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A HISTORY OF LOUGHBOROUGH BETWEEN c.1810 AND c.1870:
A STUDY OF URBAN CHANGES IN A PERIOD OF DEMOGRAPHIC
GROWTH AND STAGNATION

by

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A Doctoral Thesis
submitted in partial fulfilment of the
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A HISTORY OF LOUGHBOROUGH BETWEEN c.1810 AND c.1870:
A STUDY OF URBAN CHANGES IN A PERIOD OF DEMOGRAPHIC GROWTH AND
STAGNATION

ABSTRACT

This thesis is a study of urban change during an unusual period in the demographic history of Loughborough. Part A is concerned with the theme in relation to the local economy. Chapter 1 deals with the introduction of a machine-made lace industry to the town, the rapid growth in population which followed and its subsequent decline. Demographic stagnation then developed and this is associated in Chapter 2 with a cottage-based hosiery industry which had remained as the principal industry when the centre of the lace trade moved to Nottingham. Chapter 3 provides an intensive study of the occupational structure of the town at this period; it is based on an analysis by computer of the 1851 census. At this time the economy was flat but the first signs of change in the industrial structure were beginning to appear. In Chapter 4 the theme is pursued as innovation rejuvenated the hosiery trade and demographic growth was resumed. Chapter 5 surveys the whole period for which reasonably detailed censuses exist, that is, from 1841 to 1881, and the themes of the earlier chapters are put into a wider perspective of the occupational flow of the town. In Chapter 6 a specific factor is given attention; this was the status of

Loughborough as a market town, which offered employment and income throughout the period, during industrial recession as well as expansion.

Part B is concerned with the social aspects of the events narrated above. Chapter 7 offers an analysis of social patterns in the town in 1851 based, like Chapter 3, on the census of that year. The next chapter deals with some social responses to growth and stagnation, the chief of which were Luddism and Chartism, although the local education service and environmental amelioration are also discussed. Chapter 9 concludes this section with an examination of the urban geography of Loughborough in relation to social class; an original system for the identification of social class from census and other material is propounded. The Appendices provide additional information which could not be conveniently placed within the main body of the thesis. Appendix 1 offers more historical background and Appendix 2 discusses in detail the methods used in the 1851 census analysis upon which chapters 3, 7 and 9 are based. Appendices 3,4,5 and 6 provide additional data for Chapters 3 and 9. Since much of the thesis is devoted to a discussion on the influence of textile manufacture in Loughborough, the final Appendix consists of notes on the basic characteristics of the three principal machines.

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LIST OF ABBREVIATIONS

BJS	<u>British Journal of Sociology</u>
EMG	<u>East Midlands Geographer</u>
HC	House of Commons
HLRO	House of Lords Record Office
HO	Home Office
JSS	<u>Journal of the Statistical Society</u>
JRSS	<u>Journal of the Royal Statistical Society</u>
LCRO	Leicester County Record Office
LLL	Loughborough Public Library
PP	<u>Parliamentary Papers</u>
SP	<u>Sessional Papers</u>
TLAS	<u>Transactions of the Leicestershire Archaeological and Historical Society</u>
TxH	<u>Textile History</u>
UHYB	<u>Urban History Yearbook</u>
VCH	<u>Victoria County History of Leicestershire</u> Vol.III, edited by W.G. Hoskins and R.A. McKinley, reprint (1969)

INTRODUCTION

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INTRODUCTION

This thesis is a study of a period during the nineteenth century when the population of Loughborough changed little in size. There was no local demographic growth in a nation whose numbers were increasing continuously, the town's economy was quite unable to stimulate the flow of those ideas and activities of the kind which led to the development to be found elsewhere in the country. There was, therefore, stagnation, from some point between 1830 and 1840, until about 1870. The stagnation contained an element of dynamism, in that it was the product of earlier change, and this underlying movement eventually ended the period of no growth. The thesis expounds an explanation for the stagnant state in an East Midlands town whose circumstances, both historical and geographical, might have led to continuous expansion. The actual period covered here is from 1809 to 1887, so that stagnation can be placed in the context of growth, both prior to and after it. To appreciate the position of the town in the 1830s, when the population ceased to increase, the history of the previous quarter-century seems crucial; the first date quoted above is therefore of significance as being that of the introduction of lace-making into a market town with but one important manufacture, that of hosiery. Its early success and later failure emphasised the steadier and unspectacular pace of the domestic-type hosiery trade which remained. Between 1871 and 1881 the door to economic growth was unlocked and the population grew; this process generated enough confidence to enable the town to petition for incorporation in 1887. As the Clerk to the

Board of Health said to the Privy Council enquiry: 'If the higher dignity of municipal life is granted us, we shall be recognised by our neighbours as occupying a higher station'.¹ The thesis examines the economy to see what shifts occurred, the reasons for them, and what inhibitions existed on innovation. The impact of the local economy on local society has also been taken into account. The social fabric, the expression of social attitudes among different sections of the community, the consequences for the people, are all studied.

a) The work is to be seen in the context of a statement made by H.J. Dyos in 1977: 'the very success of urban history has to be measured in terms of its contribution towards a more general understanding of the period or the problem to which its findings belong'² and another by E.A. Wrigley in 1962, 'the tendency, deep seated in most students of society, and perhaps especially in historians, to think in terms of national areas as the natural units for study, may be a severe handicap to the understanding of some aspects of economic growth and demographic conditions'.³ Loughborough is a suitable natural unit, because it was in many ways a typical nineteenth century town, but with an unusual demographic history. It was a canal port, although not on the scale of a Runcorn or a Goole. It was, nevertheless, the first such port in its county and for some time it dominated the distribution of heavy loads passing from the Trent southwards. In the nineteenth century, those people working on its two navigations greatly influenced its general commercial life and the social quality of the streets near the wharves. The

predominant industry in Loughborough for most of the nineteenth century was textile manufacture; it has its own contribution to make to the history of this dominant group of industries and to comparative studies of other towns with other industrial backgrounds. It was also a town of the type where the administration of medieval charities was virtually the basis of local government. Loughborough was typical of most towns in the mid-nineteenth century, in that most of its workers were not employed in factories, but by that time there were some indications of change from cottage industry to that of the workshop and in part to factory. It was a town of the Kendal type, where there was a substantial working class element, an elite which controlled most of its institutional and economic life, small industries associated with the countryside and a fairly developed textile industry.⁴

There are yet other types of town with which Loughborough can be associated. It was the second town in its county, and places of this status have been rather neglected by historians, unless the study is of a Bath or a Cheltenham, or one of the 'new' cities which, since the Industrial Revolution, have created in their large populations a new ethos by which their counties are now more generally known. In contrast, Loughborough is one of an undramatic type of settlement that achieved second town status in its county without the merits of a distinguished past or the problems which accompanied heavy industrialisation in the nineteenth century.

The population of Loughborough in 1851 was 11,211, quite near to the average size of all towns in the country, which the Census Report gives as 12,953.⁵ It also conformed to other criteria in the Report for settlements in this group; its population lived less than three-quarters of a mile from the centre and the town stood with its associated villages in countryside within a radius of six miles. The radius of the sphere of influence of Loughborough is regarded in this thesis as being only five miles, for the local reason that villages beyond this range tended to turn to the large towns of Nottingham, Leicester and Derby. The general influence of the town over its area is demonstrated by population movement of a group of villages during the years of stagnation. Their total population was about the same as that of Loughborough.

TABLE 0:1

POPULATION OF LOCAL VILLAGES: 1831 - 1871

	1831	1841	1851	1861	1871
Mountsorrel	No figs	715	795	897	949
Shepshed	3,714	3,872	3,759	3,626	3,784
Quorn	1,752	1,811	1,876	1,622	1,516
Barrow	1,638	1,841	1,736	1,800	1,963
Long Whatton	855	842	838	779	756
Hathern	1,289	1,252	1,187	1,112	1,120
Woodhouse	1,262	1,309	1,201	1,205	1,195
Hoton	401	460	420	401	332
	10,911	12,102	11,812	11,442	11,615

Loughborough was not one of those towns described in the national Report as of 'extraordinary importance and magnitude', it was not a seat of mining or (in 1851) of manufacturing enterprise.⁶ It was the urban equivalent of Wigston Magna, the

home of W.G. Hoskin's midland peasant. It was just as workaday and just as plain. It was not a watering place, a seaport, a county town or an ecclesiastical centre. All these have received some attention in the literature of urban history.

It was, however, a market town. The thesis demonstrates how such a town can, in times of industrial difficulty, use its market facility to help keep its structure intact until better times come along. It was one of the type described by A. Everitt as old pre-Conquest agricultural villages upgraded to urban status by the grants of market rights.⁷ Everitt was writing about the Banburys of England on which, he believes, few adequate histories have been written. S.M. Brown and his colleagues make the same point: 'There are at least 200 British market towns ... still awaiting attention'.⁴ The writer of this thesis has searched for scholarly works on average nineteenth century towns with no special features, and has consulted authorities in this field. He feels that there can be little doubt that towns of this type have received little modern or reasonably authoritative attention in the literature and that this is particularly true of the east Midlands. This study therefore explores an unworked area and, it will be seen, some unworked themes.

If any town study is to be welcomed, because of its contribution towards the generality of urban history in the nineteenth century, a work dealing with Loughborough has additional value because of the peculiarities of the town, for

example, in its demographic growth. The population in 1831 was 10,800. This was an increase of forty seven percent over the figure for 1821, the town having a vigorous lace industry which had declined by mid-century. Had growth continued at that rate it would have been 50,430 by 1871. Had it continued at the average national rate it would have been 17,267. In fact, it was 11,456. The railway arrived in 1840; it apparently did nothing to relieve the stagnation. Indeed, the town ceased to be the thriving centre it once had been. The thesis will demonstrate that there could be pockets of stagnation in the nineteenth century, that the period was not entirely one of growth. Stagnation could take place despite good communications and despite important original applications of technical knowledge. The town's economy anticipated some later national problems, deceleration of growth, lack of diversity in industry, resistance to further innovation. Nevertheless, it found its own solution in change and a major redistribution of its workforce.

b) Sources are relatively rich for the period, which has attracted the attention of a great many historians and economists, so that, in broad national terms, the literature is extensive. Unpublished theses also offer some parallel studies of features in provincial towns of the nineteenth century. Contemporary documents are also available in quantity; surely no period offers so much primary source material. Some used here is local, because of the nature of the study, and some is of low quality in the sense that company records are incomplete or that minutes of meetings note only decisions taken and not the

discussions which preceded them. The background to much of local life is to be found, however, in the volumes of the Parliamentary Papers series. A great deal of use has been made of those dealing with Textiles, Factories, Industrial Relations, Population and, to a lesser degree, Education. Sessional Papers were also consulted for early information on the framework knitters, whose attitudes are the concern of a chapter in this thesis. The Parliamentary Papers series was valuable not only because of its broad range of discussion on general policy but also because of the contributions of Loughborough witnesses. Primary source material in the House of Lords Records Office also threw considerable light on the limited horizons of the sponsors of the Midland Counties Railway.

A principal source was the censuses. The period under review here is the only one for which all the detailed enumerators' books are available, although those for 1841 are inadequate in some respects. The full use of them all, up to 1881, was impracticable because of the problems of transcription and analysis of so much data, the absorption of the great volume of material that would have emerged and the variations in emphasis among sets of enumerators separated from each other by periods of ten years. An alternative would have been to use the sample methods employed by Anderson, Armstrong and indeed, most researchers working with census material. Their analytical ideas have been adopted, but it was felt that sampling could be unsafe. Subsequent analysis showed this to be so and this is discussed in an Appendix.

The choices therefore became:

- i) To use censuses over the whole period, not on a sample basis but by the selection of topics within them for full analysis. It was felt that this method would have demonstrated the flow of history, but that any static pictures would have been blurred, as happens with cine-film.
- ii) To produce a very sharply defined picture focussing on one year, or rather, one day in one year.

The methodology eventually used combines the two; a series of censuses has been used to demonstrate economic change but one only is taken to present an intense examination at one point in history. Dynamics are not ignored, the whole thesis places the static picture in a context of change. The opportunity was taken, however, to use a census in a way that had not been attempted previously, but is now made possible by the use of powerful modern computers which allow for the analysis of the census details for a whole town and every inhabitant of it. After an examination of the three reasonably comprehensive censuses during the period of stagnation in Loughborough, those for 1851, 1861 and 1871, it was decided that the year 1851 would reflect industrial and social structure in the town just after its first hosiery factories had been opened, when the old domestic structure of the industry was being modified, when the educational system of the town had been revised in a way which paid only minor attention to the needs of industry, when the social challenge of Chartism had recently subsided and when

problems were arising over the absence of a piped water supply in a town where bleaching and dyeing were important subsidiary trades in hosiery manufacture. The alternative would have been 1871. By that time fundamental changes in the design of hosiery machinery had taken place and the economy was beginning to move, but 1871 marked the end of the period of stagnation, whereas in 1851 it was accepted almost as if it were a permanent feature. It is claimed here that the 1851 census was used accurately, not that the census itself was necessarily accurate. The problems of the completion of the 'Rank, Profession or Occupation' column will be discussed. There were probably errors over ages, which may have been as remembered or as modified; relationships to heads of households may have been mis-stated. This is to say that no set of data dealing with people is entirely reliable, but that a full census tells us more about any individual settlement than any other record.

While the census provided the opportunity to look at an east Midlands town in depth on one day in one year, it has been explained above that the choice was dictated by the flow of days and years either side of it. The work thereafter developed as a search for continuity and coherence, to relate 1851 to earlier and later events in the various areas of the study. J.S. Mill is quoted in chapter 7 of this thesis as writing that 'the proximate cause of every state of society is the state of society immediately preceding it'. The census could only be seen to be real if it were perceived as one moment in the journey of people in one town from birth to death. The visit of an

enumerator was of minor importance to them as compared with their yesterdays and their tomorrows.

c) A short account of the earlier history of Loughborough is given in an Appendix. The modern history of the town began in 1778, when it became the principal inland port of the first navigation in Leicestershire, which carried cheap coal to the county from the Erewash valley mines. A second navigation from Loughborough to Leicester opened in 1794. They enhanced the town's status, which was already established by its position on the turnpike network, by which it was connected to the three east Midlands county capitals and to Ashby; it was also on the mail route between London and Manchester.

