest parts of the East End of London; and pointed the finger of blame in the same direction as Dr Pilkington. It was a disgrace, he said, that women and children had to work in the mills:

And the fathers in Preston were themselves responsible for the deaths of those infants because they would not stand up for their

Fig. 64: Monuments in Preston cemetery – the Billington stone in the centre records the deaths of ten children.

rights, which would enable them to work to keep their wives and children at home . . .[4]

Dr Pilkington also thought that the parents of Preston were irresponsible. In 1897, when Preston's rate of infant mortality was 263 per 1,000 births, "by far the highest in the country", he wrote:

It may seem strange that since the causes are known, the evil cannot be – or at any rate has not been – cured. Much has been done by municipal action, but it is with the parents, with those who have the nursing and home management of these little ones, that the fault mainly lies . . .[5]

Some years earlier he had written something similar which was perhaps more revealing about the difference between a mere house and a home:

The operative class as a rule are careless in looking after the surroundings of their dwellings. Too often they seem to look upon the house simply as a place in which to sleep and take certain of their meals. [1889][6]

He did not suggest any reason why the attitudes of the parents and "the operative class" should be worse in Preston than in any other town. These explanations seem rather unconvincing.

In fact, I doubt whether Dr Pilkington himself took such explanations very seriously, because year after year he was reporting one particular cause of infant deaths which distinguished Preston from other towns, and which appeared to be connected with the housing conditions of the town. The great killer was "infantile diarrhoea".

Investigation of the causes of infantile diarrhoea had begun as early as 1875, when Dr Pilkington noted that there was a great increase in deaths from this cause in the late summer and early autumn. The Sanitary Committee asked for a special investigation, and after studying the home conditions and surroundings of all the houses where an infant had died of diarrhoea, Dr Pilkington was forced to the conclusion that:

there is no particular insanitary condition in the majority of these premises . . . a great proportion of the mortality from this disease must be attributed to atmospheric influences, to a deficiency of stamina in the children from birth, and to foolish feeding. [1875][7]

He also took up an interesting suggestion which had been made by one of the councillors, Mr Benson (a grocer), that a record should be kept of the daily temperatures throughout the year. Such records turned out to be an uncannily reliable means of *predicting* when the killer would strike, though as yet they could neither identify nor prevent it. In his report for 1883 Dr Pilkington wrote:

The amount of infantile Summer Diarrhoea appears to depend upon various causes acting in concert. That it is due to a distinct and specific germ is more than probable, but certain conditions are necessary to call this germ into being and certain other conditions to ensure [it being so fatal]. First are climatic influences . . . the dryer and hotter the summer, the sooner does the epidemic make its appearance, the greater is the number of children attacked, and the more severe and fatal are the results. But . . . amongst which portion by the community is the principal mortality observed? All experience goes to prove that it is the children, especially the infants of the lower classes . . . amongst whom nearly the whole mortality is observed. . . [1883][8]

At this stage Dr. Pilkington was helped by the visit of an Inspector at the Medical Department of the Privy Council, Dr Ballard, who was making a special study of the causes of Infantile Summer Diarrhoea, and asked him to put in two earth thermometers to

Fig. 65: Councillor Robert Benson, grocer at No. 49 Church Street; home, 16 Bushell Place.

record the temperature of the ground at the depths of one foot and four feet. Over the next few years this scientific experiment showed that there was at least a regular co-incidence, and perhaps a causal connection, between high deep-earth temperatures and increased deaths from infant diarrhoea. In 1891, for example:

> *The earth temperature at a depth of four feet reached 56 degrees on August 16th, and shortly after this, infantile diarrhoea was rife.*

And in 1893:

> *The mortality from Diarrhoea was unusually heavy, – the deaths numbering 343 – I have repeatedly shown in former reports that, given a deep earth temperature of 56 degrees, Diarrhoea becomes rife amongst infants residing in certain localities.*

Preston, of course, was no more likely than it is now to be favoured with a tropical climate all of its own. The earth temperature in Preston would be much the same as in any other town.

Unlike John Clay and the *Preston Chronicle* in the 1840s (see Chapter I), Dr Pilkington did not mention the poverty as a possible factor, though he did refer to the feebleness and "debility" of infants who died of no other obvious cause. He concentrated his attention on sanitary conditions. We therefore follow him to his principal suspect: Preston's housing.

In his Report for 1883, after mentioning the hot dry summers, and the probability that the infants of the lower classes were being killed by a "distinct and specific germ", Dr. Pilkington had continued with a description of the worst affected localities.

> *The conditions in which Infantile Diarrhoea prevails are those in which the middensteads, occupying a portion of the limited yard space, are often in close proximity to the dwellings themselves, where the backs of one row of houses abut those of another street, no back passage intervening, where the pavement in the yard is defective and becomes soaked with slop-water* and other liquid refuse, and where as a result the summer's sun instead of bringing health and pleasure becomes a generator of evil odours and of dangerous gases.*

[* "slop-water": a euphemism for the contents of chamber pots, as in "slopping out".]

The date might be 1880, 1890 or even 1900; the new streets, such as those in Deepdale, might be as fine as fine could be; but most of the people in Preston were still living in the domestic conditions of 1850, or even earlier. Conditions were not getting better as the years passed, they were getting worse. A neat and airy 2-up-2-down cottage, on the north side of Miles Street, backing onto open

land when it was new in 1860, would have been a pleasant place to live; but twenty years later, with a row of 3-room houses on the south side of Havelock Street backed up against the yard, it was another matter altogether (see figure 53 above). It was even worse if both rows of houses had back extensions (figure 54 above, and figure 66 below).

Dr Pilkington observed in 1888:

the Sanitary Authority has to contend with evils done in former years, with the faulty construction of streets, by means of which as many houses as possible have been crowded together on a give space of ground, the backyard approached from the front by a lobby, surrounded on all sides of dwellings, and containing a deep pit filled with foul decaying matters. Not only does the soil of the yard become polluted . . .but the noxious emanations from its contents are constantly rising and finding their way into the house . .

His inspection-tours of houses had been continuing block by block; and year after year he reported the same sort of discoveries:

the principal evil consisted in the small size of the back yards, where often nearly the whole of the available space was occupied by the privy and ashpit. And this evil was greatly increased where, as often happened, the back of one street came directly up to the back of another . . . so that from end to end, and within a few feet of the back doors and windows were blocks of privies and unnecessarily large ashpits . . . This is a condition of things handed down to us by the imperfect sanitary regulations of former years . . . In some of the houses the insanitary conditions were still further increased by the fact that the nightsoil had,

Fig. 65: Back yards of houses in Ellen Street (left) and Barlow Street (right); built c.1860, demolished 1982.

when necessary, to be removed through the dwellings themselves. The surface of almost all the yards is covered with boulder pavement, (which allows) the soakage of refuse water (and) when the middens are emptied, of liquid filth . . .[1885][9]

Nor were the faulty construction of streets and the smallness of back yards the only evils handed down from former years: that fateful (but understandable) decision taken in 1850 by the Local Board's Sub-Committee on the water-closet question – that builders could not be compelled to erect water-closets – had had an increasing effect on home life in the town ever since. For thirty or forty years the inhabitants of the town had been poisoning themselves. Dr Pilkington had complained of the "old-fashioned system, as it prevails in Preston, of uncovered ashpits" almost as soon as he had been appointed:

Where each house has its own privy, the inmates, for their comfort's sake give timely notice when the nightsoil and ashes required removal. But this is not the case where a stack of privies, with a common cesspool, is used by a whole street. Here, what is everybody's business, is no one's. [1874] [10]

This old fashioned system did not work very well, because there were frequent complaints at his office "that middens have not been emptied after due notice has been given that they are in a condition requiring that it should be done". [1875][11] Thirteen years later he had seen more than enough of the privy-midden system which was still general:

The great evil of the privy midden system consists in the fact that a mass of the most filthy and offensive matter is stored up in the immediate neighbourhood of the dwelling house, this accumulation being removed once in every three, six or twelve months. Part of it is contained within a pit sunk below the level of the yard surface, thus polluting not only the soil, but also the ground air, which readily travels under the foundations of the house; part is above the ground, and so constantly gives off foul and dangerous gases. [1887] [12]

Among the tables appended to his annual reports the Medical Officer. gave figures for the work done by the Sanitary Department each year, which included middens emptied (later he used the term "ashpits" instead), pig-styes and animals removed; and, from 1885, ashpails emptied, and privies converted to water closets. The number of middens or ash-pits emptied began at 12,855 in 1875, rose to 19,892 in 1888, and then gradually declined to 11,092 in 1900. (These figures should be compared with the total number of houses in the town: over 21,000 in 1881, and over 25,000 in 1901.)

Fig. 67: Yards of 43 and 49 Brackenbury Street, viewed from 169, Hammond Street (1982).

"Few persons", he wrote in 1895,

have any idea of the confined nature of the yards situated behind the cottage houses in the older parts of the town . . . Originally far too small, many of them have been further encroached upon by the erection of sculleries, pantries, and other additions . . . If then a great portion of the small available space is occupied by a pit, in which is stored the excreta of a family, and the decaying refuse of a household for a space of six, nine or it may be twelve months, . . . it can be imagined how polluted and vitiated . . . is the air.[13] *[1895]*

In 1883 he found the privies of No.76 Nelson Street and No.34 Adelphi Street were situated over bakehouses (which were underground, as the next chapter explains); in Spring Street a large middenstead used by three houses was emptied through the pantry of the centre house; and in Old Lancaster Lane the offensive smells from a privy adjoining a kitchen were "aggravated by the heat derived from neighbouring washing boilers".

In conditions like these even the most conscientious and hard-working housewife would have had to wear her fingers and knees to the bone to keep a home clean; when one baby out of every four or five died, it must have broken her heart. We can understand why the custom of scrubbing doorsteps and flagged floors with donkey-stone became such a tradition in Lancashire towns.

There were many families whose house-keeping and domestic arrangements were less than the best. If even "good" new houses were bad, bad old houses were almost unbelievably awful, and unfortunately there were some people who took their standards from the houses, instead of the other way round:

In all parts of the town there are buildings, many of them densely crowded, which are quite unfit for human habitation . . . In every large town, people will be found who are willing to live in dwellings no matter how filthy and ruinous they may be, partly because they have become accustomed to live in these places . . . partly because the rents are low and not very stringently collected; but in many cases I believe the main reason is that residing in these wretched habitations they deem themselves absolved from that personal cleanliness which the present standard of civilisation requires. On persons of this class, instruction and admonition are wasted; and nothing short of the abolition of such places, destructive as they are of the moral and physical health of the occupiers, will meet the necessity of the case. [1875] [14]

I referred in the first part of this book to the continuation of country ways in the unfamiliar environment of a large town. From Dr. Pilkington's reports we learn that these were amazingly tenacious. In 1883 he remarked that:

there is a strong disposition on the part of many of the working classes to crowd up their already confined yards with pig-styes, hen roosts, and similar structures.

Not only the yards: that lobby, designed to give easy access to those whose task it was to remove the contents of the middens, was adapted to quite a different use:

In many cases, the covered lobby between the houses . . . is closed at one end, and converted into a fowl house, a pigeon cote, or even a stable. [1883] [15]

His efforts to get rid of these animals had begun to have some effect by 1890, when he wrote, in his Report for the year 1889, that there were now fewer instances of "swine or other animals being kept in unsuitable situations", but:

where poultry are kept, it is impossible that

the cleanly condition of the yard can be maintained, and not infrequently the lobby, which should be open and so admit a current of air from the front street to the rear of the houses, is closed and turned into a hen-roost . . . The pig keeping nuisance has been abated, and I propose, even at the risk of some opposition to carry out the same reform with respect to poultry.[16]

He was still reporting the removal of such animals in 1900. This was an absolute necessity, of course; but even at that date neither Dr Pilkington nor the experts at the Medical Department of the Privy Council knew *why* it was.

The reader may have noticed that in his reports of the 1880s and 1890s Dr Pilkington was still commenting on the *air*, polluted by "noxious emanations" from the yards and middens. The smell in these places must have been so over-poweringly awful that even the experts could not rid themselves of the old theory that disease was spread by a "miasma" of infection rising from polluted ground. Indeed, the experiment of recording earth temperature at a depth of four feet seems to have been rooted in such beliefs.

They were aware that there was something wrong when they saw big animals in unusual places, but not when such animals were in their normal places; nor did they yet pay much attention to certain much smaller animals which they all took for granted. The phantom killers of infants were such familiar companions that they were not yet suspected.

Dr Pilkington's most graphic description of the interior of Preston homes in the last years of the 19th century deserves to be reproduced in the form in which it was originally printed in 1896. It is interesting not only for what Dr Pilkington *did* say, but also for what he *did not say*. Observing the "wretched fowls" scratching in the midden and then coming indoors to "shake the foul germ-laden dust over the already contaminated food", he was so near, and yet still so far, from detecting the true baby-killers.

The mystery remained unsolved until the first years of the next century; in the meanwhile, we turn our attention to other matters which turned out to be part of the problem.

There are numbers of households – many in which the family is a large one, and the weekly income by no means in proportion – which shew undoubted signs of thrift and good management. Where the living room is clean and tidy, where the food is kept from contact with dirty matter, where the sleeping accommodation is arranged and looked after with a view to the health and morality of those using it, and where the back-yard – however small it may be – is kept for the purpose for which it was originally intended. On the other hand, there are others, and unfortunately many others, where the condition of things is very different. Here dirt reigns supreme. The food to be consumed is left lying about in contact with dirty clothes and unwashed cooking utensils. In the bedrooms the windows are left unopened, the slops* unemptied, and the beds unmade, until the chamber is again required for the night. Pigeons create dirt and breed vermin upstairs or in the cellars, while wretched fowls scratch amongst the refuse and excrement in the ashpit, and afterwards come indoors to shake the foul germ-laden dust from their feathers over the already contaminated food. The children are unwashed and uncombed, and – saddest sight of all – not unfrequently in a dirty cradle there may be seen a sour-smelling baby sucking at a still more evil smelling feeding bottle.

(Report of the Medical Officer of Health, 1896)

[* "slops": the contents of chamber pots.]

Fig:68: The innocent faces of houses in Barlow Street shortly before demolition in 1982.

CHAPTER V

BREAD, MEAT AND MILK

NOT ONLY was every family home intimately affected by the homes of neighbouring families, it was also dependent on neighbours for vital supplies – much more dependent than our homes are today. Meat, milk, bread and hot dinners were provided by methods which relied very heavily on other people in the immediate neighbourhood.

Bread

I referred to this subject in Chapter II, when considering the question of cooking appliances, and quoted an old man's recollections of public bakehouses in Paradise Street and Vauxhall Road – probably about the 1830s. He was speaking in 1892, and since he appeared to regard them as historical curiosities it would seem that they had gone out of use by then. If that was the case, it would be interesting to know how long they had continued.

Unfortunately, although the responsibility for the supervision of bakehouses passed to the Medical Officer of Health in 1883, his reports contain less information about bakehouses than about slaughter houses and cowkeepers. This is a pity, because everybody ate bread, even if they couldn't afford meat.

Another difficulty for the historian is that it was easier for bakehouses to escape official notice (and rates). The same applies to the many houses where neighbours with big ovens cooked dinners for a penny a time. Trade Directories' lists of "Bakers" are suspiciously short: there cannot have been so few bakers of bread.

Slaughter-houses and cowkeeping dairies (as we shall see) naturally attracted attention to themselves. Bakehouses were often underground, as the following advertisement shows:

> Lot 1. The capitally-situated SHOP and DWELLING-HOUSE, numbered 47, in Friargate, with plate-glass front, and large Bakehouse in the basement . .
> (*Preston Chronicle* 19 June 1875)

Dr Pilkington did his best. He drew up a list of the regulations "under the Act of Parliament of 1883", and "caused copies to be issued to all persons keeping public bakehouses . . .", but the only way he could have found all the bakehouses would have been by house-to-house inspection.

> *I also visited a number of premises in question, and though many of the older ones, situated in cellars, are dark and inconvenient, their condition as regards cleanliness was on the whole satisfactory. [1885]* [1]

On the subject of bakehouses the historian cannot rely on documentary sources, because it is evident that many escaped the attention of official records. In 1903, a sub-committee of the Health Committee investigated "every Underground Bakehouse", and produced a list of them which was apparently intended to be comprehensive: the total for the town as a whole was 28, and it did not include a single one of those mentioned in this chapter.[2]

Archaeology is a more reliable source of information (or would be if so many of the buildings had not been demolished). Some

Fig. 69: Bread oven in cellar bakehouse at No.40 Brackenbury Street (demolished 1982).

examples will show what I mean.

At least four such public bakehouses were discovered in Preston during clearance programmes in 1982, one at Maudland Bank, another in Ashton Street and two in the Plungington area. All of them were in cellars, and the ovens for baking were underground. In one of these the bread tins were still lying about in rusty piles.

It is clear from the plans and from the buildings themselves that customers entered the bakehouse through a separate door at one side of the shop or the house, and then went down a dark flight of steps to the cellar. There may have been some underground bakehouses which were never publicly advertised as "bakers", because one Trade Directory, at least, listing all the shops in Plungington Road, does not mention a single "baker".

There is a building plan of 1860 for houses and a shop with a bakehouse under the kitchen in Plungington Road. In 1982 the owner had no idea that originally his cellar might have been a bakehouse. The cellar contained the cooking range mentioned in Chapter II, and no sign of a baking oven except a strange blank arch of bricks beneath the cellar window into the back yard. Only excavation of the yard would discover the existence of a bread oven. Next, during demolition and preparation for rebuilding in Maudland Bank, two bread-ovens, recorded in no written document so far discovered, were found under the backyards of two otherwise nondescript houses.[3]

Third, a corner shop in Brackenbury Street, with a mysterious entrance leading from the side street, contained an apparently complete bakehouse with vaulted ovens under the yard, and piles of rusty old one-pound bread tins stacked up inside them. Last, and only a few yards from this, there was (at the time of our research in 1982) a quite ordinary house which had an exceptionally large cellar extending under both front and back rooms, and a separate door in the lobby leading onto the top of the cellar steps. The cellar contained two fireplaces, one of them having a large oven in it (see photograph opposite). The building plan for this house – dated 1874 – does not show a door from the lobby. It shows a cellar, but only under the front room: presumably the full intentions of the builder were not revealed in the plans he submitted to the Surveyor's office. I can think of no reason for having a separate entrance to the cellar except that it must have been intended for people who did not live in the house, but who made use of the extra cooking facilities. If it was possible for one bakehouse to exist in this way, it must have been possible for many

Fig. 70: Cellar of No.53, Brackenbury Street. (House demolished 1982.)

more: but the proof of their existence disappears with their demolition.

Very likely, bakehouses of this kind continued to be used as long as Preston's cotton industry continued to employ large numbers of married women, though more for cooking dinners than for baking bread. Dr. Pilkington included the statement below in his report for 1894:

> *The Bakehouses have received constant attention in order to ensure their being kept in as cleanly a condition as possible. Several of them, more especially the smaller ones, situated in cellars, have of late been discontinued, as there is a growing tendency to use shop bread in preference to that made at home.*

And in his report on the underground bakehouses in 1903 he gave a wider view of one reason for this fundamental change in domestic economy:

> *Many years ago Cellar Bakehouses were far more common in Preston, and most Lancashire manufacturng towns, than at present, and in those days – when bought bread was much less used – they were almost a necessity for the working class family, whose kitchen range and oven did not then admit of baking a batch of bread, or even the family dinner. [1903]* [4]

Meat

Like house-building and sanitation, the butcher's trade was one which began the 19th century on the basis of established custom and what was assumed to be common sense, and ended it under rudimentary public supervision, but with customary practices affecting much larger numbers of people. Its failures demonstrated the necessity for scientific management and supervision; and its history deserves much closer attention than it can be given here. What we forget too easily is that butchers' work was *butchery*.

In 1875 the *Preston Chronicle* welcomed the invention of a new method of slaughter, the "forehead pin-mask", which caused less pain and less resistance than existing methods:

> *Every person possessing the least feeling will rejoice to know that the system as usually carried out can be superseded by one freed from the fearful and shocking exhibitions seen at our slaughter houses.*[5]

At present I know nothing more about the "fearful and shocking exhibitions", nor

Fig. 71: No 44, Plungington Road.

Inspector's notes:
"Yard behind house used for killing sheep. Pebble paved. Water Tap and drain. Carcases hang in lobby."

(Still a butcher's shop, but no longer slaughtering sheep in the back yard)

Fig. 72: No.130, Elliott Street.

Inspector's notes:
"Yard behind Shop, used for sheep only. Brick floor with two Drains, in good repair. Small portion of yard covered over, adjoining privy."

(Demolished 1982)

Fig. 73: No.34, Brackenbury Street.

Inspector's notes:
"Yard behind house, covered over, and used for sheep only. Floor of bricks and cement. Drain in lobby. Ventilated by openings. Walls clean. Privy, with ashpit, opens into slaughterhouse."

(Demolished 1982)

Four examples of the premises of former slaughtering butchers, photographed in 1982

Fig. 74: post for hanging carcases, at former slaughter house in Lovat Road. (now altered)

whether they were superseded by a new system. But, whatever the system was, it might be seen (and probably heard) all over the town. In 1884 there were 67 private slaughter-houses in Preston, which the Medical Officer of Health and Surveyor jointly investigated at the request of the Markets and Town Hall Committee. The following quotations contain the essence of their report:

The Slaughter-houses are scattered over all parts of the town, and present wide differences . . . Some consist of buildings, such as stables or store-houses, intended for other purposes . . . some are situated in enclosed yards, some in yards attached to Public Houses, and many are attached to dwelling-houses and occupy what should be yard space . . . As a rule the small slaughter-houses used by one person and immediately attached to the shop and dwelling-house are the most carefully looked after, but these, occupying the yard space, are often in direct communication with the privy and ashpit. [6]

The manuscript minute book of the Markets and Town Hall Committee[7] contains a list of all the private slaughter houses, with their addresses, and a brief description of each of them. Part of this list, describing slaughter houses in the Plungington area, is reproduced below, and the photographs opposite show the same premises in June 1982.

In 1894 Dr Pilkington, optimistically predicting the complete abolition of private slaughter-houses, reported that

many of them . . . especially those which have come most recently into use, are nothing more than the back-yards of dwelling houses, where the meat is exposed to odours from adjacent ashpits. [8]

In 1982 a butcher's shop in Lovat Road still had a post fixed to the wall of the back yard, with a hook from which the bodies of slaughtered sheep had once been hung for dressing (see photograph opposite).

Oddly, perhaps, the various reports on the slaughter houses do not seem to have

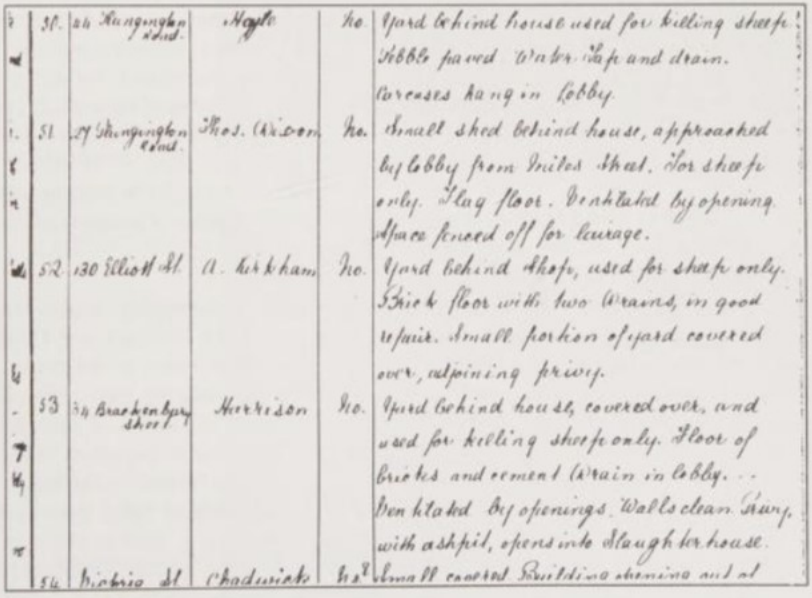


Fig. 75: Extract from minute book of Markets and Town Hall Committee, 1884.

considered the problem of the disposal of waste-products from them; but the author of the description printed in *The Builder* in 1861 had noticed it in the vicinity of Aqueduct Street:

> *A vacant piece of ground is here bounded on three sides by the rear out-buildings of houses, and on the fourth side a sewer forms a stream. The space within is used as a playground by children, who have riddled it into innumerable holes, but it is not of them we would say a word: a butcher, close by, makes use of this space in which to bury, a few inches beneath the surface, the blood and guts and offal from his slaughter-house!* [9]

Dr Pilkington's remedy for the situation was the establishment of a Public Abattoir, and the abolition of all private slaughter houses, but in the late 1890s he had to report that a compromise had been agreed with the butchers: a minority of the private slaughter-houses would remain, on condition that they would be improved, while a Public Abattoir at the Cattle Market would be doubled in size to encourage butchers to make use of a more hygienic system.

The meat trade was difficult to control, and even the control of it caused difficulties and scandal: the Meat Inspectors themselves were suspected of receiving bribes from butchers, and there was a long Sanitary Investigation in 1892, to find out why meat from diseased carcases was still being sold, even in some of the most respectable butchers' shops in the middle of town. (The proceedings and evidence were printed in full, as a book of some 170 pages.[10])

Some of the small private slaughter-houses were for pork butchers only. A larger number killed only sheep. For some reason many of these were on the north side of town, and in the Plungington area almost all the slaughter-houses were for sheep only: these people seem to have eaten no meat except mutton – unless it was tripe and trotters:

> *The preparation of tripe, cow heels, etc., is for the most part conducted in a careful manner.*[11]
> *From time to time there have been complaints relating to the Gas Works, and to certain "Offensive Trades", chiefly Tripe-Boiling and Tallow melting . . .*[12]

Complaints about the nuisance caused by tripe and trotter boiling appear fairly frequently in the minutes of the Sanitary Purposes Committee. The complaints related to the smell of preparation, rather than to the food itself. (Tripe is the white, corrugated, lining of the stomach of a sheep or cow. I was once persuaded to try eating it: but only once.)

Milk

This vital fluid (especially for babies whose mothers worked in the mills) was supplied in the same way as meat. In 1885 there were 70 "cowkeepers" in Preston, and another 365 "purveyors of milk".

> *The keeping of shippons and Dairies in a town is no doubt a convenience to the poorer class of inhabitants, but the surroundings of many of these places are not all that could be desired, and a close supervision is necessary . . . to ensure . . . the cleanliness requisite in dealing with an article so susceptible of contamination as milk. [1885]* [13]

The little cow-keeping dairies can be traced from lists of "Farmers and Cowkeepers" in Trade Directories of the period. The drawn plans for building them presented to the Local Board of Health, if one can find them, may show the arrangement of the cow shed or shippon, in relation to the house it belonged to; but a few of these places are still standing. There was a good example in Ashton Street in 1982 (since demolished), and another in Lovat Road which is still there.

They are not easy to recognise, and their

Cow-keeping dairies

Fig. 76: Former cow-keeping dairy in Ashton Street: the shippon. (demolished)

Fig. 77: Houlker's Lovat Road Provision Stores, a former cow-keeping dairy.

Fig. 78: The site of the shippon at Houlkers Lovat Road Provision Stores.

existence may not be suspected by the current residents of the premises. They were usually houses on corner sites, the shippon appearing as a nondescript outbuilding in the yard at the back; but sometimes they were fitted in, somehow, in the middle of a block of otherwise ordinary houses.

The danger of milk was that it might be drawn from a cow infected with tuberculosis, and that it might be stored, either at the dairy before it was sold, or at home afterwards, in conditions which allowed it to become infected with bacteria.

These Town Dairies are a convenience to many of the poorer class who have no regular milk supply . . . but purchase milk at the shops . . . as they require it . . . Where only two or three cows are kept, the milk is brought from the shippon into the house, and it can hardly be expected that in the living room it has the advantage of either coolness or absolute purity of atmosphere. [1893] [14]

Milk supplied to the great majority of the working people in the town, who bought it from back-street cowkeepers, was both more likely to be contaminated when it was bought, and much more likely to become contaminated when it was taken home, than was the milk used by the better-off families. Not only did the richer people obtain their milk from a different source – "the Country Farmers" – but their homes were far better suited for keeping it. Nobody had a refrigerator, but middle class houses had cellars, the best of them containing a table made of a stone slab (known as a "keeping-stone") which was cool and relatively free from the germ-laden dust of family living. Most houses in Preston, with their back yards polluted by stinking privies and middens, were ill-equipped to keep milk or any other perishable other food in an edible condition.

However pure the milk may be when delivered at the house, in the house itself it may quickly become charged with noxious matter. It . . . readily absorbs not only foul odours but poisonous germs and the greatest care should be taken to keep it cool, sweet and removed from all possible contamination. [1889] [15].

CHAPTER VI

IMPROVEMENT

WRITING his report for the year 1899–1900 ("I beg to submit my Annual Report for the closing year of the Nineteenth Century"), the Medical Officer of Health for Preston seems to have felt wearied by the apparently thankless toil of the last quarter century:

> *While one may very properly be proud of the traditions and history attached to an ancient town like Preston, it must not be forgotten that with age there must come a certain amount of decrepitude . . .*[1]

With infant mortality (i.e. deaths under one year old) at 236 per thousand births in 1900, he found Preston yet again at the top of that league of urban disgrace. The next year was little better, except that Burnley had then taken over the lead and Preston's general death rate was down to 19.56.

Then, quite suddenly, the next four years showed a complete transformation.

In 1902 the general death rate for Preston, at 17.6, was the lowest in the 65 years since records began, and infant mortality greatly reduced (though a rate of 188 still put the town at the top of the league). The figures for 1903 were even better, and Preston was down to seventh place with an infant death rate of 161 per thousand births. By 1904 Dr Pilkington was able to claim that the years 1902–4, taken together, had "the lowest rates of mortality in the recorded annals of the borough"; and this improvement was continued in 1905, when the general death rate had fallen to 16.4, and the infant mortality, at 150 per thousand births, was "lower than has ever previously been recorded". Dr Pilkington could at last take some pride in the achievement:

> *During the past year, Preston no longer holds her usual unfortunate position as regards Infantile Mortality amongst other large towns, Table No.5 showing that amongst the 39 therein dealt with, 13 have a rate exceeding 150 per thousand.*[2]

An improvement so marked and so sudden naturally makes one wonder what had brought it about, and whether it would continue.

Environmental Improvements

One of Dr Pilkington's first comments on the much lower death rates in 1902 was that they showed the progress and effect of "sanitary improvements". By this he meant a whole range of measures: the house-by-house and month-by-month replacement of privy-middens with water closets and dustbins, and of boulder paving in yards and lobbies with flagstones; the inspection and control of private slaughter houses and cow-keeping dairies; the first small stages of slum clearance; and the addition of two Female District Visitors (i.e. Health Visitors) to his staff of five sanitary inspectors.