A long tradition of hand knitting had led to the introduction of the knitting frame and Loughborough's position as a market town had made it a logical base for the hosiery trade. It was locally dominant as the site of the chief hosiery warehouses for the area, on which framework knitters in the villages relied for work, and in 1809 it became the birthplace of the first successful net-lace making machine. The factories which were opened in the later nineteenth century did not move into a greenfield site; the town had a long historical background of trade. The period brought industrial problems in plenty, but they were eventually solved because of the expertise within the town. During these years, Loughborough experienced two industrial upheavals, the one independent of the other and with a distinct gap between the two. The expression 'industrial

upheaval' suggests a more limited range of action than 'industrial revolution', here defined as the onset of fundamental change in the structure of an economy, involving higher output. Hobsbawm defines it as 'self-sustained growth by means of perpetual revolution and social transformation'.⁸ The second Loughborough upheaval, from 1864 onwards, fell within Hobsbawm's criteria; the first, of 1809, did not, in that growth was not self-sustained. The special factors at work in promoting this very strong early growth will be considered and reasons will be given for its termination. It was concerned with the operation of a highly mechanised lace industry, originating in the town but not surviving there. When the lace trade declined the town was left with a labour-intensive survival of a cottage industry that persisted until the genuine industrial revolution took place. This was the long period of stagnation, the principal subject of this thesis, the years of growth setting it in its historical context. The fully-fashioning hosiery machine, also invented in the town, led the industry into the factory age and brought with it an engineering increment that widened the town's industrial base, a process that has continued.

(d) Aspects of stagnation and change are divided into two groups, the one dealing with the economy and the other with the fabric of society, the effects on it of industrial activity. Both sections include detailed comments on the year 1851. A chief aim is to analyse the static economy and population, to assess the response of the community to a situation imposed by

loss of growth, in an area close to the centre of England, whose population and economy were growing strongly, and to discover how an almost static population earned its bread and organised its living. The value of a census in suggesting answers to some of these questions has already been discussed.

Section A

- Chapter 1: The lace trade in Loughborough; commercial adventurism, unwise expansion in an economy, its tendency to lose coherence and thus lead to decline
- Chapter 2: The hosiery trade, required to absorb the shock of lace failure; it had an archaic structure, directed to survival rather than to growth
- Chapter 3: The occupational structure of the town in 1851
- Chapter 4: The hosiery trade transformed: an essay on renewed innovation and redistribution of labour, developing on a sound financial basis
- Chapter 5: A commentary on the economic pattern of the period 1841 to 1881, using census material; the railway, its apparent inability to encourage growth
- Chapter 6: The market function of the town, its value to an economy with a weak manufacturing base

Section B

- Chapter 7: The social structure of Loughborough in 1851
- Chapter 8: Responses to growth and stagnation; Luddism and Chartism, the failure of the tradesman class to

support education, the failure of the service to meet the needs of their children; pessimism amongst leaders of the community, no belief in growth

Chapter 9: Social and geographical development in Loughborough; this chapter expounds a new method of identification of social class

(e) This thesis explores reactions between demographic factors, the economy and society, of a kind more subtle than the self-acting forces in rural communities described by Wrigley and Schofield in their A Population History of England, 1541-1871. They quote the example of such a society whose population grows because of higher nuptiality and fertility. Demographic growth produces extra stomachs to be filled; therefore, since food supply cannot be increased to meet the demand, prices rise or food itself becomes scarce. Mortality then increases until the balance has been corrected and natural stagnation has been restored. The growth of population could have been accommodated only if agricultural productivity had been increased. In an industrial economy, the balance depends on a complex range of factors involving, for example, the commodity-purchasing power of the workforce itself, the availability of raw materials and investment funds, the efficiency of the manufacturing process, the size of the market for goods and services. Populations will increase beyond the capacity of their local agricultural economy to support them, but the sale of industrial products pays for food imports and thus breaks the chain of cause and effect which

restricted growth in the eighteenth century, when the population and the economy grew slowly.

Demographic change will therefore be a useful indicator of change within an industrial economy. As Tranter puts it: 'In general, there has been a strong positive correlation between variations in the pace of demographic increase, on the one hand, and variations in the pace of economic advance on the other', and 'At no stage have the economic consequences of demographic change been wholly good or wholly bad. They have, however, always been worthy of note'.⁹ E.A. Wrigley set out to demonstrate in his study of the Pas de Calais-Ruhr coalfield belt in the second half of the nineteenth century that 'industrial populations grow in an intelligible relationship to increases in industrial production'.¹⁰ He actually uses population statistics as a 'crude measure' of rates of regional growth.¹¹ This is not to say that population movement always matches industrial movement precisely. For example, industrial production in Great Britain fell from 1873 to 1913, but the growth of the employed population rose until 1901.¹² Tranter does, however, use the words 'in general'. If population is ignored, quantitative measurements of local economic change can be very difficult to make unless there are ways of ascertaining what the gross product or gross income of an area was. The indicators often have to relate, as they do in this thesis, to changes in occupational distribution and physical changes such as the improvement of the environment, the erection of new factories and public buildings.

Most of the national debate is centred around growth and retardation, but here a relatively unexplored area is examined, that of virtually no growth at all, or local demographic stagnation, which will be associated with broad stagnation in the economy in that, since the level of demand remained generally sluggish, the profitability of new capital investment was restricted and was therefore not made. This is compared with demographic and economic growth before and after the central period of stagnation; during both periods new machines were introduced which attracted capital outlay. Tranter makes the point that take-off after stagnation depends on the size of the industrial legacy available and it will be seen that the central period of stagnation preserved such a legacy for the period of innovation that was to follow.¹³ The term 'stagnation' as normally used is associated with inactivity or even decay, but here it will have a quantitative rather than a qualitative sense. It is defined by Svernilson as a state when output 'ceases to increase'.¹⁴ Neither does it decrease, but there is an even flow. In this thesis stagnation is regarded as taking place in that period when the local economy was working at a rate which enabled it to support a population which changed little in size. This does not mean that no other changes occurred during the period. It will be demonstrated that there were underlying movements which had not reached the point at which they had any demographic effect. This is a principal criterion where Loughborough is concerned and supporting evidence is given in Chapter 9, relating to the size of the housing stock quoted in

each of the census years and to other building projects, particularly places of worship. There is no direct evidence that the economy was stagnant, for example, no details of workforce sizes, of levels of production, prices and wages or the extent of employment. Factory records for the period are very sparse indeed. There is no sequence of documents dealing with rates levied on houses in the town; such a sequence would throw some light on movement within the economy. There is other material, however, which suggests that for some years the economy was passive, rather than creative, in that hosiery, the principal industry from about 1835 onwards, was bound to old machinery within a complicated management system. Nevertheless the economy still retained its integrity: it was losing ground against rising economies, but it was improving against those that were in decline. Stagnation is therefore that state of inertia which can be described as uniform motion. In that sense it could be said to be complete if the motion is invariable, but this is likely to occur only in a theoretical model. Because there is dynamism within stagnation, there may be some variations within it from time to time that hint at growth or decline and in that sense it cannot be complete. During the middle years of the nineteenth century, for example, when the population of Loughborough varied from 10,800 in 1831 to 11,456 in 1871, the local economy was probably still affected by the trade cycles traced by Rostow.¹⁵ Textile exports were an important element in these short rhythm cycles.¹⁶ Demographic trends were not affected, however, because work available was spread over the stock of knitting frames held by hosiers. Peaks and troughs

simply meant more or less employment for a workforce varying little in size in the principal occupation of the town. The quality of life offered by a stagnant economy can also vary. It can be on a high plateau at the end of a period of growth, or on a low one after a period of decline. Its end may also be upward or downward.

This thesis will discuss not only stagnation but its causes in a local economy. It will also propound reasons for its eventual termination. The principal features of a stagnant economy are taken here to be:

- a) no variation in the supply of labour
- b) no increase or decrease in capital stock and
- c) no change in the efficiency of the production process.

Conditions for change would be significant movement in any one of these three areas. Stagnation is therefore a maintenance of balance, a time when not much money is spent on research and development or, if it is spent, the results are unsatisfactory. The methods of production used are temporarily incapable of improvement, either because there is a lack of will for change or because there are no innovative ideas capable of inducing it. Stagnation can be a state voluntarily contrived in that change may be deemed not to be worthwhile because new processes of manufacture are not seen as justifying the outlay on new machinery and the costs of obsolescence of the old. Stagnation can be enforced when change is seen to be desirable, but not possible because, although new techniques do exist, they cannot be adapted to local conditions.

Stagnation is also a state of mind. In Loughborough, for part of the nineteenth century, there was no will for change, partly because earlier growth had ended in economic failure. Crouzet points out that some tendency towards national economic stagnation, which he detects by the end of the nineteenth century, was a product of British economic evolution, from an attitude which in the eighteenth century was ripe to generate industrial revolution but later 'created conditions which were not as favourable as before to innovation and growth'.¹⁷ This statement will be disputed by some of those historians involved in the debate over the efficiency of the national economy in the fourth quarter of the nineteenth century, but the tendency that Crouzet thinks he sees may well have occurred in those firms affected by the 'generation factor'. Hence it is argued that the founder of the firm builds it up on his aggressively hard work, his son develops the business at a steadier pace and his son has ambitions to take his place in Society. The family business therefore loses its main driving force and so stagnation occurs. This could not have happened as frequently as is sometimes assumed. Payne points out that not many family businesses survived to the third generation and that partnerships were also a common feature in the nineteenth century, while the formation of the limited liability company was possible after 1855.¹⁸ Crouzet's main point remains, however, that changes in community attitudes could have been determined by a national 'generation factor', the pioneers being succeeded by men sitting on what they held.

If stagnation occurs after a period of substantial growth there may well be a great deal of local complacency. The community has done well for itself, it can now enjoy the sunlit uplands, although it may suspect that those years will not last forever. If, however, the economy has settled at the end of a period of great movement, the mood may be one of caution or even relief. The position has been stabilised and for the time being no more risks will be taken. The known way is safer. If stagnation occurs after a dispiriting period of decline, the response is likely to be one of resignation. The community has had to face this possibility for some time and now it knows the worst, or thinks it does. Money has perhaps been lost on failed ventures and it has to be accepted that no more is available. Survival is everything. It was out of this situation that there arose in Loughborough, and in hosiery towns generally, another attitude, that of nostalgia. The community did not see progress as the way forward, but wished to revert to a supposedly idyllic past. The pace of economic change does not permit this; there is no way back to Eden.

When and where was stagnation likely to occur? Lack of labour mobility was a factor. Pollard notes that the Medieval guilds induced labour stagnation by tight restrictions on the immigration of craftsmen who had acquired skills elsewhere.¹⁹ Nineteenth century towns that were more exposed to stagnation were those whose industries required workers, skilled and semi-skilled, in a specialism, such as hosiery manufacture, where the workforce formed a closely-knit community whose

occupational scope was limited to one region of the country. Strangers to the community found acceptance difficult. In Loughborough in 1851, for example, seventy-seven percent of all framework knitters (the principal occupation in hosiery manufacture) had been born locally. Only ten percent had been born outside Leicestershire and most of them quoted Nottinghamshire birthplaces in the census of that year. If people could not enter the town easily, neither could local men leave in difficult times, because they could pursue their trade only in an area also in stagnation or recession. There was therefore a type of demographic inertia within the community. Another endogenous factor in stagnation was the reluctance of individuals to take chances, both employers and the workforce. There was availability of labour and therefore no pressure on manufacturers to improve efficiency by installing modern machinery, knowing that workers would reject it. Therefore no new technology was available for renewed enterprise. There were no new, high-growth sectors with large innovations leading to productivity gains. There could also be difficulties in making structural changes in a local economy. Attempts to move into new markets could be resisted; a typical example in hosiery in the middle of the nineteenth century was the refusal of some workers to make low-quality goods for a known and available export market. It will be seen in Chapter 2 that pride in traditional craftsmanship came first.

In a stagnant economy it is probable that a few efforts will be made to use energy more efficiently. The main sources

will not be reviewed and decisions to change, which might depend on marginal factors, will not be taken. A particular form of this is the retention of human energy if it is plentiful and also, therefore, cheaper. Single industry towns are also much more likely to stagnate than those with a variety of industries in different sectors. Stagnation can here take place at almost any time, quite independently of national trends, if local conditions dictate it. McCloskey sees such a lack of diversity in the British economy before 1914, with its concentration on textiles, coal and shipbuilding producing what he calls 'fragility', that is, reduction of momentum which might have become stagnation.²⁰ This was again true of hosiery in the nineteenth century; the communities which grew had at least one other principal manufacture. In Leicester it was shoes and in Loughborough it became engineering. Svernilson postulates two conditions for resumption of growth:

- a) development of new industries and/or
- b) modernisation of stagnating industries to 'squeeze out resources, including labour, that could be used more efficiently in new fields'.²¹

The factor of education is also considered in this thesis. Technically-trained workers will not find many opportunities to develop new projects in areas where stagnation is accepted. Occasionally, however, individuals make their own opportunities, which are best developed if a suitably educated workforce is available to exploit the original break-through. This is what Postan calls 'the bridge between education and economic progress'.²² It was not officially recognised before the

Education Act of 1870 and then only on a limited scale. Growth is associated today with high-quality national education systems, especially in technical training at all levels, but the notion still has no firm lodgement in the British mind.

Stagnation also involves exogenous factors, a main one being the demand for the local product. An example is the retention of only part of a market in which the local economy had once been dominant and aggressive. So far as external markets are concerned, from the middle of the nineteenth century foreign trade controlled the rhythm and structure of growth within many sectors in the United Kingdom. An economy could also be dependent on overseas sources for its raw materials; the restriction on supplies of cotton during the American Civil War introduced a temporary depression into the general stagnation of Loughborough. A factor particularly applicable to the United Kingdom in the nineteenth century was that no government-led assistance schemes were available to local communities; there were no export incentives and no state-designated enterprise areas, no official encouragement for the transfer of business from one location to another in stagnation or decline. Communities had to find their own salvation. On the other hand, state intervention can lead to general stagnation if stability and regulation of income and employment are principal aims of national policy; it now appears that the Russians themselves believe that this is happening in the U.S.S.R. Poor communications are also likely to lead to stagnation in local economies. The converse, that railways encouraged growth, is

generally accepted, but Loughborough had excellent transport facilities and yet experienced much stagnation. Reasons will be sought in a later chapter.