Commonsense would suggest that the introduction of such measures had been the natural and direct consequence of the Medical Officer's reports to the council over the previous years. He had surely made the disgusting conditions clear enough to the councillors. By chance I found that it had not been as simple as that. Information on its own, however disgraceful, was not enough without political pressure from outside the council chamber.

I was investigating the subject of cow-keeping dairies, and looking for a list of them in the hand-written minute book of the

Sanitary Purposes Committee in 1884, when my eye fell on the words "signed by representatives of at least 50,000 inhabitants". In any document this would have been interesting, but in the Sanitary Committee minutes it was extremely peculiar, so I read the whole entry:

The Committee considered a memorial signed by representatives of at least 50,000 inhabitants of Preston praying the Council to take into their especial consideration at their earliest convenience the heavy drain which the high rate of mortality in this Borough causes upon the resources of the working classes, alike in their domestic relations and through the Benefit, Friendly, Sick and Burial Societies . . .[3]

Guessing that such an important expression of public opinion must have been reported in the newspapers, I went to the library to search the *Preston Guardian* for April and May 1884.

Victorian newspapers are so full of interesting information that it is almost impossible to open them without making more accidental discoveries (in this case, that cotton workers' wages had been reduced 5%, and that Mr W.E.M. Tomlinson MP had attended a meeting in London to support the idea of British annexation of the Congo), but eventually I found a long report of a Town Council meeting on "The Mortality of the Borough".[4]

First, the Town Clerk had read aloud the memorial, signed by the secretaries of the various Friendly Societies (such as the Oddfellows, the Foresters, the Loyal Orange Institution etc.) and the Preston Trades Council and the Spinners Society. These men had written that, considering the healthy climate, the pleasant and airy site of the town, and the good supplies of food and water, "the death-rate of Preston, other things being equal, ought to be lower than that of any other large town in Lancashire". Failing to find any proof that more mothers were employed in mills in Preston than in those of Lancashire generally, or "any proof that the working-class mothers of Preston were more ignorant or more reckless of infantile life than those of other towns", they were forced to the conclusion that:

the root of the mischief had been the inadequate building bye-laws in force in Preston in times past, the want of thoroughness in enforcing sanitary regulations even now, and the insufficiency and inefficiency of the staff of sanitary inspectors and scavengers. They had reason to know that in the houses inhabited by the working classes of Preston all the evils of jerry building and sanitary botchwork were abundantly exemplified; neglect in emptying middens and privies was common; the very situation of many petties was unspeakably vile, necessitating their being emptied through ordinary living apartments, and so inviting contagion and disease; the use of ashes mixed with house refuse for making false foundations was frequent; the stench from noisome manufactories was sickening . . .(etc.)

They ended by asking the Council to remedy these defects.

None of the members of the Council who spoke in the discussion disagreed with what those representatives of 50,000 inhabitants had said. Only one suggested that the blame belonged to the occupants of the houses, and not to the buildings themselves or the council. This was Councillor Myres, the son of J.J. Myres.

Councillor John Holden, a surgeon whose home at Cromwell Terrace, Garstang Road, was on the eastern edge of the Plungington area, agreed that one of the chief causes of the high death rate was:

the inadequate building laws which had been in operation in past years. Nobody could doubt that the present architectural arrangements of Preston were essentially faulty . . .

An architect and surveyor, who also lived close to the Plungington area, Councillor Joseph Harding,[5] likewise blamed:

the miserable condition of the dwelling houses of Preston – not so much in relation to sanitation as to structure. It was perfectly impossible to build a dry and healthy cottage under the ordinary system . . . Women left the heated atmosphere of the mill and went home to a miserable cottage, the upper rooms of which could not possibly be dry, constructed on the principles he had named. Those buildings were being erected every day in Preston.

Mr Holden, with his back bedroom window overlooking the pinched yards between Hammond Street and Miles Street, was well qualified to be

sure that anybody who went in the backyards of houses in confined spaces would perceive an abominable smell, especially in the summer time,

but he said it was a visiting doctor friend who had remarked, as he went through the streets of Preston, that "he could smell the faecal odour". It was impossible to alter the building arrangements, but the Council could surely improve the emptying of the middens and privies, and it might even abolish the midden system altogether, and introduce water closets. He quoted "a sanitary axiom":

that in any town of over 10,000 inhabitants the excreta, human and animal, should not be allowed to remain more than one week,

and ended by pointing out an economic consideration:

'People made money in the town, and, alarmed at the high rate of mortality prevailing, they left and spent their money in other places.

Perhaps it was because this idea was still in the minds of the councillors that a certain Councillor Hale (who lived in Stephenson Terrace) did not get an appropriately serious response to his remarks about the "severe action which had been taken with regard to people who kept pigs in the town":

let them consider for a moment the hundreds of pigs that had been driven from Preston.(Loud laughter).

Nevertheless he kept to his point, that if people kept a few pigs, they would be able to consume the middens – and the councillors laughed again.

They might laugh and scoff at him, but he could afford to take all that, being determined to represent his constituency energetically and faithfully.

(This tells us something about the residents of

Fig.79: Rear window view, Brackenbury Street

Park Ward).

The Council instructed the Sanitary Purposes Committee to take the necessary steps

In parallel with this exceptional coordination of working class protest, a middle-class body, the Preston Sanitary Association, was also lobbying the council. In February 1885 the Association held a meeting chaired by the journalist and historian Anthony Hewitson and attended by several doctors, clergy and councillors, and by Mr W.E.M.Tomlinson MP, "to inquire into the causes of the high death rate of the town".[6]

The leading speaker, Mr James McKay, presented a table of vital statistics for the last quarter of 1884, comparing Preston with England, Lancashire and 28 other towns. This showed that Preston had the worst record in almost every respect, including adult mortality and deaths from infectious diseases. (See facsimile of this in the appendix.)

The causes suggested by Mr McKay and by various other speakers were wide-ranging (they included the prevailing sea winds and the local bricks, but I am postponing discussion of them to the final chapter). The outcome of the meeting was a unanimous resolution that "an exhaustive official inquiry into the whole subject should be instituted by the Corporation of Preston without loss of time."[7]

So it turns out that the steady (but slow) substitution of water closets for privies and ashpits, and of "galvanised ashpails" (dustbins) for middens, which began in 1885, was not just the result of Dr Pilkington's persuasion. It began because the "representatives of at least 50,000 inhabitants", and an organised middle class pressure group, the Sanitary Association, had made a fuss. (It is possible, of course, that Dr. Pilkington, meeting obstruction from the councillors on the Sanitary Purposes Committee, might have gone round to have a quiet word with the secretaries of the Friendly Societies and the Trades Council . . . but could we ever find evidence for it?)

If any doubts about what was necessary were left in the minds of the members of the Council, they were removed in 1886 by the threatened return of an old friend of nimbleness in sanitary improvement: *cholera*. This disease had reached ports in the south of England.

Preston, sticking out like a sore thumb among the statistics of health at the offices of the Local Government Board in Whitehall, was immediately inspected by Dr Page, the Local Government Board Inspector for the Northern District.

He sent the Council a list of recommendations on "the most pressing requirements of the town" which, like orders, were short and to the point:

I The abolition of midden privies and the substitution of water closets with movable receptables for ashes and house refuse. Rapid and sustained action in this direction is urgently needed . . . the provision of Water Closets should be enforced in all new property.

II House-yards, and Courts which are unpaved or badly paved . . . should be flagged or concreted and provided with adequate trapped drain inlets . . .

III Free ventilation of the entire sewerage system . . .

IV The erection of public Abattoirs and the discontinuance of all private slaughter-houses . . .[8]

In fact, as the Council replied to the Local Government Board, the Medical Officer and the Surveyor were already working on such improvements. For several years they had been sending out "Orders" to owners of houses to convert privies to water closets, and to replace ashpits with dustbins, and in 1885 they added recommendations that the surface of yards should be covered with concrete, flags or asphalt in place of pebble or boulder paving. The same year Dr. Pilkington started to include with the "death maps" in his reports, a map showing the areas where these house improvements had been ordered.

The problem was too big to be solved quickly, and the "portions coloured red" on these maps (i.e. improved) spread only slowly. Among the first to receive attention were not only some of the poorest areas in the town, but also those where members of the Town Council lived – Ashton and Avenham in particular. But by 1900 improvements had been carried out in most of the areas south of Church Street; north of Ribbleton Lane; either side of North Road and Lancaster Road; and in the Adelphi Street area, near St. Peter's Church. Improvements in Plungington, New Hall Lane, and south of Moor Park had hardly begun in 1900, but they were all coloured red by 1910. (The thoroughness of this operation is open to doubt, however, as a back yard in St Peter's Square still has its pebble paving in 1993 (see figure 81 overleaf).

The programme of improvements also included the beginning of slum clearance. Little pockets of uninhabitable dwellings, mostly in small streets and yards near the town centre, were closed on the orders of the Medical Officer of Health. Larger areas, inspected and reported by him separately, and found to contain large numbers of very poor dwellings built in ways which made improvement impossible, were acquired by compulsory purchase and (as we would say) re-developed. This sort of scheme really changed the whole shape and fabric of the town where it was carried out. The biggest and most obvious example was between Friargate and the canal, at the top of Marsh Lane. Here, on an axis

Fig. 80: part of the Improvement map for 1899, including the Plungington area – as yet unimproved.

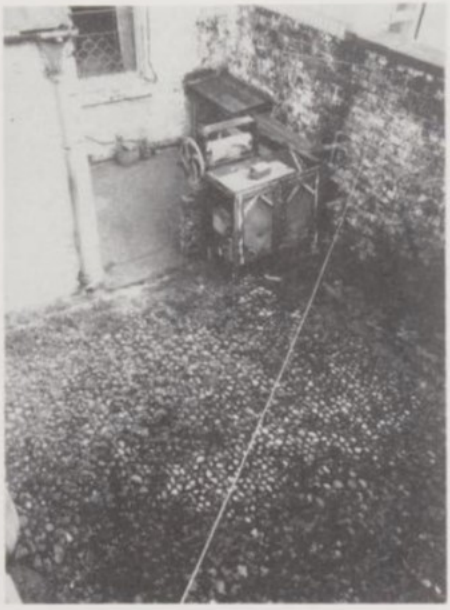


Fig.81: Pebble-paved back yard of No.38 St Peter's Square in 1982. Note also the mangle in the background. (At time of going to press the pebble paving was still there but the mangle was not.)

which used to run from east to west, were a number of small streets (Heatley Street, Marsh Lane, Edward Street, Canal Street, Back Canal Street) containing a jumble of alleys, yards, courts, small workshops and factories, with some of the worst dwelling places in Preston: an insanitary scandal from the time they were first built in the 1830s. Dr Pilkington had made a particular study of their conditions in 1875,[9] and in 1884 the Council obtained authorisation from the Local Government Board to purchase much of this property compulsorily – but also rather selectively, as the map opposite shows.

The result of this clearance was the building of Corporation Street, a sort of relief road west of Friargate, running on a north-south axis between Fishergate and Fylde Road, across the line of the old streets. This made room for warehouses, a parish hall, and for the new Victoria Jubilee Technical School – formerly known as the Harris College, but now part of the University of Central Lancashire. The cobbled ways and foundations of some of the most notoriously filthy houses in Preston are now a University car park.[10]

Such wholesale "slum clearance" must obviously have had a marked *local* effect on mortality, because it removed housing and people altogether; but it probably had little general effect, because the poorer people who had lived there simply took their housng problems to localities elsewhere in the town, where similarly old and insanitary property still remained. (Re-housing of slum-dwellers at public expense had to wait for the "homes fit for heroes" after the First World War.)

When concentrating one's attention on the better housing of the later 19th century, it is all too easy to forget that the worse housing of the early 19th century still survived at this time (as indeed much of it continued to do until after the Second World War). Mostly clustered in the older parts of the town, such as St John's and Trinity Wards, these older dwellings included the full range of almost unimaginable squalor: the tiny cottages built in courtyards off the main streets, the long-redundant handloom weavers' cottages with cellars now occupied as separate dwellings, and small groups of back-to-backs.[11] In 1905 some scandal over Mellings Yard in Friargate must have attracted attention to such dwellings, for a sub-committee of the Council appointed to visit that yard decided to extend its survey to include:

> *Back to Back Houses, those having no through ventilation, those situated in Courts, Cellar dwellings, and in short the poorer, and presumably least sanitary, of the houses in the town.*[12]

From the findings of this committee, combined with the evidence of the Ordnance Survey maps of 1909, it seems that the numbers of such dwellings were now relatively few, and that they were now mostly in as good condition as could be expected. The maps

show that many of the former back-to-back pairs had been knocked through to make single dwellings; and the committee reported that of the surviving back-to-backs and courtyard cottages, most now had accessible water closets. The cellar dwellings in the former loomshops of the block of three-storey back-to-backs in Kirkham Street/Moss Street (formerly on the west side of Fylde Road, directly opposite the University Students' Union building) were occupied only by "single couples, chiefly old people".

The limitations of this committee were pointed out by the Medical Officer in his introduction to its report: while it might be legally possible to close many of the houses, such a course, carried out indiscriminately, would not be to the sanitary advantage of the town,

> *since there were always some people who from age, infirmity, or other sufficient reasons, are unable to pay more than a very small weekly rent, and who – if the houses they now occupy were closed – would be forced to find lodgings with some other family . . . causing overcrowding – or would have to seek, as a last refuge, the Workhouse.*

(The general spirit of this report is perhaps best reflected by: "CHEW'S YARD, FRIARGATE. One small house occupied by a very old woman. To remain undisturbed.")

Two other improvements to the general domestic environment were under way, though far from complete in these years: the closure or improvement of underground bakehouses and of private slaughter houses.

Closure of underground bakehouses (under the Factory and Workshops Act of 1901) probably had no perceptible effect on public health, for two reasons. One was that the need for them was fading away, as more people used shop bread; and by contrast with the old days, more working-class families were equipped with kitchen ranges adequate

Fig. 82: The Corporation Street area in 1892. Note that the small group of former handloom weavers' cottages at Mount Pleasant still survived, as did the cluster of hovels in the bend of Fylde Street (at the top of the map), and all the courtyards of Friargate.

for baking bread "or even the family dinner".[13] The other was that the authorities did not know about most of them anyway.

Private slaughter houses were much more of a problem, and the Medical Officer of Health had been meeting obstructions to his policy of closing them and forcing butchers to use the public abattoir. In 1896 he had hoped for their total abolition, but in 1897 the outcome of negotiations between the Butchers and the Markets Committee was that "instead of 70 slaughter houses scattered all over the town, the number will be reduced to under 20, and these will be greatly improved".[14] This mattered a great deal more than Dr Pilkington thought, and for reasons which he did not yet understand.

Such were the environmental contributions to lower death rates which were attributable to human action, and for which Dr Pilkington and his Town Hall colleagues could justly take credit in these early years of improvement. But just how effective they had been in practice was a matter which was now put in question by non-human factors, mainly the *weather*.

The Influence of the Weather

Since the mid 1880s Dr Pilkington had been strenuously and repeatedly pointing out a connection between summer temperatures and deaths from infant diarrhoea. The warmer the weather, and in particular the longer the deep-earth temperature remained at 56 degrees Fahrenheit, the greater the number of babies who perished from "Summer Diarrhoea". Contrariwise, the cooler and wetter the summer, the fewer the deaths from diarrhoea.

The satisfying reduction in infant mortality in 1902, he had said, was due mainly to a reduction in Summer Diarrhoea caused by cool and wet summer weather. The summer of 1903 was also cold and wet, and diarrhoeal mortality correspondingly low – a total of 103 deaths compared with the six-year average of 237, which he attributed to:

> *the unusually heavy and persistent rainfall which had a good effect in washing the air, cooling the ground, and flushing the sewers, drains and water courses.*

Although Dr Pilkington still believed that, as far as infant mortality was concerned, Preston was largely at the mercy of the weather, the triumphant result of 1905 – infant mortality down to 150 per thousand, and Preston now occupying a comfortable 14th place in the league – suggested that, so far as in them lay, the Preston sanitary authorities might now have defences in place against the ravages of the predictable but still elusive killer. It wanted only one long, warm, sunny summer to put the matter to the test. 1906 brought just such a summer.

In June of that year diarrhoea caused the deaths of four infants, and Dr Pilkington warned that, with deep-earth temperature rising, it was time to take precautions, especially to keep milk "cool and sweet". In July there were five more diarrhoea deaths, and "the gradual rise of the earth temperature points to the approach of the Diarrhoeal Season". August brought a relative lull, the earth temperature hovered around the 56 degree mark, it rained, and diarrhoea claimed only six infants. Then, in September, the temperature ("in the shade") reached 85 degrees, diarrhoeal cases suddenly "shot up", and 68 babies died; plus another nine children under five years old. At this point, observing that the temperature (again "in the shade") then fell to 65 degrees in the following week or so, Dr Pilkington predicted that the worst was over. He was wrong. In October diarrhoea killed a further 87 infants. Total deaths from this cause alone amounted to 219, and infant mortality was back up to 200 per thousand births for the year 1906. But it was this year which revealed the missing link in the chain of causation.

Infant Diarrhoea: the Culprit Unmasked

> "Circumstantial evidence is a very tricky thing", answered Holmes thoughtfully; "it may seem to point very straight to one thing, but if you shift your point of view a little, you may find it pointing in an equally uncompromising manner to something entirely different."
> (Sir Arthur Conan Doyle *The Adventures of Sherlock Holmes*, 1892)

Between the autumn of 1906 and the spring of 1907 it seems that Dr Pilkington "shifted his point of view a little". As we have seen, in his monthly reports written in July, August and September he was repeatedly emphasising the link between rising temperatures and Summer Diarrhoea". October puzzled him slightly:

> *Even up to last week, the deaths from Infantile Diarrhoea have been numerous, a condition somewhat surprising, considering the recent marked reduction in the temperature . . . the total deaths from this cause has been 87.*[15]

Some time between then and March 1907, when he wrote his Annual Report for 1906, he seems to have picked up a word, an idea (from a journal, perhaps, or from younger professional colleagues) which caused him to reconsider some of his observations in former years. For one thing, outbreaks of diarrhoea had not been simultaneous with periods of higher temperature, but had *followed* them. Another thing was, 1906 had not been the first year he had noticed that temperature and mortality did not correlate quite as expected; he had noticed the same in 1902. Then there was that wonderfully descriptive passage he had written in 1896 (and which, perhaps, he still took out and re-read to himself on quiet evenings), about the fowls which scratched amongst the refuse and excrement and then came indoors and shook their feathers over the food (see page 71 above). Whether it dawned on him slowly and mercifully, or struck him in one embarrassing flash of revelation, we shall probably never know; but the Dr Pilkington of March 1907 was a changed man. Unlike his monthly reports, his Annual Report for the same year contains *not a single reference to temperatures*, whether of earth or of air. Instead, a new agent makes its debut in the Medical Officer's reports: "Too often", he writes, "the milk is left uncovered, in a warm situation,

> *and exposed to the incursions of the swarms of flies which during the Diarrheoal season begin to invade these dwellings . . .*" [16]

To the best of my recollection, this is the *first time* that house flies were mentioned in connection with disease in Preston, either in the Medical Officer's reports or in any of the reported public debates on the subject. Flies must have been taken so much for granted that until their role in spreading disease was recognised they had been virtually invisible. (A similar blindness seems to have applied to horses and cows, with whose names the flies were soon linked.)

In his report for the following year the Medical Officer added the weight of scientific authority to his case against the fly:

> *Although the part played by the common house fly in the conveyance of such diseases as Diarrhoea has long been suspected, and indeed recognised, in this country, it has of late received much more attention from scientists, bacteriologists and sanitarians.*[17]

After the shock of 1906–7 Dr Pilkington soon recovered his composure sufficiently to return to his long-standing habit of referring to temperature when he wrote about summer diarrhoea (it was, after all, a good predictor of outbreaks) but he never forgot the common house fly. Having at last seen this insect, he took a close interest in its habits and

lifestyle, which now explained so much. In 1907:

It was not until the close of September and the first fortnight of October, when the flies, influenced by the approaching cold, began to gather in the houses, that there was any great loss of infant life.[18]

– an understanding which he rendered in August 1908 with poetic economy:

. . . the dangerous period, associated with the close of summer, the fall of the leaf, and the invasion of the common house fly, has still to be dealt with.[19]

The connection between diarrhoeal sickness and the immediate environment of Preston's 25,000 tightly-packed dwellings lay in the life-cycle and feeding habits of the house fly, and Dr Pilkington tried to make this clear to the members of the Council in his reports:

Since the house fly breeds in rubbish, stable manure, and decaying matter generally, it is obviously desirable that no collections of this kind should be allowed to remain in the immediate neighbourhood of a dwelling house . . .[20]

Entering the houses during the hot weather, and driven into them in vast hordes on the approach of a colder temperature, the flies carry with them upon their hairy feet and legs the germs and particles derived from the filthy matters over which they have recently been promenading in their search for food.[21]

(He was wrong about some of the details, having picked on the wrong part of the fly's anatomy and the wrong means of conveyance: rather than hitching lifts on the hairs of the leg of the fly, the germs were sucked up from the middens by its mouth, and then vomited onto food in the house.)

By 1908, therefore, the killers had been identified, tried, and condemned – by the medical authorities at least – but it was quite another matter to get rid of them. Although Dr Pilkington pointed out that one way of doing this was to remove their principal breeding places, "the middensteads connected with stables and cowsheds situated in the midst of the town", he had recognised that there were practical difficulties in doing so:

Until the services of the horse are entirely superseded by the motor engine, stables in a town cannot be altogether avoided, but certain restrictions are necessary with regard to the midden in which . . . the stable manure must be stored. Where possible, it is better that such manure should be removed each day, but in the majority of cases circumstances render such prompt removal difficult, if not impossible.[22]

For the meanwhile, if he could not get rid of the flies, he could at least do something to prevent them contaminating baby feeds. He had a small card printed with advice on sterilising milk, and keeping it as cool as possible and covered over. These cards were issued by District Registrars to each person registering a birth, and distributed by the Health Visitors to houses where there were infants and young children.[23]

The difficulties in eliminating the middens of stable manure turned out to be political as well as practical, for a full *five years* after their Medical Officer had stated the need for it the councillors still could not be persuaded to authorise orders for their removal. In the autumn of 1912 the Medical Officer, the Town Clerk and two councillors (Dr Brown and Dr Rigg) had decided to issue a notice requiring the removal of horse manure more frequently than once every two or three months; but when the Health Committee met to authorise this decision it received a "deputation from the Horse Owners Association", urging that:

the compulsory application of the order would be a very serious thing to the horse owners of the town, especially those with single or two horses.

The Council debate on this question had an all too familiar ring about it.[24] On one side were those such as Dr Brown and Dr Rigg, who gave the uncomfortable but irrefutable facts of the matter (like James Hibbert 37 years before); on the other were the good old Prestonians who were representing the homely interests of their constituents, or who were content to wait for the problem to go away by itself, but enjoyed a good laugh either way.

Some people, said Dr Rigg, had said the house flies were good insects – they were scavengers – but people did not allow scavengers to walk over their food:

the matter was not one for discussion, but a settled scientific fact, that house flies did a great deal of harm, and had been the means of carrying and spreading germs of typhoid fever, infantile diarrhoea, and some other ailments, including those of tuberculosis. If he were to give them a list of the germs a fly carried as it passed along an ordinary house, they would be astonished . . . the common domestic house fly depended largely on the horse midden for a place to breed.

Other towns, he said, had introduced stringent regulations, and in some the middens were required to be cleaned and emptied twice a week.

To this another councillor (Dr Rigby) replied that the evil was curing itself, since horses were going out of use, and the number of horse middens were reducing themselves automatically. A few years ago, he said, there had been twenty horses in Winckley Square, and now there were only two. As regarded the disease caused by flies, he thought the evils much overstated:

Councillor J.Sumner was a living instance

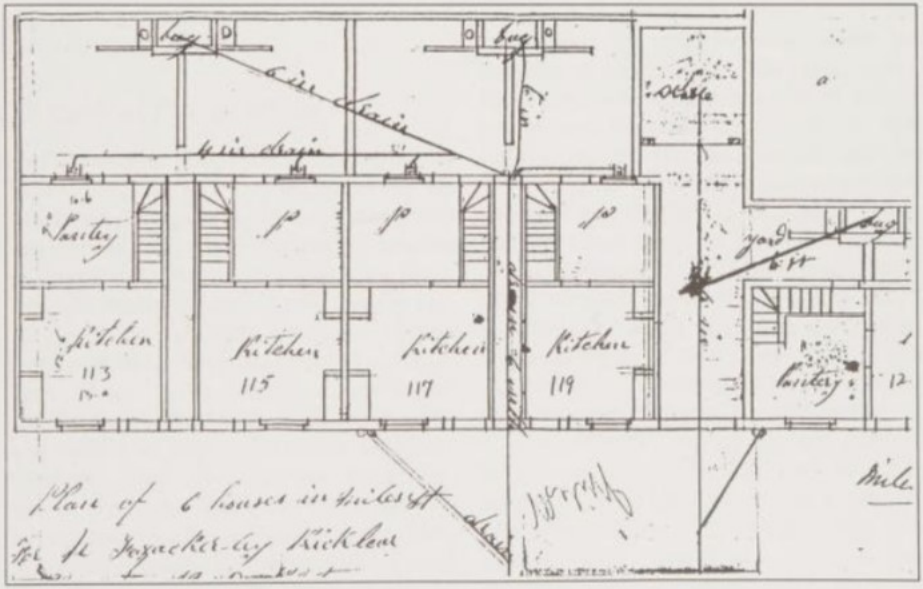


Fig. 83: Part of a building plan for six houses and a stable in Miles Street, 1875. (This block stood on the site now occupied a car park between Emmanuel Church and the Spar shop on Plungington Road.)

that the danger from flies was not so great – (loud laughter) – for he had lived near a midden all his life. (Loud laughter.)

Dr Rigby lived at No.15 Winckley Square, and Councillor Sumner, the butt of this merriment, was an accountant living nearby, at No.8 Latham Street. Neither of these addresses was heavily afflicted by Summer Diarrhoea. It was the great swathes of terraced housing round the mills in the outlying districts which suffered; and here the contribution of Councillor Parkinson, speaking on behalf of the Horse Owners Association, was more to the point:

Most of the middens that were the greatest nuisance belonged to people who had only one horse and lived in the congested districts. But they were poor men. They had got to get a living by carting or coal dealing and the midden stack was worth 30 shillings a year.

The house flies and the middens found several defenders in this council meeting. Councillor Hubbersty said "there had been a good deal of slandering of the poor fly", and Councillor Middlebrook (who lived in the country) claimed that "horse manure in itself was very healthy". What mattered was not what the flies did in the horse manure, but what they did afterwards in the houses:

A fly might be an insect that spread disease, but he felt that the great cause of infantile diarrhoea was the slum property. In the poorest houses, where the mothers were careless and indifferent, the houses were not properly clean, and the food not properly protected. (Hear, hear.)

So the wheel came full circle, horse middens were reprieved, and the blame for infant mortality returned to Preston's houses and the domestic regime of Preston mothers.

CHAPTER VII

HOUSING AND HEALTH ASSESSED

THE TITLE of this book is an obvious over-simplification, and I am sure that many readers will have realised that over-simplification did not end with the title.

Crudely summarised, what the book has said so far is that, throughout the reign of Queen Victoria, Preston was a very unhealthy place to live in, and an exceptionally bad place to be *born* in; that the main reason for this was the adoption of a particular type of terraced housing with very small back yards reached by through-lobbies; and that attempts by a minority of enlightened men to introduce appropriate remedies were either blocked or postponed by others who were stupid, or selfish, or both.

This chapter assesses the justice of such a crude caricature of Preston's housing history in the last century in the light of historical perspectives, contemporary opinions, and some statistical evidence.

Historical Perspectives

Perhaps the first thing to be said is that I have implied that the past can be judged by the standards of the present. To do so would be a bad mistake, because in the long perspective of demographic history as a whole we in the late 20th century "western" world live in a totally different age from all others. Historically, until this century birth rates have always been close to a biological maximum (dependent on the fertilty of the population and various cultural factors such as age of marriage). They have also been higher than normal levels of mortality, so that populations have grown by natural increase to the limits of available food. In remote periods such cumulative increases were wiped out periodically by exceptional onslaughts of death caused by disasters such as famine, plague and war. Then, from the 17th century onwards, as agricultural productivity improved and regional and international trade grew, such peaks in mortality were gradually eliminated from western Europe, allowing populations to grow by natural increase – apparently without check.

During the 19th century the annual birth rate in England as a whole remained fairly steadily in a range between 30 and 35 per thousand of population, and did not fall below 30 until 1894. The death rate meanwhile was much lower, fluctuating between 20 and 25 per thousand until the 1880s, when it began to fall (rather erratically) to about 14 or 15 per thousand between 1900 and 1914. For comparison, by the 1930s the birth rate, at about 15 per thousand, was almost down to its present level of about 13; and the death rate was only a point or so lower.

Preston, like most industrial towns, reflected both trends but at much higher levels. Here, birth rates ranged between 36 and 42 per thousand for almost the whole of the 19th century, and did not fall below 35 until the 1890s; and the death rate fluctuated between about 26 and 33 per thousand in the same period. Neither birth rate nor death rate even *began* to come down towards modern levels until after 1900; and when they did, the Medical Officer of Health expressed alarm about the implications of falling birth rates, which he attributed to unnatural, dangerous and immoral practices imported from America.[1]

Viewed in this context, therefore, the levels of mortality were perhaps not as shocking as they must appear to us. On a graph of infant mortality rates in Preston in the 19th century, with a maximum at about 300 per thousand births, the present rate of about 12 per thousand would hardly register at all. When the birth rate was still running at the

Fig. 84: The Hewitson memorial in Preston Cemetery: Maggie, d. 1863 aged 3 years 9 months; Ethelind , d. 1865 at the same age; and Amy, d. 1870 aged 3 months.

Fig. 85: The Latham family memorial: Ellen, d. 1893 aged 9 months; Annie, d. 1897 aged 8 weeks; Mary Ann, d.1897 in her 6th year.

Fig. 86: The Gifford memorial: Elizabeth, d. 1878 aged 2 years; Arthur, d. 1881 aged 1 month; Charles, d. 1884 aged 3 months; Helen, d. 1884 aged 18 months; Harold, d. 1885 aged 2 weeks.

Fig. 87: The Cranshaw memorial: 10 infants and young children from 1856 to 1873, and finally Elizabeth d. 1880, aged 9 – "she lived beloved and died lamented".

traditionally high level, the death of infants and small children was perhaps both natural and *necessary*: an apparently random alternative to family planning. This is a point of view which should at least be considered; though I think it belongs in the same class as justifying fox hunting as a means of controlling the population of foxes.