Because of the nature of the study, many tables are used. They have been kept mainly within the text, except where the material is lengthy, when they have been treated as Appendices. One map has also been placed as an Appendix.

f) Loughborough's demographic history in these years deserves consideration at the outset of this thesis. Its population movement was out of line with national trends, As Table 0.2 shows. The British figures are taken from Mathias. ²³

TABLE 0:2

POPULATION OF GREAT BRITAIN IN THE NINETEENTH CENTURY
AS COMPARED WITH THAT OF LOUGHBOROUGH

Decade	Loughborough	National
1801-11	+19%	+13.7%
1811-21	+36%	+17.0%
1821-31	+47%	+15.2%
1831-41	-7%	+13.3%
1841-51	+12%	+12.6%
1851-61	-3%	+11.1%
1861-71	+6%	+12.8%
1871-81	+28%	+13.9%

While national population rose in all decades, that of Loughborough did not. On the other hand, while national population never rose by more than seventeen percent in any decade, that of Loughborough did so in four, at either end of the period. It will be argued here that the local variations in

population growth were related to industrial initiatives taken or missed. As Deane and Cole have written, nineteenth century population increase 'seems to have been associated with increasing economic opportunities which were being provided in the urban areas'.²⁴ It therefore seems likely that during the years 1831-71 enterprise of this kind was rare in Loughborough.

It has already been indicated that demographic change, or the lack of it, can be a guide to the strength of local economies. The rates of growth of a group of towns are compared below and brief reasons, which will be explored later, are advanced for the variations in the Loughborough performance. There were rises and falls in the population of the town which did not conform to the pattern of the county as a whole and that of the other communities within it. The argument will be advanced that the industrial status of Loughborough was unique in its county and that therefore the responses which took place were also unique. Four other settlements have been considered which, with Loughborough, could be called the principal district towns of nineteenth century Leicestershire. They are Melton Mowbray, Ashby-de-la-Zouch, Hinckley and Market Harborough/Great Bowden. They are all market towns, Melton having achieved this status in 1077, Ashby and Market Harborough/Great Bowden between 1203 and 1229, while the date of the Hinckley charter is not known. All five are situated on or near the county boundaries and so are roughly the same distance from Leicester. They all had their own areas of influence, all had turnpike communication with the county capital and turnpike access in other directions.

There were significant differences, however. Although they were all on, or very near to, canals, Loughborough had water communication with the Erewash Valley coalfields as early as 1778. Melton had its Wreake Valley Navigation in about 1797, generally regarded as an important factor in its subsequent growth as a hunting centre, Ashby and Hinckley had canals in 1804 but Market Harborough had to wait until 1809.

Loughborough was the first town to acquire a railway connection, when the Midland Counties Railway put through its extension to Rugby (and thence to London) in 1840. Melton had a railway to Leicester in 1846 and to Peterborough in 1848, but the latter did not form part of an express route until 1880. Market Harborough had a connection with Peterborough in 1851 but not with Leicester and London until 1857. Hinckley had no rail link with Leicester until 1864, although a line was built to Nuneaton in 1862. Ashby had a rail route to Leicester from 1849, along the line from Swannington, built for coal by the Stephensons in 1832 and not offering a great deal of comfort to passengers. Loughborough should, therefore, have derived distinct advantages from its position on a line offering connections north, south and west. It certainly aroused great interest and may well have been seen not only as a modern curiosity but also as the means of putting the town on the way to further prosperity. The whole population of the town, thought the Leicester Chronicle on 9 May 1840, had turned out on the previous day, to meet the first public passenger train. Thomas Cook achieved fame by taking his temperance friends from

Leicester to Loughborough for an 'orderly' picnic in the grounds of Southfields House in July 1841. Nevertheless, the railway seemed to do little else for the town while the town did little to exploit its position on the railway. The question is raised here but the issues will be discussed in Chapter 5.

Hinckley was even more committed to hosiery than Loughborough.²⁵ Felkin credited it with 1750 knitting frames in 1844 but placed only 906 in Loughborough. There were twelve at Ashby while the other two settlements had none at all. There was here a similarity between Hinckley and Loughborough but it cannot be taken too far, since Loughborough was experimenting with steam-powered hosiery machinery and also had a lace industry. Hinckley never had lace, and the significance of this fact is discussed later. Ashby had some lace, there being five manufacturers in 1828,²⁶ but they are not mentioned again. The town was surrounded by the Derbyshire/Leicestershire coalfield and this may have extended its traditional role as a market centre. Many of the mines sunk were owned by the Hastings family, who first arrived in the area in the fifteenth century. Brine springs were discovered at Moira Colliery and these waters were brought to the town from 1822, when a building called the Ivanhoe Baths was opened.²⁷ The spa, if it can be so called, existed throughout the nineteenth century and this, with the Bath Grounds and its castle, slighted after the Civil War, provided a genteel background, but no particular prosperity, for the townspeople.

Market Harborough came into existence as a convenient trading point on the River Welland. Pigot's Directory quotes the principal occupation in 1828 as the 'extensive manufacture of carpets and worsteds', but only one manufacturer is listed.²⁷ The Quorn Hunt also had country in a district called the 'Harborough side' and there is a reference to crowds of visitors in both Harborough and Melton in the second half of the century.²⁸ From 1851 the Harborough side was hunted separately and by the end of the century Market Harborough rivalled, and may have outdone, Melton as a hunting centre. A little lace was made at Melton 'but only a few hands are employed in it'.²⁶ The town was, however, 'much celebrated for its being the residence of several noblemen and gentlemen of distinction, during the hunting season'.²⁶ Melton grew steadily throughout the entire period, never losing population between censuses, borne along happily by the wealthy firm of Nimrod and Peel. All increases in population are attributed in the Census Reports to hunting.²⁹ In 1821 it was 'a large hunting establishment', in 1831 it was the 'settlement of a number of grooms and their families', and in 1861 it was 'the large number of strangers attending the steeplechases'. This last was clearly a temporary rise but the general figures show that a nineteenth century town committed to a luxury trade could enjoy its good fortune with no apparent alarms. Market Harborough had a stagnant period from 1841 to 1861. In 1841 the population was 3,698, in 1851 it was 3,624 and in 1861, 3,697. The reason given in the 1851 census report for the depression that year was the stoppage of a carpet factory and local emigration to Yorkshire.²⁹ The town later grew

steadily, probably because of its market services and local hunting. By 1871 there was an 'abundance of employment' but the Census Report does not quote the occupations. Ashby also grew steadily, and more strongly than either Melton or Harborough. White's Directory gives the names of seven hosiers in 1846, but the twelve knitting frames of 1844 could not have provided even one of them with a living, so the town may have been a small centre for putting-out, a function described in Chapter 2. There was no longer any lace manufacture. As White puts it: 'The inhabitants are chiefly engaged in general trade, and consequently the town is free from the noise and effluvia of a populous manufacturing place'. An increase from 1861 to 1871 was attributed to railway construction and its completion could explain reduced growth up to 1881. Like Melton, however, the spa town of Ashby maintained some population increase throughout the period. The Melton/Ashby/Harborough group of towns may have had few of the advantages of industrial growth. They also had few of its disadvantages.

This was not so, however, where Loughborough and Hinckley were concerned. The Census Reports give the cause for the population decline in 1811-1821 in the latter place as 'cessation of trade with America', that of 1841 to 1851 to removals in search of employment because of 'depression in the stocking manufacture'. The Census Report records an improvement in the hosiery trade, however, between 1861 and 1871. Here was a single-industry town which suffered a very long period of stagnation after the Napoleonic wars, followed by a very

cautious move upwards from 1851, probably connected with the introduction of wide frames to the town. Wide frames made goods for a cheaper market. The population of Loughborough, the other industrial town in the county, was smaller than that of Hinckley in 1801, first grew at the same rate and then shot up between 1811 and 1831 when one of its basic industries, hosiery manufacture, was performing sluggishly and erratically. Here we meet a fundamental difference between Loughborough and its sister towns. The increase from 1811 to 1821 was attributed in the Census Report to 'the establishment of a lace manufactory about twelve years before' and that from 1821 to 1831 to the extension of lace manufacture. 29

Pigot's Directory of 1828/9 states that 'a great number of [lace] machines have been made ... which has much benefitted the town' and 'The manufactures of this town consist of cotton, worsted and merino hosiery; and bobbin-net lace, an article of great beauty and durability'. Population movement among the five towns did give Loughborough clear status as the second town in the county by 1831:

TABLE 0:3

GROWTH IN THE FIVE TOWNS 1801 - 1831

Loughborough	4,546 to 10,800	138%
Melton Mowbray	1,766 to 3,356	90%
Ashby	2,674 to 4,400	65%
Market Harborough	2,499 to 3,346	34%
Hinckley	5,158 to 6,468	25%

TABLE 0:4

GROWTH IN THE FIVE TOWNS 1821 - 1831

Loughborough	7,365 to 10,800	47%
Melton Mowbray	2,815 to 3,356	19%
Market Harborough	2,834 to 3,346	18%
Ashby	3,973 to 4,400	11%
Hinckley	5,933 to 6,468	9%

It will be seen that, over both periods, Loughborough's growth rate was more than twice that of any of the other towns, with the exception of Melton Mowbray during 1801 to 1831. Hinckley, the town totally committed to hosiery manufacture, was bottom of the table for both periods, but Loughborough, with a second industry based on high technical expertise which opened up an entirely new market, had leapt ahead.

The position had changed by 1851.

TABLE 0:5

GROWTH IN THE FIVE TOWNS 1831 - 1851

Melton Mowbray	3,356 to 4 434	32%
Ashby	4,400 to 5,691	29%
Market Harborough	3,346 to 3,624	8%
Loughborough	10,800 to 11,211	4%
Hinckley	6,468 to 6,111	-6%

The three towns offering some luxury services had grown the most quickly. The two textile towns had performed quite badly and Hinckley was still firmly in bottom place.

Figures for the town of Loughborough, the borough of Leicester and the county as a whole are given in Table 0.6, and show that the rate of growth of Loughborough was greater than that of the county and of the county town itself up to 1831.

TABLE 0:6

GROWTH IN LOUGHBOROUGH, LEICESTER AND LEICESTERSHIRE 1801-1831

Loughborough	4,546 to 10,800	138%
Leicester	16,953 to 39,904	135%
Leicestershire	130,081 to 197,003	51%

TABLE 0:7

GROWTH IN LOUGHBOROUGH, LEICESTER AND LEICESTERSHIRE 1821-1831

Loughborough	7,365 to 10,800	47%
Leicester	30,125 to 39,904	32%
Leicestershire	174,571 to 197,003	12%

Again the position had changed by 1851.

TABLE 0:8

GROWTH IN LOUGHBOROUGH, LEICESTER AND LEICESTERSHIRE 1831-1851

Leicester	39,904 to 60,584	51%
Leicestershire	197,003 to 230,308	17%
Loughborough	10,800 to 11,211	4%

It must have seemed at this time that the economy of Loughborough was in a very dull phase, but there is no comment in the Census Reports on the causes of population decline and the subsequent stagnation. White's Directory of 1846 gives the reason, however, in detail, the passage ending with the words: 'The bobbin-net, or twist lace manufacture, of which Nottingham is the chief seat, has of late years greatly declined at Loughborough'.

So far, therefore, the analysis of growth or decline in Loughborough and its four sister towns has stressed the importance of lace manufacture in demographic growth. A similar examination of population movement after 1851 will relate to the importance of hosiery, which for so long had offered survival, but no progress, to the people of the town. The period from 1851 to 1881 is broken into two unequal parts, the first being the second half of the period of stagnation, from 1851 to 1871.

TABLE 0:9

GROWTH IN THE FIVE TOWNS FROM 1851 to 1871

Ashby	5,691 to	7,302	28%
Melton Mowbray	4,434 to	5,033	14%
Hinckley	6,111 to	6,860	12%
Market Harborough	3,624 to	3,812	5%
Loughborough	11,211 to	11,456	2%

The table illustrates the real degree of population stagnation in Loughborough. Even Hinckley, with the same industrial background of struggling hosiery, did well by comparison, while the spa town of Ashby enjoyed growth almost as spectacular as that of Loughborough during the early years of the century. This occurred despite the fact that Granville, in his Spas of England, had been careful not to claim too much for the water of Ashby. It was bitter in taste and it was an 'effectual aperient', he had heard that it helped recovery from 'internal disease', if taken internally, while 'rheumatic and paralytic affections' were cured by immersion. Nevertheless, because of discrepancies in analyses he could not 'recommend the use of it with sufficient confidence', although Ashby did enjoy 'pure air'.³⁰ Best demonstrates that national income was still rising during the period covered above and that there was a credit boom in 1852-7³¹ although some mild emigration from Loughborough at that particular time suggests either a little lack of local confidence or a reaction to the collapse when the credit boom ended. Church refers to the high level of employment during the Crimean War and the increased military demand for textiles.³² There was apparently no permanent trade improvement to bring people into the town. For Church (and others) the 'great Victorian boom' began in or about 1850 and he

quotes figures showing that the peak period of growth for G.N.P. was 'between the 1840s and the 1870s', but this national revival was not reflected locally.

The population table had changed by 1881:

TABLE 0:10

GROWTH IN THE FIVE TOWNS FROM 1871 to 1881

Loughborough	11,456 to 14,681	28%
Melton Mowbray	5,033 to 5,820	16%
Market Harborough	3,812 to 4,403	16%
Hinckley	6,860 to 7,763	12%
Ashby	7,302 to 7,465	2%

Although Ashby grew very little during this period, the hunting towns of Melton Mowbray and Market Harborough expanded and Hinckley continued to grow at a steady rate. Loughborough, however, resumed the place at the top of the table which it had last held in 1831. In a decade of progress, Loughborough had grown to be 1.9 times bigger than the next largest town, Hinckley. Its relation to the county as a whole and the borough of Leicester is shown in Table 0.11.