Against such arguments, one has to recognise that people of the time who left any recorded opinion on the matter did not view it so coldly. John Clay was obviously appalled by the results of his investigations in the 1840s, and he himself was afflicted by the deaths of some of his own children (as one can read on a surviving monument on the site of Christ Church, beside County Hall). Among "the middle classes" he was far from alone in such experiences for the rest of the century, as many late 19th century stones in Preston cemetery testify: including one on which the journalist and historian, Anthony Hewitson, mourns the loss of daughters in 1863, 1866 and 1870. (See figure 84 opposite)

Contemporary attitudes were probably expressed well enough by the wording of the resolution of the Preston Sanitary Association in 1885 (at the meeting chaired by Anthony Hewitson):

> *. . . the excessive death rate of Preston is a source of great loss, sorrow, and suffering to the community . . .*[2]

I conclude that the people living in Victorian Preston were almost as horrified by the mortality they suffered as we would be, and would have prevented it if they could.

The next question is whether Preston's housing was to blame; and if so, to what extent, and why.

The first thing to be said about this is that, in the general scale of mortality at the time, other rapidly growing industrial towns were similar. In all Victorian towns the consequences of poverty, over-crowding, bad housing, shortage of water and inadequate sewerage and sanitation, combined with contemporary ignorance of the causes and modes of transmission of disease, were much the same.

Second, while I have concentrated almost entirely on infant mortality, and on infant diarrhoea as one main cause of it, preventable death carried off not only older children, but also many adults in the prime of life; and there were other causes of death which killed larger numbers of children than diarrhoea.

According to the Medical Officer's reports, more than twice as many babies perished from premature birth, "general debility" and so on. Likewise, far more deaths were ascribed to "teething": the deaths being caused not by the teeth but by horrifically mistaken treatments prescribed by doctors for the fever and convulsions associated with teething (such as lancing the gums and giving emetic medicines to cause vomiting). Infectious diseases such as measles, scarlatina, whooping cough, croup and diphtheria were frequently fatal. So were respiratory ailments such as bronchitis, which killed at a lower rate than diarrhoea, but for longer periods during the winter time. Respiratory disease might be put down to cold and damp houses, or to the domestic environment generally when the air was polluted by the smoke of some thirty thousand chimneys. Otherwise, none of these causes of child mortality can be directly related to houses as such; although the domestic regime of large families in small houses must have played a part in spreading infectious diseases picked up elsewhere, such as in the schools or the mills.

Nevertheless, as the Sanitary Association was told in 1885, Preston was distinguished from other large towns by its exceptionally high levels of mortality in general; and especially by infant mortality, which was rising towards the end of the century. If the cause lay in some locally distinctive characteristic of the housing, or in a combination of this with some other factors, we may put the matter to the test in two ways: first, by considering what was said by those who investigated it at

the time; and second, by comparing the mortality of different parts of the town.

Contemporary Explanations

Contemporary opinion usually stressed a range of factors which were all, broadly speaking, "social". In 1882 a popular magazine of the time, *Good Words*, printed a piece by an anonymous "Lancashire Parson" about his experience in an unnamed cotton manufacturing town – which the *Preston Guardian* had no difficulty in identifying as Preston.[3] In the middle of this article the parson mentioned that "during a fortnight's cemetery duty in the early autumn, and in the absence of any epidemic, out of nineteen funerals only four were over the age of seven, and the large majority were mere infants". This had caused him to reflect on what was happening to the home life of the working classes in Lancashire, and he came to some chilling conclusions:

> *To thousands of children in this populous county . . . the word "home", in its ordinary English sense, is a word that is practically meaningless . . . It might be defined as a red-brick house opening off a narrow street and containing four or five little rooms, rented by two persons whom the child seldom sees in daylight, and known respectively as "father" and "mother"; which is locked up in the morning when the mill-bell goes for work, and is open again at night when he gets his supper and goes to bed.*

In a nutshell, the reason for the vulnerability of children, and the cause the death of far too many, was the cotton industry:

> *The mill is the unfailing resort for employment, and is much preferred by the female section of the community to domestic service . . . for a smart young weaver or spinner is soon expert enough to earn 18s or 21s per week, besides having her evenings and Sundays all to herself.*

By enabling young people of both sexes to earn good wages, the cotton industry encouraged "boys and girls not out of their teens" to get married. Marriage made no difference to the working life of the young wife, who continued her ten hours a day as before; and when a baby was born she withdrew from the mill for the shortest possible time:

> *. . . and when she is well enough to resume her place at the loom, the baby is placed in the care of some old crone, who is past work herself and ekes out sufficient to live on by taking charge of five or six of these luckless babes for . . . a shilling or two a week. The stipulations are very exact: the child is not to be brought before six in the morning, nor to remain after six at night.*

Far ahead of professional medical opinion, this Lancashire parson identified a social and psychological hazard which could jeopardise a young child's chances of surviving other hazards, describing in his own words what is nowadays known (more succinctly but with less empathy) as maternal deprivation: "there is no chance of that instinctive attachment and bond of affection being formed which insensibly grow up between mother and child, and constitute the very life and strength of a mother's influence".

Between 1851 and 1881 the number of people working in Preston's mills increased from about 16,000 to almost 27,000, and the proportion of women among them also rose, increasing from just over half to two-thirds of the work force in 1881 and almost three-quarters in 1901. Since this is the period when infant mortality was rising, there would seem to be an obvious connection. On the other hand, the total number of mill-workers was contracting in those last twenty years, and although the proportion of women was higher in 1900 than it had been in 1881 the *number* was slightly lower; and only about one in three of them was married. But this

still means that .some 5,000 married women were spending ten hours a day in the mills.

A sub-committee of the Council, reporting in 1902 on the Infantile Death Rate,[4] began with the same general causes – "the employment of female labour in mills", and "nursing out"; but added some more material points. Chief among these were: "the very habits of the operative class themselves, in their ignorance of the first laws of health"; having children in quick succession; inappropriate feeding (of which, more below); and "insurance", which enabled parents to make monetary gain from child deaths – and which they mentioned in the same sentence as "the use of sleeping stuffs to quiet a fractious child". To these credible possibilities they added another, which must have been a reflection of current anxieties about the falling national birth rate:

The increasing use of means to prevent conception or procure abortion, which, if unsuccessful, must have a prejudicial effect on the health of the child.

(Women readers will need no reminder that this was a committee of men.)

The inappropriate feeding of babies had already been brought to the attention of the Council in 1900 by their Medical Officer, who had found infants, both at the places of their nursing out and in their own homes, "regaled with such things as shellfish, tripe, tinned salmon, and pigs' feet".

The Committee also noted "the alarming increase of consumption, by young women and mothers, of alcoholic beverages". This was probably true. It was well known that gin offered "the quickest way out of Manchester" – which brings us back to the home conditions from which mothers might understandably have tried to escape by such a route.

Although it concentrated mainly on the social causes of infant mortality, the sub-committee could not escape a glance at the architectural causes:

Many houses of the poorer classes are crowded together, and their yards small, badly paved, largely taken up by the privy and ashpit, and the subsoil is honeycombed and infiltrated with human and animal excrement.

The Preston Sanitary Association in 1885 (at its meeting mentioned in chapter VI above) had produced some interesting alternative explanations for the high death rate in the town, almost all of them associated, one way or another, with the housing.[5]

The principal speaker, Mr James Mckay, pointed out that in the last quarter of 1884 there had been 320 deaths from bronchitis and 139 from "inflammation of the lungs", diseases which he said were "largely affected by climatic conditions" (a class in which he also included 225 deaths from "consumption", i.e. tuberculosis). In explanation he quoted the emphatic opinion of Dr Taylor, Medical Officer of Health for Scarborough, that high death rates from such diseases occurred in towns which were exposed to *sea winds*. In Preston humid air off the sea became trapped in the gridiron of terraced housing, where it was then polluted by festering middensteads. He also pointed out a statistical oddity: that whereas in England as a whole men died faster than women (in the proportion of 108 men to 100 women in 1884), in Preston the ratio was reversed. What could it mean?

It means that . . . the women, whose duties keep them at home, are subject more persistently to evil physical conditions than men who are absent at work . . . Does not common sense dictate that it is the constant, unremitting, unredeemed breathing of the dead calm air of our blocked streets, laden with debilitating pollutions arising from adjacent middens and slops?

An unexpected connection between the privy-midden system and the building of houses was revealed by Councillor Parker in

reply to one of the clergy who had said that it was "a notorious fact that refuse of a character most detrimental to the public health was repeatedly, with the permission of the Sanitary Authority, used to make the foundations of houses":

He admitted that sand had been taken away from the land and night-soil substituted, and that the Corporation had not paid the attention to sanitary matters which they ought to have done for some time back.

The reason for this extraordinary practice was that, for lack of a refuse destructor, the scavengers had either scattered their collections of human dung on open ground, or, with the cooperation of builders and the connivance of officials, buried them under the houses.

For the purposes of this chapter, the most telling contributions to the meeting were offered by Mr W.E.M.Tomlinson himself and by Councillor Joseph Harding: respectively the leader and one of the members of the Builders' deputation which had scuppered the work of Mr Hibbert's Bye-Laws Committee in 1875 (see chapter III above). Mr Harding, who as an architect and surveyor had "an experience of something like twenty years, looking after cottages", was in no doubt that

this scourge of the death rate was caused by the houses in which they lived:

their lack of ventilation, poor-quality bricks which were too porous, inadequate drains and defective foundations.

Good though these revelations are, the prize for candour goes to Mr W.E.M.Tomlinson, MP; the very Mr Tomlinson who had developed the Adelphi and Plungington estates, and had led the campaign against bye-laws and back roads in 1874–6. Speaking at surprising length on the subject of bye-laws, he recalled that in 1875 the Corporation had "very courteously received the observations of any persons who were interested in one way or another in the construction of houses or the laying out of land", and the result was the bye-laws had undergone "considerable modifications". He himself had "made some few suggestions at the time", and

There was one question of principle on which at the time he entertained a strong opinion – but one which he had perhaps modified somewhat since – and that was with regard to back passages between rows of houses. The bye laws made a particular mode of construction compulsory, but subsequently were not regarded as sufficient . . .[6]

If both Mr Harding and Mr Tomlinson were now pleading guilty on behalf of a type of housing which Mr Tomlinson had done so much to promote, there is hardly any need to send a jury out on the case. Nevertheless, we should do what we can to test their confessions against such forensic evidence as we can find.

Mortality Rates Compared

If high death rates were connected in some way with particular types of housing, this should be revealed by differences between one part of town and another.

For this purpose I have used a standard of assessment which was mentioned at the Sanitary Association meeting in 1885:

Professor Gairdner, at the Social Science meeting at Birmingham, held against all comers that the mortality of babes under one year of age is the true test of a town's sanitary condition.[7]

The following test of housing is therefore based on levels of infant mortality within the town, comparing one ward with another.

The Medical Officer's annual reports are accompanied by appended tables which contain vital statistics for each ward. Although he did not normally calculate the rate of infant

mortality for each ward, from 1883 his tables include the figures from which we can calculate the rates ourselves: the number of births in each year (given in one table) and the number of infant deaths (given in another).

The series is continuous from 1884 to 1910, but a reorganisation of the wards in 1900 – replacing six big wards with twelve smaller ones within slightly different boundaries – makes direct comparison throughout the series difficult.

Also included in the Reports from 1883 onwards are pairs of maps showing the locations of infant deaths during the year, one for all such deaths and the other for those caused by infant diarrhoea. These are immensely valuable for distinguishing between different localities within wards.

It is a great pity that the Medical Officer did not begin printing such detailed information about infant mortality as soon as he was appointed in 1874. Had he done so, we would have been able to test Mr Hibbert's assertion in 1875 that "the rate of mortality is higher in the closely-packed newly-erected dwellings – say in St Peter's Ward, – than in the oldest parts of the town. The death map in the surveyor's office shows this irrefutably."[8] If true, this surely laid the blame on the system of building new houses at that time; that is, with through-lobbies to pairs of small back yards. The eight-year gap is frustrating, but on the other hand, perhaps it makes one's emergence from the tunnel of darkness in 1884 more interesting.

Ward boundaries from 1880 to 1900 are shown on the sketch map (figure 88). *St John's Ward* was filled mostly with the oldest working class housing in Preston, built mainly between 1790 and 1825, including the former handloom weavers' colony south of Horrocks's Yard works which was crammed with back-to-backs and cellar dwellings, and generally had the worst back yard accomodation in the town. It had already become a slum when Anthony Hewitson described it in the 1860s.[9] Housing of a similar period occupied the town-centre salient of *Park Ward* (which had formed Trinity Ward before 1880, and was restored as such in 1900), but the greater part of this ward was similar to *St Peter's* and *Fishwick*: cotton mill wards almost exclusively occupied by working class terraced housing, and still growing. *Christ Church* contained the comfortable middle class quarter centred on Winckley Square, built mostly between 1820 and 1840; and *Maudland*, although it included the Pedder estate which was much the same as Plungington but on a smaller scale, was now dominated by the growing middle class suburb of Ashton. (All middle-class houses had cellars and most of

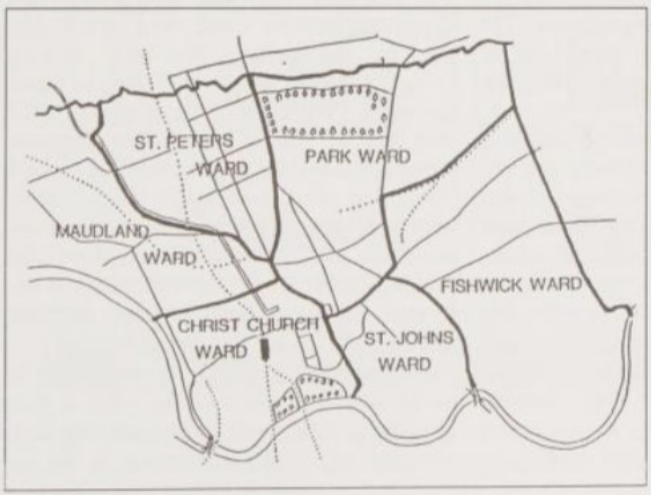


Fig.88: Ward boundaries 1880-1900

Fig. 89: Ward boundaries 1900–1914.

them had resident servants.)

Thus described, the six wards can be divided into three crudely defined categories according to the type of housing most characteristic of them: town centre slum (St John's); middle class (Christ Church and Maudland); and cotton mill workers' terraced housing (St Peter's, Park and Fishwick). For ease of reference in the accompanying tables and graphs (figures 89-91), I have arranged them in this order, placing the post-1900 wards likewise, so that the same localities appear in the same order as far as possible.

In order to assess the relative vulnerabilty of the wards to infant mortality between 1884 and 1900, I have selected three pairs of "good" and "bad" years: 1888/1889, 1892/1893 and 1896/1897.

The table and charts show that St John's Ward and Park Ward (containing the old Trinity ward) were fairly consistently bad, and that in "good" years such as 1892 and 1896 they were worse than the cotton mill wards, St Peter's and Fishwick. By contrast, in the succeeding "bad" years, the cotton mill wards were the worst. It therefore seems that, whatever was causing infant mortality in the bad years, the cotton mill wards with relatively new housing were more vulnerable to it; and that James Hibbert had been right in 1875.