TABLE 0:11

GROWTH IN LOUGHBOROUGH, LEICESTER AND LEICESTERSHIRE FROM 1851 to 1871

Leicester	60,584 to 95,220	57%
Leicestershire	230,308 to 269,311	17%
Loughborough	11,211 to 11,456	2%

Table 0:12

GROWTH IN LOUGHBOROUGH, LEICESTER AND LEICESTERSHIRE FROM 1871 to 1881

Leicester	95,220 to 122,376	29%
Loughborough	11,456 to 14,681	28%
Leicestershire	269,311 to 321,258	19%

From 1851 the county as a whole was reacting to some extent to

the growth of Leicester itself, which was based on shoe manufacture. This did not affect Loughborough, where recommencement of growth was based, like that of 1811 to 1831, on inventive contributions by engineers to textile manufacture, with the additional benefits of engineering for other markets.

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P A R T A

THE LOCAL ECONOMY

CHAPTER 1: THE LACE INDUSTRY, THE BASIS OF EARLY DEMOGRAPHIC GROWTH

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CHAPTER 1: THE LACE INDUSTRY, THE BASIS OF EARLY DEMOGRAPHIC GROWTH

This chapter deals with the lace industry in Loughborough, which, as we have already seen, provided the economic basis for the town's demographic growth in the early years of the nineteenth century. It was based on a new method of production which was vigorously exploited, it experienced a temporary boom and then failed. A machine making a type of lace which drove hand-made lace-net from the market steadily acquired new outlets in lower price ranges. Unfortunately for Loughborough, the inventor left the town in 1816, partly to seek water power elsewhere and perhaps, it is suggested in Chapter 8 of this thesis, to work in an area less committed than north Leicestershire to the cottage type system of textile manufacture. Any chance of well-founded local growth then disappeared. There was investment only in manually operated machines, but labour poured in to work this obsolescent equipment and for a time there appeared to be no need to improve techniques of production. The industry could have persisted in Loughborough if only one man with the will and the capital had invested in steampower, but none of the small manufacturers who moved in and out of the trade had much financial backing, and those outside lace who did have capital to spare cautiously delayed their entry into it. Capital-intensive competition from the Nottingham area subsequently destroyed the local trade; there was sharp deceleration of the economy. It will be shown in

the next chapter that this was arrested by hosiery and at that level stagnation occurred.

a) Just as the effects of the Napoleonic Wars were making themselves felt on hosiery, the lace industry was introduced by John Heathcoat in 1809, when the population of the town was about 5,300. He was a craftsman inventor, but he had enough financial backing to concentrate on the development of a machine capable of making lace much more quickly than the hand-made article, but equally serviceable and attractive. He achieved this with his first patent in 1808, but the finished material was only three inches wide.¹ A setback occurred when he sought finance for his improvements, which was first offered by Messrs. Boden, Oliver and Cartwright, all hosiers of Loughborough. The latter two subsequently withdrew on the grounds that the risks were too great. Money was, however, forthcoming from another backer, Charles Lacy, an 'Irishman of mercurial temperament, who squandered money on a vast scale and made enemies wherever he went', but who later played a useful part in developing lace in Loughborough.² The firm eventually began business in Factory Street under the title of Heathcoat, Lacy and Boden and later took another building in Mill Street, where they built 'Old Loughborough', the patent machine of 1809, a major innovation in textile manufacture.

'Old Loughborough' was a bobbin-net machine, so called because the hexagonal lace mesh was made by slim bobbins in carriages, which crossed over fixed warp threads, twisting as

they went and forming the net. Combs were used to perform the function of the pins in hand-made lace. Heathcoat had designed his machine to copy the movements of the hands in making Buckinghamshire lace on the cushion or pillow, by which a skilled worker could make five meshes of 'plain net' in a minute. 'Old Loughborough' could make lace of similar quality a yard wide, at the rate of one thousand meshes in a minute. In the original machine each mesh required sixty movements, but an improvement patented in 1811 reduced the number to thirteen and later modifications made a further reduction to six.³ We have here an interesting example of how the machine first destroyed competition from the human hand and later imposed its own logic on the operation, so that it was no longer making lace to compete with the cottage product (Heathcoat himself called it a 'mechanical pillow') but an article that created a market in its own right.

Heathcoat had not been working in isolation and Felkin asserts that Charles Hood, who had gone some way to making a twist-net lace machine, entered his employment in 1808.⁴ At least sixteen bobbin-net machines had been attempted by various people before the 1808 patent, and in 1809 Lindley and Simpkin, both of Loughborough, were working separately on lace machinery.⁵ John Lindley had, in fact, produced, with others, the foundation invention for bobbin-net lace manufacture - the bobbin and carriage itself - in 1799.⁶ Heathcoat was perhaps an intelligent co-ordinator, who could see the machine as more than the sum of its parts and was therefore able to bridge the

gaps through which earlier efforts had slipped. As Chapman puts it, the invention was 'a cumulative synthesis of a group of lesser inventions whose source is often obscure'.⁷ These were what Mathias refers to as ideas developed as innovators responded to demands by business to adopt a machine to solve a problem or make a fortune.⁸ Heathcoat was intent on making his own fortune, using the method described by Mathias as 'technological Darwinism'. His invention fell within the description of 'not the result of the formal application of applied science nor the product of a formal education system'.⁸ He did, however, have the qualities held by Mathias to be of greater value at that time, 'intense curiosity, quick wits, clever fingers, luck, capital, or employment and a backer to survive the period of experimenting'.⁸ Elliott, his former employer, described him as 'inventive, persevering, undaunted by difficulty or mistakes ... patient, self-denying, taciturn'.⁹ A correspondent of the Loughborough Monitor wrote of him: 'I scarcely know a brighter exemplar of perseverance, well directed talent and integrity'.¹⁰ It appears therefore that Loughborough had been fortunate that this industrial paragon had chosen to live in the town, where he did all the technical research. He had raised capital locally, he found a town in which housing was about to become easily available, at a time when the prospects of framework knitting were being affected by the war. His partners offered commercial expertise and also the technical skills of making textiles, for which Heathcoat's apprenticeship had not prepared him. In fact, John Boden became his director of lace sales in London.¹¹

The year 1809 was one of depression in the lace trade, but before long the firm could pay its skilled hands as much as £10 per week.¹² By 1816, fifty-five bobbin-net frames were working at Mill Street¹³ in what may have been the first large factory of its kind.¹⁴ Bobbin-net lace did not, however, enter an empty market. The warp frame which, by introducing a second thread to the knitting frame 'united the stitch ... with the warp of the weaver's loom'¹⁵ had probably been invented in about 1775 by Crane, of Edmonton.¹⁶ By using a separate thread for each vertical row of loops, the knitting frame was thus adapted to make lace and other patterned fabrics. Heathcoat himself, in co-operation with Caldwell, had patented an improvement to it in 1804.¹⁷ In 1807 rotary power had been applied by Orgill, of Castle Donington. Warp-lace came into direct competition with bobbin-net lace. In addition, 156 bobbin-net machines were built in infringement of Heathcoat's patent, and legal action had been made difficult by an error in the drafting of the patent specification. Therefore, he felt forced to reduce wages by one-third in 1816 to retain his share of the market. This could still have left his men earning much more than hosiery workers. Heathcoat's solicitor later said that prior to the reductions they were earning between £1 10s and £3 per week, nothing like the £10 that had been possible a few years earlier, but still a good wage.¹⁸ There was now in some minds, however, a principle at stake. Heathcoat's hands contacted a group of machine breakers in Nottingham and his factory was subsequently attacked in a well organised raid.

Since the attack had little effect on the course of events, Luddism is discussed as a social reaction to change in Chapter 8.

b) It is sufficient to say here that the damage was very extensive, but the year 1816 was to mark only the end of the preliminary phase of the history of lace manufacture in Loughborough. If the aim of the movement had been to deliver a major blow at the bobbin-net lace trade, it had failed. As far as the attackers were concerned, the 'Loughborough Job' was a Pyrrhic victory. The Hammonds believe that the success of the authorities in making arrests and obtaining convictions 'closed the epoch of Luddism'.¹⁹ Heathcoat did close his operations in Loughborough after 1816, but his departure and the Luddite attack were probably not closely related. The Hundred awarded him £10,000 damages, but he would not accept the condition that it should be spend locally.²⁰ This was a generous offer and Heathcoat must have had strong reasons for turning it down. One that he gave was that he feared for his life, but the arrests of the offenders ensured that this particular group would not operate again. The job itself was, in that sense, a reason for staying in Loughborough. He was, however, in Tiverton at the time of the attack and the Hammonds produce evidence that he had bought a mill there.²¹ His action in leaving must have been based on a careful calculation between the value of £10,000 to him in Loughborough and the value of water power at Tiverton. He wrote to the Mayor of that town as soon as he heard of the attack, and asked for protection, adding that he believed his Loughborough

premises had been damaged because of his interest in Tiverton: 'I believe the real cause of this mischief being done is principally, if not wholly, owing to the offence of our removing here'. Rawstron feels that the reason for the Tiverton venture was that 'there was a vacant woollen mill with adjacent water power and ample labour from among ... unemployed hand-loom weavers'. 22

Varley makes another suggestion. He points out that it might always have been in Heathcoat's mind to staff a factory additional to, but not in place of, that in Mill Street, and adduces in support the attempt to keep the Loughborough operation commercially viable. 23 He also points out that the factory had been (or should have been) protected by six armed guards and implies that Heathcoat would not have made this arrangement if he had intended to move entirely to Tiverton, but it could be argued that the machines in Loughborough were too valuable to have been left unprotected in any event. If there had been any doubt about the future location of the factory, it is reasonable to suppose that the minds of Heathcoat and Boden were made up by the Luddites. They may well have connected the treachery of their workforce, as they would have seen it, with more general concern over the aims of the Luddites themselves, that is, to destroy machinery which threatened the domestic style of textile production then common in the east Midlands. A response to a reduction in wages was a convenient opportunity to attack a factory, then a new development in the region. Tiverton was, however, a long way from the Luddite base in Nottinghamshire.

c) Local historians are vague about the events that followed the destruction at Mill Street. H.W. Cook claims that lace manufacture enjoyed a later boom in Loughborough, after the expiry of the Heathcoat patent.²⁴ W.A. Deakin says plainly that the industry was 'lost' to Loughborough and that at least five hundred people left to go to Tiverton in 1816, 'the greatest exodus the town has ever known'.²⁵ No similar piece of nineteenth-century folklore exists in Devon. Baptismal registers of churches in Tiverton do record a number of children of lacemakers in 1817, but this is not evidence that their fathers came from Leicestershire, since by that time Heathcoat would have been employing local people. There is no obvious source of information on population movement in Tiverton at this date.²⁶ The 1821 Census Report, however, gives as the cause of the rise in the population of Loughborough at that time the 'establishment of a lace manufactory about twelve years before'.²⁷ Rawstron probably has the truth. He believes that Heathcoat took with him only enough skilled labour to start up in Devon.²⁸ Deakin's father, Joseph, was more cautious in 1927, when he wrote: 'When the Luddite troubles ceased, there continued in Loughborough men who gained a favourable trade in making 'bobbin lace', although he believed wrongly that 'it was freely maintained until the end of the nineteenth century'.²⁹ In fact, bobbin-net lace was probably being produced in the town, in Lacy's factory, on the day after the 1816 attack. Accurate information is difficult to obtain. A method is to search Church and Chapel registers in the hope of assessing by aggregative analysis the proportion of lace makers (as distinct

from lace manufacturers, the machine owners) in the population. Unfortunately, the only local registers showing occupations prior to 1837 were those for baptisms, but an analysis is still useful in demonstrating the continuity of the trade in the town, although the sample is small (never more than 250 entries per year).

The proportion of lacemakers, expressed as percentages of all the entries in which occupations of fathers are shown, is given in Table 1.1 for the period 1815 to 1822.

TABLE 1.1

PERCENTAGE OF LACEMAKERS/TWIST HANDS IN PARISH CHURCH AND WESLEYAN REGISTERS, 1815-1822

1815	9.8
1816	8.3
1817	13.8
1818	14.6
1819	10.7
1820	12.3
1821	12.9
1822	14.2

(Average for period: 12% of 1547 entries)

Although these figures deal only with fathers - by no means the whole of the labour force - they provide an impression of the importance of the occupation. The numbers vary generally in accordance with the numbers of manufacturers and the known trends in the trade. They do suggest that lacemaking continued in Loughborough, impeded only for a short time by the move of Heathcoat to Tiverton. The general population of the town also continued to rise although hosiery offered little prospect of growth. The only industry strong enough to sustain it was lace. There are several reasons why that should be so.

Lacy's name appears in a Directory entry for 1822 (as C. Lacey and Company) as a lace manufacturer in Loughborough and a 'patentee'.³⁰ This must have meant that either he was using machines built prior to 1816 or that he still had an agreement with Heathcoat. Varley says that Lacy made between £40,000 and £50,000 from his association with the inventor.³¹ Thomis believes that another firm moved into Heathcoat's factory in Mill Street.³² This may have been Paget and Wallis, to whom Heathcoat granted a licence to build his machines. There were therefore at least two firms who were legally working with bobbin-net machines in the town. According to Gravenor Henson, the author of an early history of the framework knitters, published in 1831, Heathcoat had actually issued licences in 'some hundreds'. Henson may not be a reliable witness; Chapman points out in the introduction to the reprint of the book that he himself had failed as a lace manufacturer and had a 'frequently voiced antipathy' to Heathcoat.³³ Whether Henson was right or wrong, however, it has already been stated in this chapter that there had been large-scale infringements of patent rights. The analysis of twist-hand fathers given above covers the period prior to the expiry of the patent, and it will be seen that the percentage was higher than in the Heathcoat era. This is the first phase of the expansion of the lace trade in Loughborough.