In the re-arranged wards after 1900, as the general level of mortality began its erratic fall, this pattern can be seen changing. At first, in 1901 (a bad year) the worst levels of infant mortality were still in the cotton mill localities: Maudland, St Peter's and Moor Brook (collectively representing the former St Peter's); Park Ward and Deepdale (the cotton mill areas of the former Park Ward); and Ribbleton and Fishwick (together comprising the whole of the former Fishwick Ward). Thereafter, St John's and Trinity were most consistently among the worst, while Ribbleton and Fishwick improved remarkably, and Maudland, St Peter's and Moor Brook only patchily. But perhaps the most striking change is in the relative vulnerabilty to infant diarrhoea. Comparing the good year of 1905 with the bad year of 1906 (when diarrhoea struck again heavily, after a run of three good years), the cotton mill wards seem to have been less vulnerable than they had been before 1900, and far less than Trinity Ward now was. By 1909/10, not only was infant mortality now much lower in all the wards, but their relative vulnerability was greatly reduced.

The most likely reason for this change in the relative vulnerabilty of the wards is that, whereas St John's and Trinity had long been saturated with very old housing, in the six

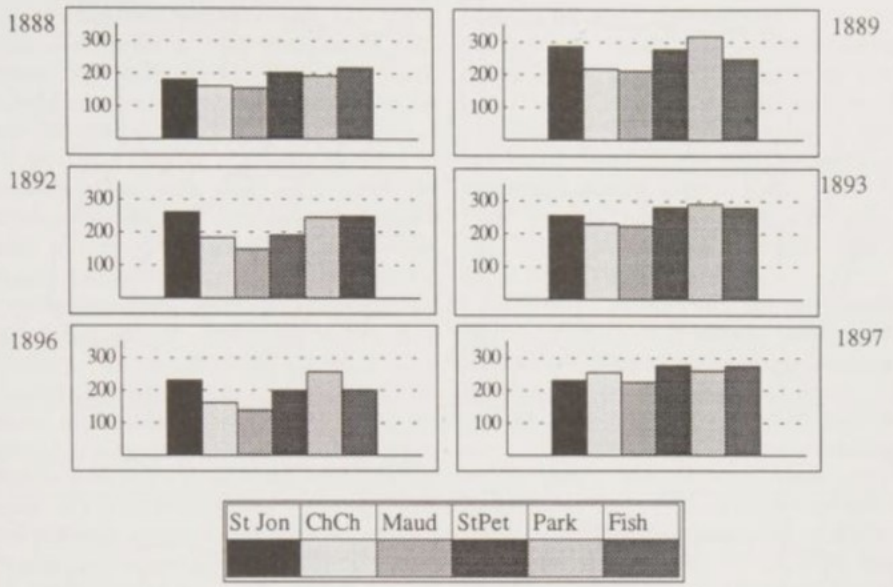


Fig. 89: Relative vulnerability of wards to infant mortality, in "good" and "bad" years between 1888 and 1897. (See appendix for associated table.)

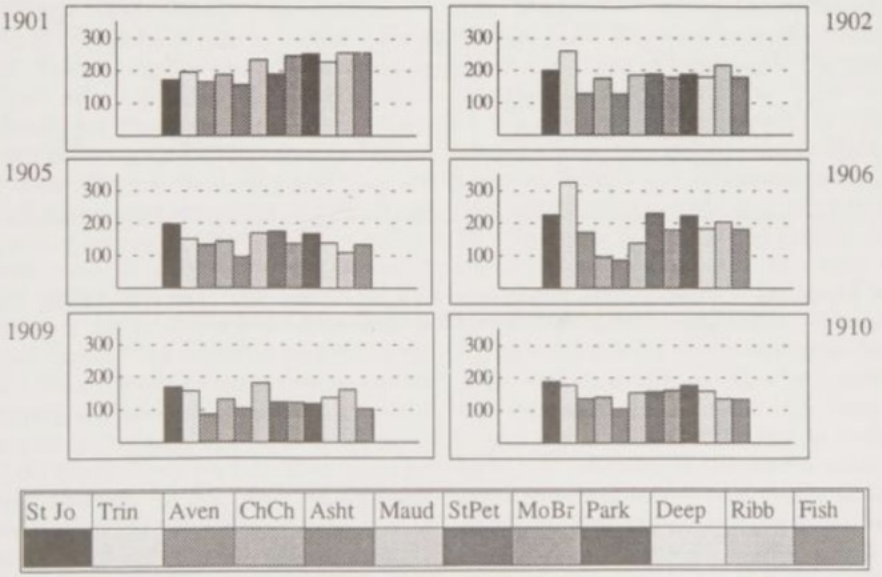


Fig. 90: Relative vulnerability of wards to infant mortality, in "good" and "bad" years between 1901 and 1901. (See appendix for associated table.)

Fig 91. The distribution of infantile diarrhoea deaths in Preston: 1884, 1901, 1905 & 1906 (Taken from Medical Officer of Health Reports for those years).

cotton wards to the north and east new housing to reformed standards was still being built. From year to year these wards contained increasing numbers of households, leaving an ever-diminishing proportion in the pre-1880 type of housing.

Since the number of women working in Preston cotton mills was pretty much the same in 1910 as it had been in 1900, it is now hard to believe that working mothers were mainly to blame for infant mortality; or that the housekeeping skills of working-class mothers in general could have improved so abruptly. Nor had the wind ceased to blow from the sea. We must look elsewhere for the cause of Preston's now fading infamy: the *special* quality which had been giving Preston that little bit extra in the mortality tables. We must look at Dr Pilkington's "death maps", to see precisely where in each ward the infantile deaths were occurring.

At the start of this series of maps in 1884, i.e. when the building of improved terraced housing with back roads (under the Improvement Act of 1880) had hardly begun, deaths from infantile diarrhoea were distributed fairly evenly throughout St John's, St Peter's, Park, and Fishwick wards (though the outer or eastern half of the latter was clear); in Christ Church and Maudlands they were concentrated mainly in the locality where the boundary between them ran along Marsh Lane, the middle class areas being clear. In 1901, infant deaths as a whole (from all causes) were also fairly evenly distibuted throughout the cotton mill wards, including some which had occurred in the newly-built streets with back roads, such as "the Saints" in Park Ward and "the Canary Isles" in Deepdale Ward; but the infantile diarrhoea map shows that there had been no deaths from this cause in the Saints or the Canary Isles. On both these maps the worst-affected locality was Plungington, where diarrhoea had killed 20 infants in St Peter's Ward and 22 in Moor Brook Ward.

Comparing the "good" and "bad" years of 1905 and 1906 is equally instructive. In 1905, when infant mortality for the town as a whole had fallen to the lowest level so far recorded (150 per thousand), one baby died from diarrhoea in the Canary Isles and none in the Saints, but six had died in Moor Brook Ward and 21 in St Peter's – more of them in the post-1850 houses between Plungington Road and Brook Street than in the pre-1850 housing round Adelphi Street. In the following "bad" year of 1906, diarrhoea killed two in the Canary Isles, none in the Saints, eight in Moor Brook and 27 in St Peter's.

Elsewhere in the town, the incidence of diarrhoeal death in 1906 was lower in the eastern mill district, but was once again confined to the oldest streets and those with through-lobby houses. In the whole town the worst affected individual *streets* were Hopwood Street and Newton Street which formed a single small block on the east side of Trinity Ward (twelve deaths in all), Higginson Street at the north end of the same ward (five), and Albert Street in St John's (seven). Higginson Street and Albert Street had been built for handloom weavers about 1790 and 1825 respectively, Higginson Street with a back "midden-pan" and no through-lobbies to the back yards. Hopwood Street and Newton Street also contained midden-pan rows without through-lobbies.

The result of these comparisons of infant mortality rates, both between wards and between one locality and another within wards, does seem to be that it was the type of housing, rather than the culture and hygienic habits of the operative classes who lived in them, which made the fatal difference between Preston and other towns. It seems equally clear that the reason was infant diarrhoea associated with that type of housing. The Victorian terraced houses with through lobbies instead of back roads, and very small back yards containing rarely-emptied middens close to the back rooms, were usually almost as bad as their Georgian predecessors, the midden-pan rows without any other access to the middens; and had been becoming worse.

Conclusion

The hundreds of houses surviving in Preston from the period covered by this book, now perfectly habitable, are living proof that there is nothing intrinsically wrong with them as *houses*. Had they been isolated from all the other circumstances of the Victorian age they would have been quite healthy dwellings. The trouble was, they and their households were at the mercy of circumstance.

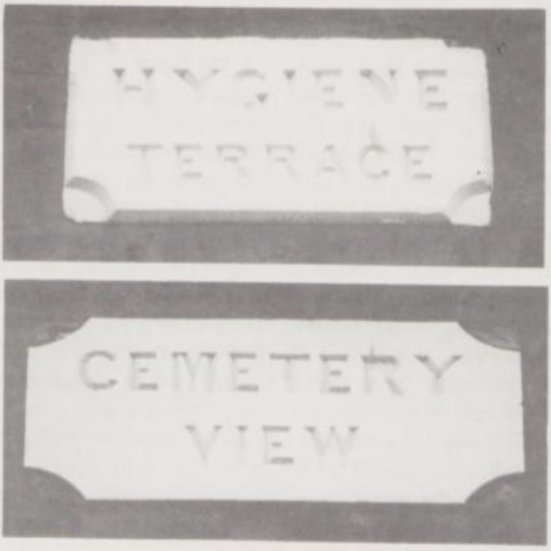
Preston houses and households shared the same handicaps as most other cotton towns in Lancashire: the terminal phase of a demographic era in which high birth and death rates prevailed; the domination of the cotton industry, employing younger people of both sexes, and increasingly the female sex, for six days a week and ten hours a day; primitive domestic technologies; and contemporary ignorance of the causes of disease, with consequent powerlessness to combat it.

In short, it was all too easy for people to be dirty and ill-fed, and altogether too difficult for them to be clean and well-nourished. The obstacles to good housekeeping would have challenged the ingenuity of the most conscientious twentieth century houseperson.

But Preston does seem to have contributed some marginally greater handicaps than other towns. These were principally associated with the standard form of housing; which placed middens and privies in close proximity to houses, and made clearing them out very difficult. Even this would not have been as deadly in its effects, however, if the Corporation had been more interested in spending money on refuse disposal than it was – from 1884 – in building the largest inland dock in the world. All that accumulated human excrement just had to be removed from the vicinity of the houses.

Epilogue

In 1910 the Medical Officer of Health reported a new threat to human life in Preston: shellfish brought in from Lytham and St Annes, contaminated by sewage which had flowed down the Ribble.



The two plaques above are on terraces at the east end of New Hall Lane

	Preston.	28 Towns.	Lancashire.	England.	Blackburn.	Bolton.	Oldham.	Manchester.	Salford.	Liverpool.	Birkenhead.	London.	Leicester.	Birmingham.	Bradford.	Halifax.	Cardiff.
Population to acre	26·7	35·0	.....	.....	15·8	45·3	25·9	78 8	38·1	110·0	23 6	63·4	41·5	50 1	19·4	20·3	12·7
Births per 1,000 of pop.....	39·0	34·9	.....	33·2	36·5	31·6	32·1	24 8	24·3	34·9	37·8	33 3	35·9	34 2	29 5	30·9	42·9
Deaths per 1,000 of pop.....	29·9	21 7	23 5	20·1	24·5	25·2	23·7	25·8	22 3	25 3	19 5	20·2	23 0	20·1	21·3	22 9	26·6
Babes (under one year)...	206	156	174	14·2	172	213	175	169	15 6	190	157	136	199	170	198	180	199
Adults between 1 and 60	17·5	12 8	.....	11·1	13·8	11·1	14·1	16·1	14·2	16·3	11·2	12·0	11·7	12 0	11·5	13 6	15·7
Old age (over 60).....	101·6	79 5	.....	72 9	111·0	93·5	104·5	101·3	80·3	75·1	61·8	76·0	88·6	80·8	95·4	80·5	76·4
Zymotic death rate per 1,000	5·28	2·41	3·05	2 20	2·50	4·0	2·10	2·12	3·14	3 12	1·56	2 06	2 81	2 58	2·42	2·63	6 54
Diarrhœa ,, ,,	1·62	0·52	0·74	0·47	1·06	1·10	0 59	0 78	0·93	0·73	0·33	0·31	0 35	0·94	0·70	0 24	0·79
Fever ,, ,,	0·71	0 34	.....	0·33	0·67	0 31	0·15	0·43	0 72	0·27	0.37	0 25	0·08	0·23	0·20	0 49	0·36
Whooping Cough ,,	0·97	0·38	.....	0·29	0·00	0 27	0·88	0·39	0·55	0·40	0.00	0·26	0·39	0 81	0 68	0·73	0 16

The death-rate of Lancashire at large is 6·4 less than that of Preston; and the average whole death-rate of the 28 largest towns is 8·1 less than ours; but, then, 32 more babes die in Preston out of every 1,000 born than in the rest of Lancashire, and with us 2·23 more people perish from zymotic diseases than in the rest of the county, and nearly three per cent. more than in the 28 largest towns, in which great centres the infantile mortality is less than in Preston to the extent of 50 out of every 1,000 born.

The death-rate of Bolton is 4·7 less than Preston, yet Bolton has 213 infant deaths to Preston 206. But it has 1·28 less zymotic disease—far less diarrhœa—though its infants are more numerous—not half the fever, not a third of the whooping cough. Its old people do not die so quickly, and the death-rate of its adults is 6·4 less than in Preston.

Blackburn's death-rate is 5·4 less than Preston. Its old people succumbed more rapidly than in Preston; but the deaths from zymotic diseases were not half what they were in Preston; it had notably less diarrhœa, not one-half of the fever, not a third of the whooping cough.

Manchester again had a death-rate 4·1 less than Preston. Its old men perished no faster, nor its adults so quickly, and its infantile deaths were 37 less out of every 1,000 born; and it had not one-half the diarrhœa, little more than half the fever, and not half the whooping cough.

The death-rate of Oldham is 6·2 under that of Preston; slightly more of its old folks perish, but the deaths of its adults are correspondingly low, and its proportion of deaths among every 1,000 babes born is 31 less than in Preston; its zymotic deaths are less than half ours; its cases of diarrhœa only about one-third of ours; its fever little more than a fifth of ours; its whooping cough being the only fatal complaint that anything like approaches ours.

Table of Health Statistics by Preston Sanitary Association 1885 (See text pages 84 & 97)

	1884	1888	1889	1892	1893	1896	1897	1900
whole town	222	*188*	***264***	*216*	***268***	*204*	***263***	*236*
St John's	**296**	181	**286**	**260**	254	**230**	230	**266**
Christ Church	156	160	216	182	228	161	254	193
Maudland	184	153	210	148	223	138	224	187
St Peter's	**226**	**201**	**277**	190	**280**	199	**275**	**250**
Park	**247**	**192**	**315**	**243**	**290**	**256**	258	**245**
Fishwick	**250**	**217**	246	**247**	**278**	200	**273**	**240**

Infant mortality per 1,000 births by wards, selected years of low and high mortality between 1884 and 1900.

The wards are arranged in clockwise order starting at St Johns, so that those containing the principal cotton mill districts to the north and east (St Peter's, Park and Fishwick wards) form a sequence running from west to east. Years of low and high mortality occurred in conveniently consecutive pairs, indicated by the thicker lines. 1884 and 1900 are the first and last for which statistics are available for these wards: boundaries were altered in 1901, replacing the 6 wards shown here with 12. St Peter's being divided between three and Fishwick between two.