Heathcoat fought a successful legal action in 1818, after which non-licensees were obliged to pay heavy royalties. In a deed of 1819 he and the majority of licensees limited the production of machinery and thus kept up lace prices.³⁴ The figures quoted above for lacemakers suggest that this had some effect on the local trade. Unfortunately, the Chart of Lace Manufacturers given at the end of this chapter does not begin until 1822, the first year for which Directory entries exist. Eleven firms were quoted then, but the effect of Heathcoat's defence of his patent on the number of local manufacturers is not known. It may be said, however, that protection of patent rights was not easy in the nineteenth century and some firms may have slipped through the net. On the other hand, lace manufacture was so profitable that many manufacturers could have obtained loans for licences. Machines could also have been acquired from other sources. The licence was one to build, not for the use of, bobbin-net machines. Whatever the legal status of these firms, their presence must have been an important factor in the steady rise of the town's population after 1809. In view of the inadequacy of the early censuses, access to directories and the use of indirect methods such as the analysis of baptismal registers are our principal sources for the period and the Chart of Manufacturers is revealing in many ways. Lace was always a volatile trade in Loughborough. Of the eleven firms known to be engaged in it in 1822, six are never heard of again and these include Charles Lacy, one of the three pioneers. Another survived for only one more year and two for two more. Of the remaining two, Henshaw did not go out of business until

engineering side of the trade include only one machine builder, W.Cross, from 1835 to 1849. Another four were bobbin and carriage makers:

J. and W.Chapman	1809-1834
J.Cook	1828-1835
T.Skevington	1835
C.Wootton	1835

The action of the bobbins and their carriages was the most critical part of lace manufacture. The bobbins were made of two brass discs, between which up to 120 yards of fine thread could be wound. Each bobbin was held in a steel carriage by a spring. The workmanship was so precise that up to twenty bobbins and their carriages could be fitted next to each other in the space of one inch. It will be seen that only the Chapman brothers are known for certain to have been making machine parts from the date of the original invention and also during the years which immediately followed the expiry of the patent. The other business entered in the Directories prior to 1835 is that of J.Cook. Only the Chapmans remained in the trade for a long time. The three men entering it in 1835 must have had hopes of a revival in lace, but it was not to happen, although Cross survived until 1849. An analysis of the occupational entries in the baptismal registers shows that the number of journeyman bobbin and carriage makers who took their infants to the font was only about five percent of lace makers performing the same duty. It seems evident that the production of lace was far more important in Loughborough than the building of machinery.

1835, while Paget and Wallis, the early licensees, lasted until 1846. Perhaps virtue had its own rewards. Other firms had the luck or the ability to survive, Smith from 1828 to 1861, Rushforth from 1828 to 1854 and Cresswell from 1828 to 1849. It may well have been that the relative stability of such firms led other men to believe that there was still a living to be made in lace when most of the evidence suggested otherwise.

d) The patent expired in 1823 and lace manufacture moved into its second local phase. Lee's Report on the Sanitary Condition of Loughborough in 1849 includes the statement: 'About the year 1825 the town increased very rapidly, in consequence of the expiration of a patent which caused the lace trade to be thrown open'. An attraction to those moving into Loughborough must have been the existence of lace manufacturers there already and the pool of experienced machine operators which had developed. White's Directory of 1846 stated: '... when the invention was thrown open to the public so lucrative was the trade that nearly everyone in Nottingham and Loughborough, who had capital at command, were [sic] 'anxious to invest it in bobbin-net machines, in the manufacture of which hundreds of mechanics from other parts of the kingdom found ample employment for several years at exorbitant wages'. This immoderate claim about construction was not true of Loughborough, and there may have been a misuse of the word 'mechanic', which often referred to a machine operator rather than a machine maker. The references in the Directories to local firms engaged on the

The atmosphere of 1823 in lace making areas was like that of a gold rush. Men with no business experience became infected with what became known as the 'twist-net fever' and Felkin described the entire lacemaking community as one 'athirst for gain'. Nevertheless, he adds, the years from 1823 to 1825 were a 'time of unparalleled prosperity, capital flowed into the business abundantly ... in order to construct new lace machinery'.³⁵ The machines cost as much as £600 in 1823-5 and could be bought on weekly instalments, at ten shillings per nine-inch width of lace, to a maximum of forty-five inches. Wages of the operators rose to as much as £6 per week for a period.³⁶ At the time, many men outside lace must have regarded Heathcoat's invention as a God-sent opportunity. Some paid £50 or £60 for courses of instruction, but were at first so inexperienced that their product was much inferior and any loans that might have been taken out would have remained a constant burden. Felkin says that there were 240 patent lace machines in Loughborough and district in 1826.³⁷

The baptismal entries reflect the collapse of some lace firms after 1822 (see Chart of Manufacturers), but thereafter they suggest rapid recovery as the effects of the expiry of the patent made themselves felt.

TABLE 1:2

PERCENTAGE OF LACEMAKERS/TWIST HANDS IN PARISH CHURCH
AND WESLEYAN REGISTERS, 1823 - 1828

1823	(year of patent expiry)	9.7%
1824		17.2%
1825		16.4%
1826		17.9%
1827		10/0%
1828		18.7%

The average for the period was 15% from 1336 entries, as compared with 12% prior to the expiry of the patent.

The Chart of Manufacturers reveals the local reaction in 1826 to what White's Directory calls a 'commercial panic'. Only ten firms are recorded, and five disappeared in that year or the next. Another two were not heard of after 1828. There had been over-speculation, the market was over-stocked and machines which had cost from £400 to £500 each were sold for less than £100. There are some contemporary local references to this. The Leicester Journal of 18 November 1825 reported that Hosea Heafford (a family later to be prominent in dyeing) had embarked with a partner, who had no capital, in the bobbin and carriage trade. He lost all his money in a few months. The same newspaper noticed the bankruptcy of J. Brown, lace manufacturer, on 24 February 1826. On 3 March that year there was a general report on the trade: 'Twist Net Lace Machines. On Friday a quantity of these machines were offered for sale by Public Auction, at Loughborough, and as a proof of their excessive falling off in their original value, a machine for which £1,200 had been refused a few months earlier was offered for £125'. Commentaries of the period dwell heavily on this kind of spectacular failure, but there were recoveries. For example, the events of the first week of March 1826 were followed by a report of 31 March in a reprint in the Leicester Journal of a statement in the Nottingham Mercury : 'We are happy to have it in our power to announce a marked improvement in the state of the Lace Trade in

this town and neighbourhood'. The population of Loughborough was still rising, and in 1828 there were thirty Directory entries for lace manufactures, Pigot's Directory, from which most of them are taken, has the entry: 'A great number of [lace] machines have been made ... which has much benefitted the town'. Ten of the manufacturers are not mentioned again but, as we have noted, men came and went quickly in this trade. It was easy to buy machines very cheaply when the market was faltering: it was difficult to establish firm commercial contacts and even more difficult to survive the next of the storms that blew up so frequently, particularly after 1828, the end of the second phase.

e) The final phase of local lace manufacture began, therefore, in 1829. That year there was a fall in prices as buyers held back, aware that over-production would operate to their advantage. ³⁸ The Chart shows that by 1830 some of the manufacturers in business in 1828 had gone and, although others had appeared, there was a nett loss of four. The larger capitalists had initially withheld investment in the trade, their caution putting that of Cartwright in 1808 into proper perspective. The smaller men had many problems, partly of their own making. To these there was now to be added another, from which recovery was not possible - steam power. In 1831 there were 3,500 hand machines in use throughout the country, but by that time they ran into competition from the twenty-two factories which had also been opened, with 1,000 powered

machines between them. ³⁹ As the number of factories grew, many small owners or single machine operators went out of business. The expense of modernising was far beyond such men. For them, economy in time, energy and manpower was less important than economy in cash outlay.

The price of finished lace, per square yard, had been forty shillings in 1813. In 1824 it was only eight shillings. By 1836 it was to be 10d and in 1850, 4d. ⁴⁰ Between 1824 and 1832, one-third of all the machinery in the trade changed hands. Older machines 'not worth the trouble of carrying downstairs' were thrown out of windows. Many masters disappeared from the trade, or sold their frames and became, as Felkin puts it, 'absorbed into the ranks of the journeymen'. ⁴¹ In Loughborough only two of the manufacturers listed in 1822 (Henshaw, Paget and Wallis) were also entered in 1832. Of those listed in 1826 for the first time, only one (Jarrow) also appeared in 1832. The trade did what it could to help itself. In 1832 a 'stint' (limitation on hours of work) lasted for several weeks in Loughborough, and national restrictions were practised in 1834/5, only to be relaxed when the trade temporarily revived. ⁴² Statistics on the lace trade presented by Felkin (himself a bobbin-net manufacturer) suggest that there were 3,800 machines in 1835, a loss of 700 compared with his figures for 1831. ⁴³ He thought that many hand-machines had been broken up and some had been made wider by joining two narrow frames together, while others had been exported. He said that the

number of machine hands had fallen since 1833, by 1,500 to about 6,000. Some of this loss was semi-skilled labour, since the wider frames required more expertise. He believed that about 500 small employers (that is, those owning less than four machines) had gone out of business.

In Loughborough the number of small employers actually grew. Eighteen manufacturers had survived the crisis of 1832 and were still in business in 1835; another twenty-two had joined them, bringing the total to forty. Thirteen were, however, entered for the one year only and it may well have been that they had fallen into the error of buying machines cheaply, only to find that the trade would not support them. Here were men who were apparently unable to believe that the local economic miracle was over. Another seven firms of longer standing did not survive the year and subsequent decline was rapid. By 1846 manufacturing capacity in Loughborough, in terms of the number of firms, had fallen to thirty-seven percent of its 1835 level. The decline occurred partly because of technical change and partly because power-driven machinery took over the market. Felkin said that there were 'twenty-nine or thirty' power factories in 1835 and that there were 1,200 steam driven machines in 1841.⁴⁴ Nottingham had also taken a clear lead in the trade; its manufacturers were large enough to be able to survive during periods of adversity, and had the capital so that they could adapt more quickly to technical improvements. The processes were similar to those observed by Boyson in cotton.⁴⁵ Capital was essential for progress and those who did

not have it were less able to impose themselves on the trade. In all industries, he argues, the first successful mechanised producers made large profits but, unless one firm acquired a virtual monopoly, competition reduced profits all round, unless restrictive trading was practised.

A report to a Parliamentary Commission in 1843 illustrates a problem which destroyed the smaller man: 'It is one of the peculiar features of this [lace] trade that the machines are very often liable to be superseded by others, either in consequence of improvements which have succeeded each other in rapid succession or of changes in fashion'⁴⁶ Felkin had estimated in 1835 that, of all machines at work, 2,162 were in the efficient areas around and in Nottingham and only 343 in Leicestershire.⁴³ The small men could not survive in 'an economy of limitless expansion, accumulation and technical revolution'. That was the 'savage jungle pursuit which doomed the weak to bankruptcy and wage earning status'.⁴⁷ Evidence to the Childrens' Employment Commission, taken in 1841, shows clearly how Loughborough had finally lost its way in lace making. All the machines of local manufacturers from whom evidence was taken were hand operated on the 'man and boy' basis. The two firms, J. Wallis and Truman and Wallis, owned fifty-six of them and three other firms a further twelve between them. Boys under the age of eighteen helped to turn the wheels of the machines and also acted as threaders. The census of 1841 records that there were still 170 lace makers in Loughborough; the last

entries in Directories for firms visited by the 1841 Commission are:

W. Clarke	(four frames)	1842
M. Smith	(six)	1861
J. Oldham	(two)	1846
Truman and Wallis	(eleven)	1841
J. Wallis	(forty-five)	1846

Thus by the end of 1846 a further sixty-two machines had been taken out of the local trade.

The precise effect of the rise and fall of the lace industry is difficult to calculate because of the absence of reliable data prior to 1841. There had been continuous lace production in the town since 1809 and it expanded after the expiry of the patent. No doubt there had been much industrial impetuosity and some spectacular slumps, but the general decline of lace in Loughborough proceeded at a steadier pace. In 1836, for example, ten local lace manufacturers and one lace dealer subscribed a total of £1,600 towards shares in the proposed extension of the Midland Counties Railway through Loughborough to Rugby:

£300 M. Smith

£200 W. Keightley

T. Bryan

W. Clarke

£100 C. Rushforth
 J. Thornhill
 J. Massey
 B. Leavesley
 J. Leavesley
 J. Brand

The lace dealer, who subscribed £100, was Phoebe Bakewell. These subscriptions were no sign of great wealth. The major hosiers in the town could find sums ranging from £500 to £3,000. Three grocers subscribed sums of £1,000, £500 and £200, while a dissenting Minister found £300.⁴⁸ Nevertheless, half the lace manufacturers in the town could find money for railway shares; the trade may have been in some difficulty, but there were men in it who were relatively affluent. In 1837, however, there was another sharp depression. Only 25 percent of the machinery in both hosiery and lace in the east Midlands was in work, and then only part-time, and from this period the industry steadily decayed, except where capital and steam power were able to save it.⁴²

The census enumerators' books for Loughborough in 1841 show that there were 132 heads of household still engaged in lacemaking, that is, 7.6 percent of all heads. In 1851 the number of male lace maker heads of households had fallen to forty-one, that is, only 2 percent of all heads in the town. Within Leicestershire, however, Loughborough still held its lead. In 1841, there were 369 adult male lacemakers in the county (household heads and others), of whom 170 lived in Loughborough, that is, 46 percent.⁴⁹ In 1851, there were

forty-seven adult lace makers out of 112, that is, 42 percent. The next most important area was that of the Barrow Union adjoining Loughborough to the south. The town and its surrounding villages might well have become a little Nottingham had manufacturers been able to operate on a larger scale, but the local lace industry slowly died away.