[*Shading indicates wards worse than the average for the whole town.*]

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
whole town	***218***	*188*	*156*	*183*	*150*	***200***	*158*	*156*	*137*	*156*
St John's	172	**200**	**158**	**185**	**197**	**225**	**164**	**185**	**169**	**189**
Trinity	195	**260**	157	**220**	**151**	**325**	**159**	**214**	**156**	**177**
Avenham	166	128	118	99	135	171	153	80	86	136
Christ Church	189	176	**178**	177	145	97	155	**171**	131	140
Ashton	157	127	138	166	95	87	106	106	103	105
Maudland	**234**	185	**167**	**219**	**169**	138	**160**	**182**	**181**	153
St Peter's	190	188	**164**	**185**	**175**	**230**	**175**	**162**	122	**157**
Moor Brook	**247**	178	**163**	**184**	137	179	**182**	**157**	121	**161**
Park	**252**	**189**	**165**	179	**167**	**223**	**184**	136	118	**176**
Deepdale	**227**	179	107	183	139	182	137	139	136	**158**
Ribbleton	**256**	**217**	**203**	174	109	**204**	**168**	155	**161**	135
Fishwick	**256**	179	113	172	135	181	113	135	103	133

Infant mortality per 1,000 births, by wards, between 1901 and 1910.

Beginning with the two old town-centre wards (Trinity now separated from Park Ward), then clockwise, the former St Peter's Ward now divided between Maudland, St Peter's & Moor Brook Wards; and the former Fishwick Ward now divided into Fishwick Ward and Ribbleton Ward.

[*Shading indicates wards worse than the average for the whole town.*]

Vital statistics 1838-1914									
	PRESTON							England & Wales	
Year	Total pop'n	No. of births	Birth rate	Deaths under 12 months no.	/'000	Total deaths	Death rate per '000	Birth rate	Infant death rat /'000 birt
1838	45,540	1,833	40.3			1,286	28.2	30.3	
1839	47,350	1,950	41.2			1,302	27.5	31.8	151
1840	49,170	1,999	40.6			1,993	40.5	32	154
1841	51,000	1,974	38.7			1,508	29.6	32.2	145
1842	52,840	1,944	36.8			1,550	29.3	32.1	152
1843	54,680	1,975	36.1			1,459	26.4	32.3	150
1844	56,520	2,200	38.9			1,380	24.4	32.7	148
1845	58,360	2,293	39.3			1,635	28	32.5	142
1846	60,200	2,475	41.1			2,189	36.4	33.8	164
1847	62,050	2,268	36.6			2,059	33.2	31.5	164
1848	63,900	2,223	34.8			1,550	24.3	32.5	153
1849	65,750	2,403	36.6			1,751	26.6	32.9	160
1850	67,000	2,649	39.2			1,745	25.8	33.4	162
1851	69,450	2,803	40.4			2,241	32.3	34.3	153
1852	70,850	2,998	42.3			2,284	32.2	34.3	158
1853	72,250	3,072	42.5			2,346	32.5	33.3	159
1854	73,600	3,037	41.3			2,013	27.4	34.1	157
1855	75,000	3,071	41			2,557	34.1	33.8	153
1856	76,400	3,151	41.2			2,251	29.5	34.5	143
1857	77,800	3,286	42.2			2,131	27.4	34.4	156
1858	79,200	3,082	38.9			2,545	32.1	33.7	151
1859	80,600	3,399	42.2			2,111	26.2	35	153
1860	82,000	3,381	41.2			2,236	27.3	34.3	148
1861	82,985	3,626	43.7			2,585	31.2	34.6	153
1862	83,231	3,522	42.3			2,411	29	35	142
1863	83,477	3,388	40.6			2,142	25.7	35.3	149
1864	83,686	3,422	40.9			3,432	29.1	35.4	153
1865	83,932	3,338	39.8			2,708	32.3	35.4	160
1866	84,178	3,535	42			2,854	33.9	35.2	160
1867	84,424	3,732	44.2			2,608	30.9	35.4	153
1868	84,670	3,710	43.8			2,798	33	35.8	155
1869	84,916	3,434	40.4			2,248	26.5	34.8	156
1870	85,162	3,486	40.9			2,406	28.3	35.2	160
1871	85,427	3,438	40.2			2,541	29.8	35	158
1872	85,654	3,704	43.2			2,294	26.8	35.6	150
1873	86,000	3,558	41.4			2,899	33.7	35.4	149
1874	86,000	3,582	41.7			2,962	34.4	36	151
1875	86,000	3,499	40.7			2,581	30	35.4	158
1876	86,600	3,623	41.8			2,331	26.9	36.3	146
1877	87,000	3,601	41.4			2,336	26.9	36	136
1878	87,300	3,697	42.4			2,502	28.7	35.6	152

Vital statistics 1838-1914									
	PRESTON							England & Wales	
Year	Total pop'n	No. of births	Birth rate	Deaths under 12 months no.	/'000	Total deaths	Death rate per '000	Birth rate	Infant death rat /'000 birt
1879	87,600	3,403	38.8			2,395	27.3	34.7	135
1880	88,000	3,475	39.5			2,425	27.4	34.2	153
1881	96,524	3,489	36.1			2,014	21.2	33.9	130
1882	97,656	3,785	38.8			2,511	25.7	33.8	141
1883	98,564	*3,800*	38.2		210		25.5	33.5	137
1884	99,481	*3,800*	38.8		222		27.2	33.6	147
1885	100,406	*3,800*	39.1		218		27.1	32.9	138
1886	101,340	*3,800*	39.5		233		28.9	32.8	149
1887	102,283	*3,800*	38.5		214		27.9	31.9	145
1888	103,234	*3,800*	37.5		188		23.9	31.2	136
1889	104,194	*3,800*	38.1		264		30	31.1	144
1890	105,163	*3,800*	36.2		245		27.4	30.2	151
1891	107,864	3,830	35.5	892	227	2,807	26	31.4	149
1892	109,038	3,686	33.8	805	216	2,481	22.8	30.4	148
1893	110,225	3,809	34.6	1,032.0	268	2,753	25	30.7	159
1894	111,425	3,545	31.8	770	217	2,186	19.6	29.6	137
1895	112,638	3,702	33	927	249	2,528	22.4	30.3	161
1896	113,864	3,673	32.3	760	204	2,191	19.2	29.6	148
1897	115,103	3,687	32	954	263	2,687	23.3	29.6	156
1898	116,356	3,559	30.6	812	221	2,107	18.1	29.3*	160
1899	117,622	3,492	29.7	889	255	2,490	21.2	29.1	163
1900	118,902	3,410	28.7	814	236	2,636	22.2	28.7	154
1901	113,117	3,418	30.2	737	218	2,213	19.6	28.5	151
1902	113,766	3,278	28.8	618	188	1,998	17.6	28.5	133
1903	114,404	3,453	30.2	541	156	1,955	17.1	28.5	132
1904	115,055	3,314	28.3	609	183	2,091	17.8*	28	145
1905	115,721	3,259	28.2	490	150	1,906	16.5	27.3	128
1906	116,399	3,317	28.5	665	200	2,065	17.7	27.2	132
1907	117,093	3,124	26.7	495	158	2,003	17.1	26.5	118
1908	117,799	3,309	27.6	516	156	2,122	17.7	26.7	120
1909	118,519	3,027	25.5	416	137	1,842	15.5	25.8	109
1910	119,253	2,812	23.6	438	156	1,929	16.2	25.1	105
1911	117,216	2,726	23.3	473	173	1,984	16.9	24.3	130
1912	117,630	2,753	23.4	342	124	1,972	16.8	23.9	95
1913	118,070	2,888	24	462	160	2,043	17	24.1	110

NOTES ON THE TEXT

[*Abbreviations:*
CBP: County Borough of Preston.
Corp.Procs.: Corporation Proceedings.
LCRO: Lancashire County Record Office.
MoH: Medical Officer of Health.]

Chapter I The Crisis of the 1840s (pp 1-22)

1 Samuel Leach *Old Age Reminiscences* 1916
2 Nigel Morgan *Vanished Dwellings* 1990
3 G.T. Clarke *Report to the General Board of Health on the Borough of Preston*, 1849
4 *The Moral Reformer*, January 1832
5 *Preston Guardian*, 17th April 1847
6 G.T.Clarke *Report*
7 Joseph Livesey *Autobiography*
8 *Preston Pilot*, 6 Oct.1838
9 *Second Report of the Commissioners for Inquiring into the State of Large Towns and Populous Districts*, 1845
10 G.T. Clarke *Report.*
11 LCRO: CBP Preston Improvement Commissioners Minute Book 1838–45
12 *Preston Chronicle* 9th November 1844
13 *Second Report* ... 1845
14 G.T. Clarke *Report*
15 *ibid.*
16 *Preston Guardian* 9th November 1844
17 *Preston Chronicle* 16 December 1843
18 See my own *Vanished Dwelling*, 1990
19 G.T. Clarke *Report* 1849
20 *ibid.*
21 *Preston Chronicle* 3 December 1843
22 *Preston Chronicle, Preston Guardian*, 9 Nov.1844
23 *Preston Chronicle* 12 July 1845
24 *Preston Chronicle* 20 Feb. 1841
25 *ibid.*
26 *Preston Guardian* 11 Aug. 1849
27 LCRO: CBP 30/2 (Sanitary Committe Minute Book)

Chapter II: The Local Board (pp. 23–44)

1 LCRO: CBP 17/1, 21 Nov.1850
2 *Preston Guardian* 3 Nov.1858
3 I have found no local portrait of James German, he died at Sevenoaks in 1901 (obituary in *Sevenoaks Chronicle*, 1 Nov.1901
4 *Preston Chronicle* 8th January 1848
5 *Preston Chronicle* 11 Nov.1848
6 *Preston Guardian* 28 Nov. 5 Dec., 8 Dec., 12 Dec. 1857, *et seq.* See also *Preston Chronicle* 12 March 1862, for attempts to obtain royal pardon for him at that time. He was eventually released (I forget when) and was noted by Hewitson in 1882 as one of the only two survivors of the first Reformed Corporation elected in 1835 (the other being Joseph Livesey).
7 H.N.B.Morgan "Social and Political Leadership in Preston, 1820–1860", M.Litt thesis, University of Lancaster 1980
8 *ibid.*
9 Henry Wrigg *Surveyor's Report on Water Supply*
10 LCRO: CBP 18/1 28 Dec.1850
11 Corporation Proceedings 1856–7
12 LCRO: DDRf/12/1 – Tomlinson estate
13 Charles Dickens *Hard Times* (1854)
14 LCRO DRB/1/157
15 Anthony Hewitson *Our Churches and Chapels*, 1869 p.201
16 Anthony Hewitson *Preston Town Council Portraits* 1867, p18
17 LCRO: DDRf/12/2
18 Stefan Muthesius *The English Terraced House* (1982) p.20
19 LCRO: DDRf 12/2/279)
20 reference temporarily mislaid
21 LCRO: DDRf/12/2/302

Chapter III Doubts & Disputes (pp 45-58)

1 Preston Corporation Proceedings, *passim*
2 *Preston Chronicle* 20 October, 1875
3 *Preston Guardian* 29 March 1862
4 David Hunt *The Silent Mills*, (Leyland Historical Society, 1991)
5 LCRO DDRf/12/2, box 2, nos.393-436 and 437-457.
6 *Preston Guardian* 29 March, 1862
7 *ibid.*
8 *ibid.*
9 *Preston Chronicle* 31 Jan. 1874.
10 *ibid.*
11 *ibid.*
12 *Preston Chronicle* 27 June 1874
13 (My emphasis – but I have not checked his figures.)
14 Other sources of information used for this section: Public Health Act (1872) 35 & 36 Vict: c.79; Public Health Act (1875) 38 & 39 Vict: c.55; Anthony Hewitson *Preston Town Council or Portraits of Local Legislators*, (1870); Corporation Proceedings, variously.
15 MoH Report, August 1874, *Corp. Procs.* 1873-74
16 *Preston Chronicle* 31 Oct.1874
17 *Preston Chronicle* 28 Nov. 1874
18 *Preston Guardian* 23 June 1875
19 *ibid.*

[20] LCRO CBP18/4: Local Board Different Committees Minute Book: Bye Laws Committee. For subsequent opinions of Tomlinson and Harding, see chapters VI and VII below.
[21] James Hibbert *Monimenta: Remains in Prose and Verse of James Hibbert 1849-1902* (1902)
[22] *Preston Chronicle* 2 Oct. 1875
[23] *ibid.*
[24] *ibid.*
[25] *ibid.*
[26] *Preston Guardian* 23 June 1875
[27] *Preston Guardian* 3 July 1875
[28] *Preston Improvement Act, 1880*: Part VI.
[29] (Other sources of information for this chapter: annual printed volumes of Corporation Proceedings; manuscript Minute Books of the Sanitary Purposes Committee (CB 41/1 and the Bye-Laws Committee (CBP 18/4), County Record Office; a packet of papers, including printed draft Bye-Laws, and letters from the Local Government Board and from W.E.M. Tomlinson (1875), kept in the Town Clerk's department, Preston Town Hall. Reports in the Preston Guardian and Preston Chronicle, especially the following dates: 31 October 1874; 28 November 1874; 19 June 1875; 23 June 1875; 3 July 1875; 31 July 1875; 2 October 1875.)

Chapter IV The End of the Century (pp 59-72)

[1] Building plans in Town Hall.
[2] *Corporation Proceedings* 29 May 1882.
[3] MoH Report for 1906, *Corp.Procs.* 1905-6.
[4] *Preston Herald* 14 Oct. 1893.
[5] MoH Report for 1897 *Corp.Procs.* 1897-8.
[6] MoH Report for 1889, *Corp. Procs.*, 1889–90. Compare with comments of "A Lancashire Parson", on p.96 below).
[7] MoH Report, Sept. 1875 *Corp.Procs.* 1874-5.
[8] MoH Report for 1883, *Corp.Procs.* 1883-4.
[9] MoH Report for 1885, *Corp.Procs.* 1885-6
[10] MoH Report, Aug. 1874, *Corp.Procs.*1874-5
[11] MoH Report, April 1875 *Corp.Procs.* 1875-6.
[12] MoH Report for 1887, *Corp.Procs.* 1887-8.
[13] MoH Report for 1895, *Corp.Procs.* 1895-6.
[14] MoH Report, Feb.1875, *Corp.Procs.* 1875-6.
[15] MoH Report for 1883, *Corp.Procs.*1883-4
[16] MoH Report for 1889, *Corp.Procs.* 1889-90.

Chapter V: Bread, Meat and Milk (pp 73-80)

[1] MoH Report for 1885, *Corp.Procs.* 1885-6.
[2] MoH Report for 1902, *Corp.Procs.* 1902-3.
[3] John Hallam *The Surviving Past* (Chorley, 1986).
[4] MoH report for 1902, *Corp.Procs.* 1902-3.
[5] *Preston Chronicle* 17 April 1875.
[6] Report to Markets and Town Hall Committee, by MoH. and Surveyor 14th Aug.t 1884: *Corporation Proceedings* 1884–5.
[7] LCRO CBP 33/5.
[8] MoH Report for 1893, *Corp.Procs.* 1893-4.
[9] *The Builder* 14 Dec. 1861, p.853.
[10] LCRO CBP 12/2.
[11] MoH Report for 1883, *Corp.Procs.* 1883-4.
[12] MoH Report for 1894, *Corp.Procs.* 1894-5.
[13] MoH Report for 1885, *Corp.Procs.* 1885-6.
[14] MoH Report for 1893, *Corp Procs.* 1893-4.
[15] MoH Report for 1889, *Corp.Procs.* 1889-90.