As the chart shows, only three lace manufacturers appear in the census of 1861 and only ten lacemaker heads of households are recorded. There were another fifty-eight who were not householders, many of them quite young. Thirty-nine of the total were with one firm, Bird and Pillings. The other two manufacturers were trading in a very small way. T. Pallett told the enumerator that he was employing only two men, although previously his workforce had been six men and two boys. By 1860 the English lace trade was under attack from a superior and cheaper French product and the Report upon the Expediency of Subjecting the Lace Manufacture to the Regulations of the Factory Acts (1861) illustrates the increasing problems of the small manufacturer. From about 1841 all lace machines had been built specifically for steam power and in any event the masters in the trades were all in or near Nottingham.⁵⁰ Kelly's Directory lists only one lace manufacturer for Loughborough in 1864 - T. Pallett. Pillings and his partner had transferred from lace to a new venture, that of elastic cuff and sleeve making. Elastic web manufacture was an attempt at partial restructure of the economy by the manufacture of a new product. Had it been successful, it would have added impetus to the forces at work at

this period to lift the town out of a long period of stagnation. It was, however, the action of small employers with no particular expertise and even less capital, seeking any outlet which could maintain them at a level above that of the paid worker. It failed for the same reasons that lace had failed, including the complication that it was a victim of changing fashion.

This chapter has demonstrated that there were causal links between economic activity and demographic growth or decline in Loughborough in the period from 1809 to the 1840s. The growth was based on an industry new to the town, but for which the workforce was suited because of its experience, not only in textile manufacture but also in the construction of machinery. Capital was available to develop a trade that created new markets for net lace. Centralised production methods could be used, that is, the machine operators did not work at home, as was the practice in hosiery, but in larger buildings owned by their employers. Small firms developed locally after the inventor moved to Tiverton in 1816; some of them may have been managed quite efficiently, but this kind of fragmentation led eventually to economic and demographic decline, because financial restraints prevented the owner of a few machines from taking advantage of later modifications of the production process. The early years of expansion in the lace trade occurred in what P.L. Payne has described as a 'buoyant domestic market buttressed, particularly in textiles, by a flourishing overseas demand'. Although there were risks involved in pioneering,

`entrepreneurial difficulties were often exacerbated by feverish over-production'.⁵¹ Often these pioneers had little technical knowledge, but were still prepared to risk money without `rational calculation' of costs, probable demand and the planning necessary for the business to operate efficiently. Excesses of optimism were not uncommon, in lace they were checked only when the trade moved into the hands of the larger manufacturers, who were capable of making more realistic assessments.

Any conclusion that the lace manufacturers were entirely to blame for their misfortunes may, however, be only partially true. Events in the trade in Loughborough related in this chapter are associated in Table 1.3 with the troughs and peaks in British trade cycles as traced by W. Rostow. Contrary trends are shown in brackets. The frequency and short duration of the swings is linked by Rostow with exports, not necessarily connected to immediate demand overseas but to variations in stocks held for sale there. Rostow calls this the `inventory cycle', and textiles were an important factor in it.⁵² Long swings cannot be traced because there are no business archives which could provide a sufficiently clear demonstration of local and national relationships. The short term fluctuations seem, however, to be associated with Rostow cycles. There were no doubt very many small and inefficient businesses in Loughborough lace, but the impression is given that national factors also played a part.

TABLE 1:3

EVENTS IN LOUGHBOROUGH LACE TRADE RELATED TO ANNUAL TURNING POINTS IN BRITISH TRADE CYCLES

ROSTOW TROUGHS	LOUGHBOROUGH LACE TRADE TROUGHS
1816	Heathcoat feels obliged to reduce wages at his Loughborough factory
1819	Probable fall in the numbers of local lacemakers
1826	Number of lace manufacturers falls by one since 1822, and five more disappear in 1826/7 Commercial panic in February/March (Probably a high number of lacemakers)
1829	Ten of the lace manufacturers quoted in 1828 not mentioned again
1832	Number of lace manufacturers falls by three Restrictions on production in force
1837	Sharp depression in lace throughout the east Midlands. The comment below against the year 1836 suggests that it reached Loughborough earlier
ROSTOW PEAKS	LOUGHBOROUGH LACE TRADE PEAKS
1810	Machine made lace was introduced in 1809 during a depression, but it was soon followed by an upswing in the trade cycle
1815	
1818	Probable rise in the number of lacemakers to its highest level
1825	Sanitary Report of 1849 notes an increase in the population 'about the year 1825'
1828	Number of lace manufacturers rises by twenty from 1826 Probable rise in the number of lacemakers to a new high level
1831	
1836	(Number of lace manufacturers falls by twenty from 1835. Industry in terminal decline.)

The theme of growth through new methods of production will be repeated in Chapter 4, which refers to the events of 1864 and afterwards, the difference being that fragmentation did not occur then and growth continued, because of a higher level of managerial competence. The decline of local lace manufacture in the 1830s carried with it, however, a loss of confidence so that, although demographic decline was arrested by some improvement in hosiery, there was a general reluctance to avoid new economic adventures. It will be seen in the next chapter that during this period the population of the town varied only slightly.

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CHAPTER 2: HOSIERY AS A MAJOR COMPONENT OF STAGNATION

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CHAPTER 2: HOSIERY AS A MAJOR COMPONENT OF STAGNATION

Hosiery was the basic industry of Loughborough throughout the central period of the nineteenth century and the purpose of this chapter is to examine its performance up to the 1850s. Economic stagnation after the 1830s will be seen as the inevitable consequence of dependence on hosiery, whose production structure and manufacturing processes were developed before the Industrial Revolution. It maintained in fitful employment a large force of knitters and ancillary workers. It provided some kind of a living for very many people. It was restricted by the nature of its basic machinery, but product substitution was rejected by many in the workforce. Movement away from its domestic structure met with determined resistance. The workers looked to legislation to create the protected industry which, it was believed, had once existed and had offered a good living to all. Hosiery had only a few men with innovative ability and entrepreneurial drive during the years under review in this chapter. Conservatism was so entrenched that there could have been little hope that the industry would later spring into vigorous life. Despite its weakness, however, it was able to arrest the slide precipitated by the decline of lace. It provided an economic plateau on which the town could maintain itself and, on this base, the few men with drive were seeking alternative methods of manufacture.

a) Traditional framework knitting was prominent up to 1881, that is, the machine still in frequent use was a modified form of a sixteenth-century model, worked by hand (see Appendix). Because of its many ingenious modifications, it had served the trade well, but it was defective in one particular respect; narrowing (fashioning) had to be done by the manual reduction of loops in the row of knitting. Most master hosiers were not, however, concerned with the technical processes of the trade; they no doubt knew the industry well and had probably served apprenticeships in it, but they made no constructive contribution except sometimes in finding capital to finance inventive craftsmen. They were mainly concerned with the commercial aspects of the industry, they were merchant entrepreneurs, issuing raw materials to the framework knitters and paying for the finished goods, which were made in the workman's home or in a small workshop. The workman had only to concern himself with the manufacturing process and was free, in theory, to associate himself with any hosier of his choice.

Loughborough had, in addition to these merchant entrepreneurs, two other eighteenth century hosiers, Richard Cartwright and Joseph Paget, who were creative men actively seeking improvements in materials. Paget had introduced worsted hosiery before 1792.¹ At about the same time, Cartwright introduced the carding and spinning of cotton and a fine wool known as Merino, to produce an 'unshrinkable' thread, patented in 1794. In partnership with Edward Warner, he opened a mill and equipped it with Arkwright and Crompton machinery. Partly

because of these two enterprises, the people of the town enjoyed some prosperity before the nineteenth century began. Framework knitting had been in recession in the 1740s when, according to Gravenor Henson, the phrase 'as poor as a stockinger' could be heard, but had recovered with a renewal of the export trade with the United States at the end of the War of Independence in 1783.² By that time the opening of a navigation from the Trent had enhanced Loughborough's position as a communications centre. Framework knitters felt themselves to be comfortably off. Their work was based on the older cottage industries of hand-knitting and weaving; it still retained its air of domesticity. This was part of the myth of the 'golden age', which is discussed later in this chapter.

The better years were those of the relative scarcity of knitting frames. At first only a man of some wealth, perhaps of yeoman status, could afford a frame, but as prices fell it came within the pockets of other men. Thereafter the productive capacity of more and more machines steadily outstripped the markets available. The wealthier operatives bought up several frames and set hands to work on them, apprentices were indentured at high premiums and paupers were put to the occupation to free parishes of their upkeep. It was an easy trade to enter. The work was only semi-skilled; there were frames available and children not in their teens could be put on them. The knitters' association, the Framework Knitters' Company, had little influence on the struggles for the status and protection required by its members and a legal decision of

1809 showed that its charter was ineffective against those knitters who had not served a legal apprenticeship. Simple dilution of labour could not, therefore, be resisted.

Thereafter, the Company went into 'the honourable retirement of a City livery company'.³ To make matters much worse, knitters had sold their frames for immediate cash in times of poverty. They had therefore lost control of the means of production, which fell into the hands of the master hosiers, who now had power over the men themselves.

b) At the same time, the export trade, on which the industry depended, had been seriously restricted by the war with France, which closed many continental markets, while the British blockade aroused anger in the United States, whose Non-Intercourse Act of 1809 had damaging effects on British trade with that country, previously a heavy importer of our textiles. Gregory says that the Act plunged the export industries into a 'deep and protracted crisis, bankruptcy followed bankruptcy' and quotes Brougham on the importance of the American market: 'not an axe falls in the woods of America which does not put in motion some shuttle, or hammer, or wheel in England'.⁴ A Commission enquired into the state of the hosiery industry in 1812. The South American trade had declined in 1810 and the economic problems caused by the war were pressing heavily. Felkin described the years 1811/12 as 'sorely distressful' and there had been outbreaks of violence.⁵ No Loughborough evidence was called by the Commission, but the problems raised in the town were to continue in varying degrees for much of the

century. There was a hosiery crisis in 1825 and yet another in 1837, but the cotton and worsted branches held up well.⁶ Since these were certainly the main branches of the local trade in 1851 and probably were so in 1837, it would not have been the cause of the population erosion at that time, which was associated with the decline of lace.

The erratic progress of the national hosiery industry may be demonstrated by figures for exports taken from the Report on the Condition of the Framework Knitters, 1845.⁷ All figures quoted are to the nearest thousand pounds.

TABLE 2:1

NATIONAL HOSIERY EXPORTS, 1834-1843

DATE	COTTON	WOOL/WORSTED	TOTALS
1834	£180,000	£115,000	£295,000
1835	£181,000	£139,000	£320,000
1836	£208,000	£155,000	£363,000
1837	£149,000	£ 79,000	£228,000
1838	£214,000	£121,000	£335,000
1839	£235,000	£161,000	£396,000
1840	£199,000	£109,000	£308,000
1841	£169,000	£127,000	£296,000
1842	£136,000	£124,000	£260,000
1843	£140,000	£120,000	£260,000

This information demonstrates that, in the branches that probably covered the bulk of the Loughborough work, business measured in terms of exports had fluctuated. The lean year of 1837 had been followed by three relatively fat ones, but the drop in demand thereafter led to the petition which preceded the 1845 Report.

c) The ability of the industry to compete aggressively in overseas markets was restricted by its domestic system, which was operated through decisions made arbitrarily by the hosiers and could be made to work only by a complicated arrangement of charges and fines. Although the master hosiers and other men seeking a safe investment bought up knitting frames, they did not gather them together in large numbers under their control, they were dispersed in small workshops and in individual houses. Their collection together under one roof would have put the accommodation costs on to the hosier. The operators bore that charge because they objected to the kind of control that rationalisation on these lines would have created. They were individualists who felt no particular loyalty for the hosier to whom they worked, and who felt none for them. The hosier had a workforce which never appeared before him as a body of men; each man had to be treated separately on his weekly visit to the warehouse, when he took in his finished work, collected his pay and a new supply of yarn.

c(i) There was no company spirit, but there was a considerable amount of distrust over the various devices used by the hosier to defend his interests. A principal complaint of workers was frame rents, that is, weekly fees for the use of frames lent to them by the hosiers. These payments were arbitrary, depending on the attitude of each individual master, and the grievance was discussed by the Commission of Enquiry into the Petition of the Framework Knitters which reported in 1845. William Biggs, the

Leicester hosier, estimated his frame rents to be worth 7.5 percent on the investment, after allowing for payment of interest on the capital cost of the frames and all repairs and incidentals.⁸ It is not surprising, therefore, that people quite unconnected with the trade bought frames as an investment. They received a profit taken directly from the workman, who worked a machine he could never own, but for which he had to find space. He also had to maintain it on a day-to-day basis. This was sufficient cause for discontent, which was inflamed by the way in which the rent was charged. Loughborough men complained that it remained unchanged even when the value of a frame had obviously dropped, that it was demanded at the full rate throughout the year (whereas in Nottingham only half was payable at Christmas, Easter and Whitsuntide) and that it appeared to rise as wages were reduced. Above all, the full rent was still charged during illness or slack times, when the work was 'stinted', that is, spread over the number of available frames, although there was an abatement when the frame had to go into the smith's shop, for repairs. W. Dean, one of the Loughborough hosiers, admitted that frame rents were the 'best part' of a hosier's profits and were a way of covering his risk at slack times and passing it on to the knitter. Other hosiers said that rent charges had always been the practice, that stinting was a method of keeping frames in order in bad times (they worked better if kept in use) and that rebates during times of alleged illness would lead to abuse.

c(ii) Unfortunately, rent was not the only charge payable by the knitter for the use of a frame. If he did not work at home, he had to pay a standing charge on his frame, a rent for the space it occupied in a workshop. Another source of discontent was that, when knitters did visit the hosier's warehouse, they were not shown the schedules of frame rents to be charged or wage-rates they could expect for finished articles. This complaint was raised before the Commission on the Frameworkers' Petition which reported in 1812. It is of interest to note that the workmen did not want Parliament to 'meddle with' wages, they realised that 'the trade must always be left to find its own level'.⁹ They simply wanted to know what those wages were. Hosiers were reluctant to appear before this Commission, which forced their hands by suggesting that an early Bill should be offered to Parliament. A second Report included evidence from them that a schedule of wages publicly displayed would affect the right of every man of 'preserving the secrecy of his contracts in business' (even, apparently, from his own workforce). The problem was raised again before the Commission which reported in 1845. That report records a great many complaints that arose out of the complicated organisation considered necessary by hosiers to maintain quality in a product not made on their premises by workmen they saw only once a week.

Some hosiers were still not providing 'tickets', or written statements of transactions with workers. Wages varied greatly according to the size of the garment and the gauge of the machine; the ticket had been some protection against

employers who renamed articles and then paid a lower rate, an example being the reclassification of small ladies' hose as children's. Minor changes could also be ordered for articles, which put the knitter to some inconvenience but which were not directly paid for. In addition, men made comparisons between districts. 'Spider work', requiring intricate detail, attracted as much as one-third more in wages in Nottingham than in Loughborough. The explanation from Warner was the stock answer of the employers. The lower local wage was the 'custom'. Other complaints made by local men were that Ratcliffe, quite a large hosier, failed to weigh yarn properly when it was given out, and so his estimate had to be taken, although he expected the same weight to be returned as knitted goods. It was alleged that Paget refused to allow men to keep their own books of accounts, but Cooke did and White was willing to do so, while Warner kept a separate account for each worker.¹⁰ It is difficult to see how Paget and Ratcliffe could possibly have claimed to be dealing openly and fairly with their workmen. A Ticket Act intended to deal with these problems was passed in 1845.

c(iii) Deductions could also be made if garments were not of the specified length, or not finished in an approved way, or if they had to be mended in the warehouse. It was apparently no defence to claim that the material supplied was faulty and, although an Arbitration Act had been passed in 1824, it was ineffective in practice, partly because both parties had to be agreed on the need for it, partly because many knitters had not heard of the Act and also because some of them feared victimisation. As

W. Parsons said to the Commission, it was better simply to say 'Yes, sir' or 'No, sir'.¹¹ The hosier Cooke actually stated that his deductions were a system of punishing faulty work, but that they were under one-half percent of wages. Cartwright and Warner put them as 2s 6d percent of all wages paid. A further complaint was the actual system of taking in goods, which could involve long delays in the warehouse, no matter how carefully a rota system was devised. It is difficult to believe that these bitter complaints were more than problems of labour relations created by an archaic system, which would not have occurred had masters and men been working at the same place.

Further deductions from a man's wages were made for winding, stitching, seaming and footing of hose, if these tasks were not undertaken by his wife or children. His 'independence' put him in a state of perpetual discontent. The Commission of 1845 estimated that all charges on him amounted on average to two days' earnings per week. Two Loughborough witnesses claimed that they amounted to three. Other general problems were those concerning imports, payment by truck and middlemen. Imports did not occur as a Loughborough difficulty and the five workmen witnesses who were asked about truck all said that they were paid in 'ready money'.¹² The middlemen, who occupied an intermediate tier in the system and took their profits from the workman, were also no problem in Loughborough. The local knitters lived near enough to warehouses to deal directly with the hosiers.

c(iv) The complexity of the organisation of the trade made it an unstable base for industrial growth. The master hosier could not exercise his control within the four walls of his own premises, where conditions of employment could be established with a greater chance that they would be seen as fair by all the workforce. There was no advantage in this for employers, on whom it would have imposed additional costs, and there would have been resistance by the workers, who would have opposed factory-type conditions. The hosier therefore had to deal with knitters working in their own homes or in small workshops that he rarely, if ever, visited, but where his machinery was installed. He could exercise his control only in ways that could appear to be discriminatory to the knitters. It was a low-wage, low-incentive economy, and employers saw no point in financing their own industrial revolution within the trade.

It has already been claimed in this thesis that nostalgia was a reaction to stagnation at a low level of economic activity. Although by the middle of the century few workers had any personal recollections of the better times, the myth of the golden age had taken hold of the memory of the knitting community. The better years in the industry could have existed only for a short time; a description of Loughborough in 1770 includes the words: 'The chief manufactures at present carried on here, are woolcombing and framework knitting; but I know not of any person in the parish that hath made a fortune by either'.¹³ The golden age had still not arrived in 1778/9, when two Bills to stop competition from poor-quality work (an

enduring grievance of framework knitters) were defeated. In 1778 the Commons rejected a proposal to abolish frame rents and a Bill of 1788 to regulate wages was also defeated. E.P. Thompson, however, quotes W. Gardiner, in his Music and Friends, who wrote of the wakes of the past, when the 'stocking maker had peas and beans in his snug garden, and a good barrel of humming ale'. He had weekday and Sunday suits and plenty of leisure. Thompson believes that there was a 'fairly high level of employment' and wages of 14s to 15s a week, from 1785 to 1805.¹⁴ A Loughborough man quoted, in the Leicestershire Mercury of 12 June 1841, wages of as much as 17s per week in the 1790s. Gardiner is, however, criticised by Temple Patterson as not a very reliable witness, 'idealising his memories in contrast to the grimness of the time at which he wrote'.¹⁵ It does appear that there had been good years from the 1780s onwards, but they had certainly ended by 1812. The evidence of Commissions and local sources during the long period which followed, is that most of the workforce believed that if only the conditions of labour and trade applying during the short period of the 'golden age' could be restored, then prosperity would return.

This is the background for any study of the hosiery trade for most of the nineteenth century. The workforce consisted of men who objected to the organisation of their own lives and who could not always organise themselves as a group. This labour force of machine operatives was supplemented by women and children on ancillary tasks, the latter claiming no special

consideration from society in an age when punishable indolence was not distinguished from the natural attitudes of childhood. Parliamentary commissioners examined the problems, asked pertinent questions, listened with courtesy to the answers and made proposals, but those with political power did very little. The framework knitter had an occupational attitude common in the nineteenth century, a dislike of the regular working week. He was seeking pleasant subsistence, not profit to carry him through the bad days. He honoured Saint Monday, no matter how hard he had to work on Friday so that he could take in his work on Saturday. He cherished his independence and for this reason he claimed that he worked 'to' a hosier rather than for him, although in practice he was tied to him by the tyrannies of trade organisation. The costs of production rested on the knitter. He, not the hosier, took the risks of fluctuating trade, seasonal demands and changes in fashion. He was regarded as improvident, but even those families who were models of prudence were affected so often by problems not of their making that any attempt at foresight was doomed to failure.

There was no commonly agreed system of arbitration to deal with disputes which must have arisen frequently in such a complex production process. In 1806 the French had introduced their 'Conseils des prud'hommes' to deal with problems in their hosiery industry. Although they did not cover actual wage negotiations, they could enforce agreements when made. But Liberte is not quite the same as Liberty, and no such body came into being in England until much later. Attempts by workpeople

to combine in defence of their interests were, of course, illegal, but in 1819 (that is, five years before the repeal of the Combinations Acts) there was a general meeting of the Loughborough and District Framework Knitters, called to support a proposed United Framework Knitters' Union of Leicestershire, the general feeling being that if workmen could agree amongst themselves on common courses of action, especially towards those hosiers who paid lower wages, then the distress of the post-war years could be alleviated.¹⁶ Military contracts had decreased. Demobilisation had added to the workforce; large numbers of framework knitters had enlisted in the Army between 1800 and 1810.¹⁷ No amount of agreement by local Unions could alter the local economic situation. Raw materials, for example, had almost doubled in price since 1814 and in 1819 another Commission was convened on a petition from Leicester.¹⁸ The principal considerations were unchanged from those of 1812. The Report regretted the destruction of 'the spirit of independence for which these Mechanics were formerly conspicuous', by which it meant that distress amongst knitters had increased the poor rate 'to the great injury of the Middle Classes of Society'.¹⁹ There was one Loughborough witness, John Prowitt. He stated that his earning had dropped from between 15s and 16s clear (that is, after all deductions) in 1799, to 6s per week clear for a fifteen to sixteen hour working day. He had four frames of his own, so he was not a poor man by knitters' standards, but even so he said that he could scarcely buy any food, and he could not pay his house rent. He had sold one frame, worth twenty-one guineas when new, for £5 15s. 0d, to pay off some of his debts.²⁰

He might still have kept this frame in his shop but, if so, he would have been forced to work to the hosier who had bought it, otherwise he would not have received a supply of yarn for it. He was on the way to losing his freedom to a particularly arbitrary form of dictatorship.

d) The knitter working at home was dominated by events often beyond his control, in that the machine he used determined the structure of the trade. Many men did possess inventive skills and used them, but they tended to restrict their scope to improvements to the knitting frame. There were 128 modifications to it between 1589 and 1843, but none of them was fundamental.²¹ Even when Luke Barton went some way in 1838 to produce a powered frame capable of knitting fashioned work, his efforts met the obstacle of plentiful and low-paid labour for the existing model.²²

Although only the knitting frame could produce high-quality goods, the workers also failed to realise that there was a market for the cheaper article which could offer alternative employment. The Commission on the Framework Knitters' Petition which reported in 1812 was told that a wide hosiery frame had been developed, which produced a piece of material that could be cut up to make shirts, combinations and caps, as well as unfashioned stockings. The knitters did not blame the war for their distress so much as the machines of this kind, making 'bad and fraudulent goods', as far as stockings were concerned.²³ The pieces were sewn up and then 'boarded' so that, after steaming, they had the appearance of the traditional article,

which was superior in wear. The knitters wanted the conventional frame to be used, and no other. They rejected the argument that the 'fraudulent' goods attracted export orders, which were repeated. They were, in fact, 'fraudulent' mainly in that they were inferior to and cheaper than articles made in the traditional way, but there could have been no fraud in their sales, otherwise orders would not have been repeated.

Nevertheless, a Bill was introduced in 1812 to prohibit their production for a trial period of three years, but it was lost in the Lords, and there were strikes in the east Midlands. Fourteen thousand knitters came out and in Leicestershire the public raised about £800 to support them, some of the subscriptions being made by hosiers. The Hammonds add to the list of donors the gentry and the Churches.²⁴ There were strikes in 1821 and 1824, after which wages rose, but they fell again when supply caught up with demand.²⁵ Knitters were now exhausted and lost any effective organisation for the time being, although individual branches of the trade occasionally had some power, presumably when demand in those branches was high. It was an industry in great disarray, distinguished by opportunist employers and a conservative workforce. It was to remain so for much of the century. In a sense, no organisation seems more flexible than an army of men with knitting frames, not expecting full employment, able to make over their complete range of skills a great variety of knitted garments. Its rigidity was determined by its opposition to change in production techniques; the hosiery workers adopted a negative

attitude towards new machinery and conducted the kind of policy described by Crouzet as a 'long rear-guard action, by resigning themselves to lower and lower wages'.²⁶

The evidence taken by the Commission which reported in 1845 suggests that the workers had not altered their stance towards change. There is a section on Loughborough which reflects the problems of a stagnant economy at that time, and the system from which it arose. The Commission took evidence from the men themselves, their employers and some neutral observers (two clergymen, a house owner and a pawnbroker). The attitude of the men was mainly emotional, they were anxious to stress extreme examples of hardship or unfair treatment. The employers, the local middle-class, were hard and practical, claiming to state facts impartially, but inferring that the workpeople were partly the authors of their own misfortunes and that they thought the facts of commercial life could be changed simply because they wished it so. The four neutral observers all agreed that framework knitters were an impoverished section of the community; they were not required to comment on other aspects of the trade.

Despite the evidence that wide frames had won a market-share that was not to be recaptured, old-style frames had actually increased in number by about 63 percent throughout the east Midlands between 1812 and 1844. Many were not required. For example, men were wearing trousers rather than breeches and did not need the fully fashioned stockings that only the old frame

could produce. Some changes in design did stimulate trade, but when they were introduced so many workers crowded into that branch that supply soon exceeded demand.²⁷ Towards the end of 1843 conditions had improved, but had deteriorated again by the time of the Report, which was commissioned in February, 1844, and finished in February of the following year.

Wide frames were heavily criticised. R. Spencer, a traditional framework knitter, thought them 'the greatest evil in the trade', they flooded the export market, and 'an American' had told him that each box had a top layer of better quality goods.²⁸ Felkin's evidence to the Commission stressed the concern that the use of these frames aroused in Loughborough.²⁹ As another worker, J. Jarratt, said, when wide-frame products were 'legged out and got up' the ordinary person did not notice the difference until they were washed. 'Steam and scissors' were the ruin of folk like him.³⁰ In 1833, however, William Biggs, the Leicester hosier, told the Commission of Enquiry into the Employment of Children in Factories that about one-half of the 'fraudulent' goods were exported, but not more than one-sixth of the traditionally fashioned goods.³¹ This is a clear defence of cutting-up and boarding, and another point, not made in the Report, was that operatives working wide frames earned more money than the traditional knitter. 'Paradoxical as it seemed, the factory worker supplying the needs of the poor Hindu got better wages than the skilled framework knitter who made the trousseau for a princess.'³² There were also rather more poor Hindus than princesses contemplating matrimony.

Steam power was an even greater cause for alarm.

M.I. Brunel had patented a 'tricoteur' for steam power in 1818 and it was later rediscovered by Paget. It was not a completely new concept but Felkin thought that it demanded 'high praise for skilful adaptation if not for absolute independence' from the knitting frame.³³ It was a circular machine producing a seamless tube of material, rejected by most hosiers and workmen who, says Felkin, had 'an almost intuitive dislike for it'.³⁴ Steam factories were operating in Germany in the 1830s and Paget opened the first successful one in Britain in 1839, certainly using a form of the 'tricoteur', which had previously been worked by turning a handle. In 1840 Warner, who had produced a slow and clumsy power knitting frame in 1828/9, began to use steam successfully to drive frames making 'straight-down' (that is, unfashioned) articles, such as shirts.³⁵ By 1845 Paget had opened another steam factory equipped with Brunel-type machines and Chapman holds that Paget's circular frame was a major factor in the revival of the industry after 1850.³⁶

If Chapman had been able to make that statement to framework knitters in 1844, they would not have accepted it. For them steam was the destroyer, not the creator. Spencer said that it had thrown many men out of work and stopped him from making shirt bodies, at which he got a fair wage. T. Clarke complained of 'overproduction from power' and added that Paget was about to open 'another great steam factory' (the one referred to above). W. Hickling said that a steam frame could do his work 'nearly if not quite so good' for a little over one-quarter of the cost.