Chapter VI: Improvement (pp 81-92)

[1] MoH Report for 1899–1900, *Corp. Procs 1899–1900*
[2] MoH Report for 1904–5, *Corp.Procs. 1904–5*
[3] LCRO CBP 41/3: Minutes of the Sanitary Purposes Committee, 20th May 1884: and *Corp.Procs* 1883–4
[4] *Preston Guardian* 26 April 1884
[5] For Joseph Harding's role in the bye-laws affair of 1875, see chapter III, p.54 above.
[6] "The Preston Sanitary Association and the High Death Rate of Preston", *Preston Herald* 1885
[7] I have not yet found any record of such an enquiry at this date.
[8] LCRO: CBP 41/3 Sanitary Committee minutes 1886, pp 47–9.
[9] MoH. Report December 1875.
[10] The list of all these properties, identifying the owners, occupiers, and uses of each part, is in *Corp.Procs.* 1883–4.
[11] Morgan *Vanished Dwellings* (Preston, 1990).
[12] MoH Report pages 23–27, *Corp.Procs.*1905–6.
[13] Report to the Underground Bakehouses Committee, *Corp. Procs.* 1902–3.
[14] MoH. Reports, *Corp. Procs.* 1895–6 and 1896–7.
[15] MoH.Report for October 1906, *Corp.Procs.*1905–6.
[16] MoH. Report for 1906, *Corp. Procs.* 1905–6.
[17] MoH. Report for 1907, *Corp. Procs.* 1906–7.
[18] MoH. Report for 1907, *Corp. Procs.* 1906–7.
[19] MoH. monthly report, Aug. 1908, *Corp. Procs.* 1907–8.
[20] MoH. Report for 1907, *Corp. Procs.* 1906–7.
[21] MoH. Report for 1908, *Corp. Procs.* 1907–8.
[22] MoH. Report for 1907, *Corp. Procs.* 1906–7.
[23] *ibid.*
[24] *Preston Herald*, 2 Nov.1912

Chapter VII: Housing and Health Assessed (pp 93-104)

[1] MoH Report for 1903, *Corp. Procs.* 1902–3.
[2] "The Preston Sanitary Association and the High Death Rate of Preston": *Preston Herald*, 1885.

[3] *Good Words*, December 1882; *Preston Guardian*, 29 Nov.1882.
[4] MoH Report for 1902, *Corp.Procs.*, 1901–2.
[5] "The Preston Sanitary Association and the High Death Rate of Preston", *Preston Herald*, 1885.
[6] *ibid.*
[7] *ibid.*
[8] The surveyor's "death maps" may survive, but I have not yet found them.
[9] Anthony Hewitson ("Atticus") *Our Churches and Chapels* (1869).

NOTE ON ILLUSTRATIONS

The author and publisher are very grateful to the following for permission to use illustrations and other material as indicated:

The Trustees of the Harris Museum and Art Gallery: figures 12, 25, 26, 27, 33, 47, 48, 49, 51, 52 and 65.

Lancashire County Record Office and Messrs Fair & Rea: figures 34 and 35, the letter quoted on p.35, and all other references to the Tomlinson Estate papers deposited by Messrs Fair & Rea in the County Record Office.

Preston Borough Council for permission to use material deposited in the County Record Office, or still in the Borough Council's keeping, as follows: figures 7, 23, 24, 29, 36, 37, 39, 43, 75 and 83; and the extract on page 77 reproduced from the Minutes of the Markets and Town Hall Committee.

Preston District Library for permission to use materialsheld by the Harris Reference Library as follows: figures 1, 3, 6, 8, 9, 10, 19, 20, 21, 55 and 80; the extracts quoted on pages 14, 19, 20, 21, 25, 27, 28 and 43, and the table in the appendix reproduced from the report of the meeting of the Preston Sanitary Association in 1885.

All other illustrations and photographs are the work of the author.

NOTE ON THE AUTHOR

Nigel Morgan did National Service as a pilot in the RAF before reading History at the University of Cambridge in 1957-60. He then took two years out, teaching in Sweden in 1961 and working for Cassell & Company, Publishers, as educational sub-editor in 1962. After completing his Certificate in Education at Cambridge in 1963 he taught History at Preston Grammar School until 1968, and then at S.Martin's College, Lancaster, where he was Senior Lecturer in History from 1969 to 1980. Concurrently with this post he researched the history of nineteenth century Preston, and his thesis "Social and Political Leadership in Preston, 1820-60" was accepted for the degree of M.Litt of the University of Lancaster in 1980. Subsequently he worked for a year at Preston Curriculum Development Centre (where the original version of this book was published). Since 1982 he has been employed principally by English Heritage on re-surveys of Listed Buildings in Lancashire, West Yorkshire, Cornwall, Surrey and the City of Manchester. He married a Preston nurse, had five children, was widowed in 1977, married again in 1980 and now has four grown-up sons and a daughter and two grown-up step-daughters.

SOURCES AND BIBLIOGRAPHY

Note: The following lists cover sources which I have used for the history of housing in Preston throughout the 19th century, not simply those which I have used for this book.

Abbreviations:
CBP County Borough of Preston
Corp. Procs.: Corporation Proceedings.
HL Harris Library
HM Harris Museum
LCRO Lancashir County Record Office

PRIMARY SOURCES

Acts of Parliament

Preston Improvement Act, 1815.
Preston Water Company Act, 1832.
Municipal Corporations Act, 1835.
Public Health Act, 1848.
Artisans' and Labourers' Dwellings Act, 1868.
Public Heath Act, 1872.
Preston Improvement Act, 1880.
Preston Corporation Act, 1900.

Census Records

Census Reports 1801 to 1911.
Census Enumerators' Returns 1841 to 1881.

Land Ownership etc.

Preston Land Tax books 1830-32 in LCRO
Preston Tithe Award 1840 [LCRO].
Tomlinson Estate papers [LCRO: DDRf]
Derby Muniments: printed calendar [LCRO]

Parliamentary Election Records

Registers of Electors from 1832 [HL]
Pollbooks 1830 to 1868 [HL and LCRO]

Preston Borough Council Records (in LCRO and HL)

Corporation Proceedings 1835 to 1914
Improvement Commissioners' Minutes 1838-1850 [LCRO]
Local Board of Health: various committee minute books (1850-74).
Urban Sanitary Authority: various committee minutes books from 1874.
Deposited Building Plans from 1850.
Draft Bye-Laws and associated correspondence 1874-1876
Sewer Record Plans.

Official Reports

Henry Wrigg: *Surveyor's Report on the Water Supply*, 1851
Henry Wrigg: *Surveyor's Report on the Principal Sewers to be Constructed*, 1853.
John Newton: *Report on the Sewerage of the Borough of Preston*, 1857.
Thomas Hawkesley: *Report to the Water Committee*, 1857 [in Corp.Procs.]
H.O.Pilkington: *Reports of the Medical Officer of Health* 1874-1914 [in Corp.Procs.]
Reports on the proposed extensions of the Borough in 1855 and 1867.

Public Health Reports of the 1840s

John Clay *Report on the Sanatory Condition of Preston*, 1842.
Lyon Playfair *Report on the Sanatory Condition of the Large Towns of Lancashire*, 1845; (included in the Second Report of the Commissioners for Inquiring into the State of Large Towns and Populous Districts).
G.T.Clarke: *Report to the General Board of Health on the Borough of Preston*, 1849.
[See also: Joseph Livesey *The Moral Reformer* January 1832.]

Newspapers and journals

Preston Chronicle (from 1812)
Preston Pilot (from 1825)
Preston Guardian (from 1844)
Preston Herald (from 1855)
The Builder (7 and 14 Dec. 1861)
Good Words (Dec.1882)

Trade Directories

Rogerson 1818
Baines 1825
Whittle 1841
Mannex 1851 and 1854
Oakey 1853 and 1854
Slater's (annual volumes)
Kelly's " "
Barrett's " "

Maps

Ordnance Survey:
6-inch scale, 1845, 1895 and 1909.
60-inch scale, 1847
25-inch scale, 1892 *et seq.*
126-inch scale, 1893.
Local:
William Shakeshaft, 1809.
Edward Baines, 1825.

J.J.Myres, 1836.
Tithe Plan, 1840.
Preston Guardian map, 1865.
W.Brown, 1882.
A.Hewitson, 1882.

Photographs

Demolished properties (LCRO: CBP)
Lancashire Evening Post collection.
Preston Curriculum Development Centre collection (taken in 1982, mostly by the author).

Published Works

Hardwick, Charles *History of the Borough of Preston* (1857).
Hewitson, Anthony *History of Preston* (1882).
" (as "Atticus") *Our Churches and Chapels* (1869)
" *Portraits of Local Legislators* (1870).
Hibbert, James *Monimenta; Remains in Prose and Verse of James Hibbert 1849-1902.*
Jacson, C.R.. *Hints for Cheap Living and Domestic Economy in General* (c.1862).
Leach, Samuel *Old Age Reminiscences*, 1916.
Livesey, Joseph *The Moral Reformer* (c.1830-32)
" *The Struggle*
" *An Address to the Working Classes on Domestic Economy* (1836).
Preston Herald *The Preston Sanitary Association and the High Death Rate of Preston* (1885).
Reed, Rev.Andrew *A Citizen of No Mean City* (1862).
Waugh, Edwin *Home Life of the Lancashire Factory Folk during the Cotton Famine* (1862).
Whittle, Peter *History of the Borough of Preston* (1822 and 1837).

SECONDARY WORKS

Local publications, theses, etc.

Bristow, B.R.:"Residential Differentiation in mid-19th century Preston" (University of Lancaster PhD thesis, 1982).
Bristow, B.R.: "An Artisan Elite Residential District in Preston" (*The Mancheste Geographer*, vol.3, No.2, 1982).
Burscough, Margaret: *The History of Lark Hill, Preston, 1797-1989* (Preston 1989).
Crosby, Alan: *The History of Preston Guild* (1992)
Crosby, Alan (ed.): *The Family Records of Benjamin Shaw, mechanic of Dent, Dolphinholme and Preston, 1772-1841* (The Record Society of Lancashire and Cheshire, vol.130, 1991).
Everett, Robin (ed.): *Representing the Past* (Age Concern, Lancashire, 1991)
Hallam, John: *The Surviving Past* (Chorley, 1986).
Harris Museum and Art Gallery:
A Tour of Victorian Preston (Preston, 1980).
A Tour of Edwardian Preston (1981).
Hodge, Alistair C: *History of Preston, An Introduction* (Preston, 1984).
Hunt, David: *A History of Preston* (1992).
King, J.E.: *Richard Marsden and the Preston Chartists* (Lancaster, 1981).
Lawson, Zoe: "Working-class shopkeeping in Preston, 1860-1890" (University of Lancaster, Diploma in Local History dissertation, 1989).
Morgan, H.N.B. "Social and Political Leadership in Preston, 1820 to 1860" (University of Lancaster M.Litt. thesis, 1980).
Morgan, Nigel: *An Introduction to the Social History of Housing in Victorian Preston* (Preston Curriculum Development Centre 1982).
Morgan, Nigel: *Vanished Dwellings* (Preston 1990).
Morgan, Nigel: *Central Preston 1909* (Alan Godfrey Old Ordnance Survey Maps, 1993).
Oakes, E.C. *Water Supplies through Three Centuries* (Preston, 1953).
Roberts, Elizabeth: *Working Class Life in Barrow and Preston* (Lancaster, 1976 - see also under General below).
Roberts, Marian: *The Story of Winckley Square* (Preston, 1988).
Sartin, Stephen: *The people and places of Historic Preston* (Preston, 1988).
Spencer, K.M.: "A Social and Economic Geography of Preston 1800-1865" (University of Liverpool MA thesis, 1968).
Taylor, R.F.: "Industrial Houses in Preston 1800 to 1850" (typescript in Harris Museum).
Timmins, Geoff: *Handloom Weavers' Cottages in Central Lancashire* (Lancaster 1977).
Timmins, Geoff: *Preston, A Pictorial History* (1992)
Willoughby, Susan: "Domestic Service in the Middle Classes in 19th century Preston" (University of Lancaster MA dissertation, 1987).

General

Anderson, Michael: *Family Structure in Nineteenth Century Lancashire* (1971) – actually Preston.
Ayres, James: *The Shell Book of the Home in Britain* (1981).
Brunskill, R.W.: *Houses* 1982).
Bruce, Maurice: *The Rise of the Welfare State* (1973).
Burnett, John: *A Social History of Housing* (1978).
Burnett, John: *Plenty and Want.*
Bythell, Duncan: *The Handloom Weavers* (1969).
Caffyn, Lucy: *Workers' Housing in West Yorkshire* (Royal Commission on Historical Monuments 1986).
Chapman, S.D.: *The History of Working Class Housing* (1971).
Clifton-Taylor, Alec: *The Pattern of English Building* (1972).
Daunton, M.J.: *House and Home in the Victorian City Working Class Housing 1850 -1914* (1983).

Davidson, Caroline: *A Woman's Work is Never Done* (1982).
Dyos, H.J. (ed.): *The Study of Urban History* (1968).
Evans, E.J.: *Social Policy 1830-1914* (1978).
Eveleigh, David J.: *Firegrates and Kitchen Ranges* (Shire Publications, 1983).
Frasr, Derek: *The Evolution of the British Welfare State* (1973).
Fraser, Derek: *Urban Politics in Victorian England* (1973).
Frsaser, Derek: *Power and Authority in the Victorian City* (1979).
Garrard, John: *Leadership and Power in Victorian Industrial Towns, 1830-80* (1983).
Gauldie, Enid: *Cruel Habitations* (1974).
Girouard, Mark: *The English Town* (Yale, 1990).
Lambert, R.J. *Sir John Simon 1816-1904 and English Social Administration* (1963).
Lewis, R.A.: *Edwin Chadwick and the public health movement 1832-54* (1952).
MacDonagh, Oliver: *Early Victorian Government 1830-1870* (1977).
Midwinter, E.C. *Social Administration in Lancashire 1830-1860* (1969).
Muthesius, Stefan: *The English Terraced House* (1982).
Parker, Vanessa: *The English House in the Nineteenth Century* (1970).
Quiney, Anthony: *House and Home* (BBC, 1986).
Roberts, Elizabeth: *A Woman's Place* (1984).
Roberts, Robert: *Classic Slum* (1973).
Saunders, Matthew: *The Historic Home Owner's Companion* (1987).
Savage, Michael: *The Dynamics of Working Class Politics: The Labour Movement in Preston 1880-1940* (1987).
Smith, F.B.: *The People's Health* (1979).
Walton, John: *Lancashire, A Social History 1558-1939* (1987).

Note: having accidentally omitted the most important recent book on terraced housing from the bibliography of *Vanished Dwellings* (but not from this – see Muthesius above), it is almost certain that I am guilty of equally embarrasing omissions from this. I should therefore be most grateful if any author thus apparently overlooked would kindly inform me of the fact.

Preston in 1895, from the 6-inch Ordnance Survey (scale slighly reduced).

Above: A rear-window view of yards in Brackenbury Street.
Front cover: Demolition in Plungington in 1982.

A rear-window view can sometimes be shocking. So can hindsight. According to statistics of the time, Preston was the deadliest town in Victorian England – especially for children. Why?

This book explains how the terraced houses of Victorian and Edwardian Preston were built. It explores their structure, accommodation and equipment, and reveals how they were supplied with foodstuffs such as bread, meat and milk. It exposes for the first time an extraordinary tale of local politics, and reveals a disturbing relationship between housing and health.

£9.95

ISBN 1 873424 01 9