Here was a man claiming, as Wells puts it, that the hand-frame 'held some special right to pre-eminence', but accepting that its product was not particularly superior in his branch.³⁷

Fear of unemployment was a factor in the opposition to the new technology. Berg quotes Engels: 'every technical innovation shifts more and more of the physical labour from the worker to the machine.' Consequently, tasks performed by grown men were no longer necessary.³⁸ It was of no comfort to Hickling to know that new work in other industries was being created in the making of more machinery. His pride in himself as a craftsman was at risk, his traditional skills could be transferred to a machine.

The Commission of 1845 listened to pleas for protection against competition from France and Germany because of lower wages there. The continental domestic industry was often part-time in the sense that workers had pieces of land on which some food could be grown. The Commission did not recommend any action, but it made the point that the problem could be solved in another way. The British industry had been slow to accept technological change whereas, the Report states very firmly, trade flourished 'where the powers of machinery are best developed, and where, consequently, wages are highest.'³⁹ The domestic industry discouraged invention: the secrecy of new ideas could not be protected when frames were operated in workers' homes. The improvements that were made by hosiers were to machines in factories under their immediate control.

Hosiery was an industry which offered many workpeople the means of subsistence. It offered no basis for growth. The Report of 1845 therefore exposed its problems and indicated that they could be solved only by the acceptance of new ideas and new structures. The next twenty years were to produce a flow of creative ideas in which Loughborough men were deeply involved. The industry may have been revived by steam power; its future would not be assured until the power driven machine was invented that could knit high-quality goods to a standard approaching that of the old knitting frame. J. Watson, a Loughborough hosier employing men from the villages, thought that methods of making cheaper goods would improve and compete with fashioned hose, especially in speed of manufacture.⁴⁰ In fact, Cooke was already experimenting with a mechanical attachment to his wide frames, that could fashion stockings.⁴¹ This was part of the search for the final answer, which was eventually to be discovered in Loughborough. In the meantime, however, trade improved and stagnation moved into a more acceptable phase.

The theme of this chapter is an extension of that pursued in Chapter 1. The decline of lace encouraged tacit agreement between most of the workforce and most of the employers in hosiery that change should be avoided, unless it could be in the form of a return to a probably mythical golden age of the past. The argument here is that this economic attitude restricted demographic growth. It must be stated, however, that this is a point of view of the late twentieth century and it is appreciated that the average framework knitter

or hosier of the 1840s or 1850s could see the economy only in terms of his past experience in his own trade in his own locality. The difficulty in hosiery lay in its basic machinery and the attitude of the workers to it. The frame could be improved, but it could not be replaced and there was a general hope that it would not be replaced. There arose around the frame the notion that those who operated it had a craft status which offered them a dignity in their labour which not even poverty could destroy. Associated with this was the workman's belief that the cottage method of production gave him independence. He knew no other way of life and had reason to believe that the greater efficiency of factory production, where it could be applied in hosiery, would reduce the standing of the operatives to that of machine minders. Since the subsidiary workers in the domestic industry could operate such machines, the labour hierarchy, in which the man of the house was usually the creator in that he made the basic garment, would be destroyed. The machine in operation in a factory also dictated the rhythm of the working day and week, in a sense that the hand frame did not. Even if the knitter was bound to his frame, he could modify the terms of his drudgery by periods of effort and rest at times which seemed natural for him. Framework knitters did not object to machines as such, the frame was a machine that had itself destroyed an older hand-knitting industry. The trade had also always welcomed improvements to the frame, but none of its modified versions destroyed the cottage system. The power-driven machine took the trade out of the home, however, and that was not to be borne. It was not regarded as an extension of

technical progress but as part of a technical revolution whose effects on the local economy and society were felt to be unpredictable.

Berg points out that during this period the social conscience in middle-class opinion recognised that the advance of machinery and industrialisation had brought with it 'poverty, disease and social discontent'.⁴² The Tories saw the machine as the cause of unemployment and of the disappearance of the skilled artisan; they preferred a stable landed society safe from the disruptive effect of steam power.⁴³ The Radicals also regarded the machine as a tool of industrial exploitation which brought suffering to the poor. With allies such as these it is not surprising that the knitters sought reforms in the domestic system, not its replacement; indeed, they saw their frames as an assurance that the factory age would never arrive for them. They could not be expected to believe that the time would come when machinery as a labour-saver would be an indispensable factor in the daily life of the working man. Unfortunately, however, the domestic system was itself organised by hosiers who were often little more than dealers; the trade could not easily create new sales outlets or resist competition in existing ones. Workers did not understand, and could not be expected to understand, the problems of marketing or the opportunities created by new products, for example, the 'cut-ups'. They saw their life and work from the point of view of their cottage, virtually built physically and emotionally round the knitting frame.

On the other hand, there was no real prospect that a Commission would recommend any action to ease the problems of the framework knitters, or that, if it did, the subsequent legislation would be passed in both Houses. A ruling class generally committed to industrial growth was unlikely to do more than offer something to ease the pain of transition to greater efficiency in hosiery manufacture. In addition, there was 'a peculiarly English negative view of the state' in which Government action was seen in terms of more or less interference.⁴⁴ The Report of 1845 did not seek seriously to interfere in an industrial structure that was heavily weighted against the workman. The Commission awaited new machines to create a new structure. There was little local population decline, however, partly because the system offered some employment most of the time and also because of the practice of spreading available orders over as many frames as possible. The three factors of stagnation applied; the means of production could not be improved, therefore no new capital was needed, and there was only slight demographic movement.

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CHAPTER 3: RANK, PROFESSION AND OCCUPATION IN LOUGHBOROUGH
IN 1851

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CHAPTER 3: RANK, PROFESSION AND OCCUPATION IN LOUGHBOROUGH IN 1851

The chapters on lace and hosiery have placed us in a position from which we can look more closely at the occupational structure of a provincial town of average size, with a generally stagnant economy, in the middle of the nineteenth century.

Occupations will be discussed from a social point of view, that is, the census of 1851 will be used as a point at which the flow of history was, as it were, halted; a systematic record was taken and preserved on one day.¹ From this record certain inferences can be drawn about the impact on the family and other social groups of the industrial changes already discussed. Dynamic questions cannot be answered from one set of static data, but informed deductions can be made. Indeed, the value of the data is enhanced if it is used, with caution, in this way. Answers will be sought here to questions such as:

How were people adapting to economic stagnation?

Does their occupational range suggest that, within stagnation, there were undercurrents favourable to change? For example, what influence did the opening of factories have on the cottage system of production?

How high is the probability that the employment of children and wives was essential if families were to avoid serious poverty?

What kind of people had moved into the town seeking employment?

Was the town completely dependent on its manufactures?

What other work was available, for example, to maintain

its market facility, to meet professional and administrative needs, to perform personal services?

Other chapters are devoted to some of these matters, particularly that of the market, but details are given here, so that the occupational pattern is shown in full.

A completely clear view of the occupational structure of Loughborough at this time is not possible, because the way in which the census data was collected was influenced by the view of society held at that time. For example, women's work was probably often not recorded; this presents problems in a hosiery town where the work of wives was an accepted feature of the domestic system of production. The factor will be discussed later in this chapter. Notions of occupational status of householders and others also varied. The response of the official enumerators was not uniform; some copied out the entries on the householders' schedules as they were, while others seem to have reorganised them to fit into an overall concept of the recording process. At least one concentrated on the work of the head and was casual over other members of the household; any attempt to compensate for this would be pure guesswork. Nevertheless, the census of 1851 is an incomparable source for a close analysis of a community at that time. It was the first of its kind, in that the collection of data was fuller than at the census of 1841, while those from 1801 to 1831 provide the minimum amount of information. The care with which the 1851 census has to be interpreted is a small price to pay for the riches it provides.

a) Tables 3.1 and 3.2 below are intended to provide a general summary of the extremely detailed data which follow. The first provides concise information on rank, profession or occupation related to age and sex, the second the totals of all those with stated occupations in the population aged over eleven years, that is, it places those entered on the top line of Table 1 in the various occupational groups to which they have been allocated here. The system used to define the groups is that of the writer, not that of the census authorities. It is discussed in Appendix 2.

TABLE 3:1

SUMMARY OF RANK, PROFESSION AND OCCUPATION DATA, 1851

	M	F	TOTAL
With stated occupations, ages over eleven	3,388	2,177	5,565
`Not employed', ages over eleven	375	2,082	2,457
`Scholars', ages 3-11	760	705	1,465
Others, ages 3-11	375	425	800
Ages 0-2	468	456	924
	<u>5,366</u>	<u>5,845</u>	<u>11,211</u>

The `not employed' group includes those with private incomes, paupers, scholars and others where no paid employment is shown.

TABLE 3:2

STATED OCCUPATIONS, AGES OVER ELEVEN

OCCUPATIONAL GROUP	M	F
Textiles and Clothing	1,074	1,423
Other Manufactures	510	18
Shops and Services	716	148
Building	263	3
Agriculture	340	23
Commerce and Finance	128	13
Professions	79	54
Public Administration	73	7
Transport and Communications	134	4
Personal Service	71	484
	<u>3,388</u>	<u>2,177</u>

b) A full occupational structure is given in Table 3.3 for all those over the age of eleven, in the groups summarised in Table 3:2. It is based on the fact that at age twelve boys were considered suitable for men's work and that at the same age the number of girls in domestic service also increased. It was therefore the local equivalent of the modern school leaving age.

TABLE 3:3

OCCUPATION STRUCTURE FOR THOSE AGED OVER ELEVEN
TEXTILES AND CLOTHING GROUP

OCCUPATION	M	F
Bonnet, hat, capmaker	4	50
Dressmaker	0	168
Framework knitter	594	110
Glover	9	0
Lace Maker	61	7
Weaver	18	3
Woolcomber	36	3
Wool Stapler	2	0
Tailor	106	2
Warehouse worker	32	70
Factory/Mill Hand	98	223
Overlooker, Supervisor	9	5
Card Manager	1	0
Ancillaries (not in factories or warehouses)	<u>104</u>	<u>782</u>
	1,074	1,423

A general comment may perhaps be made immediately on ancillary work. The number and variety of the smaller occupations is such that the only useful classification is 'ancillary' within the occupation group, that is, the work was not concerned with a principal operation in manufactures or trade. The domestic system of hosiery manufacture required, prior to or after the main knitting process, operations which were usually, but not invariably, done by women, girls and some

boys. For example, there were spinners, seamers, cheviners, cuff makers, cutters out, doublers, embroiderers, menders, reelers, tuckers, twiners and winders; in lace there were runners (also embroiderers). In 1851, some of these operations in hosiery were carried out in warehouses and factories and this is the reason why almost 70 percent of those there employed were females.

Emphasis must be placed on the dominant part played in the stagnant economy of the town by the textile workers, and on the high number of females employed. As well as their ancillary work in hosiery, they were very numerous in millinery; there were also 168 dressmakers and two tailoresses, as compared with 106 tailors. Factory-based work undertaken by females was connected with the introduction of steam-powered spinning and the more recent steam-powered hosiery machine. That part of warehouse work dealing with the packing and despatch of goods was not new but the practice of gathering girls together to undertake ancillary work under the hosier's supervision was also fairly recent. This kind of employment was the early sign of the movement that was to sweep away the mid-century stagnation, but Loughborough still lived substantially in the past in that the traditional knitting frame was the most common piece of machinery to be found in the town. Lace was being forgotten, and employed only sixty-eight people, to whom could be added a few lace runners and menders. It will be seen that in the major mechanical processes in knitting and lace, men predominated, but the presence of women in factories was an early indication that

the old sex roles were later to be challenged, when the knitting frame lost its supremacy in output and quality to the powered machine.

Ancillary work in Other Manufactures included a variety of general and 'job' labourers, assistants, 'boys' and driers in the dyeing trade, while in Shops and Services there were errand boys, hawkers, rag and bone men, labourers, waiters, shoe binders, welters and closers. The main occupations in the Other Manufactures group included much of the subsidiary work created by hosiery; there were, for example, fifty-one framesmiths, twenty-two needlemakers, twelve sinker makers, all working on the knitting frame itself, and sixteen dyers, twenty-one trimmers, sixteen bleachers and two box-makers, all employed on subsequent operations in hosiery manufacture and distribution. In addition, many of the others listed, for example the blacksmiths and iron workers (foundrymen) would also have been involved. Every five knitting frames provided manufacturing employment for at least one other person, in addition to those engaged in the finishing trades and marketing. It is not untrue to say that hosiery meant survival for the town of 1851. The only other occupation of particular interest in Other Manufactures is bellfounding, for which Loughborough still has a wide reputation although the foundry concerned is quite small.

TABLE 3:4

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
OTHER MANUFACTURES GROUP

OCCUPATION	M	F
Basket Maker	15	0
Bellfounder/hanger	5	0
Blacksmith	32	0
Bleacher	15	1
Boxmaker	2	0
Brazier	4	0
Brush maker	16	0
Cabinet maker, Upholsterer	7	1
Clock and watch maker	5	0
Cutler	4	0
Dyer	13	3
Engineer/machine maker	5	0
Framesmith	51	0
Glass manufacturer	2	0
Gunsmith	4	0
Iron worker	6	0
Leather worker	13	1
Mat maker	1	1
Machinist, mechanic	10	0
Millwright	1	0
Musical instrument maker	2	0
Nailmaker	11	1
Needlemaker	21	1
Potter	2	0
Rope maker	9	0
Sinker maker	12	0
Spar ornament maker	3	2
Tinman	5	0
Trimmer	19	2
Turner (metal and wood)	8	0
Wheelwright	23	0
Whitesmith	2	0
Ancillary worker	182	5
	<u>510</u>	<u>18</u>

TABLE 3:5

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
SHOPS AND SERVICE TRADES GROUP

OCCUPATION	M	F
Baker	42	3
Beerseller, Publican	34	12
Brewer	10	0
Butcher	54	0
Chimney Sweep	16	0
Cooper	16	0
Confectioner	12	4
Eating House Keeper	1	1
Hair Dresser, Barber	12	1
Innkeeper	22	12
Lodging House Keeper	4	4
Maltster	15	0
Miller	17	0
Oil and Colourman	2	0
Pawnbroker	3	0
Perfumer	1	0
Pikelet and Muffin maker	1	0
Pipe maker	10	1
Printer	8	1
Saddler	6	0
Shoemaker	193	0
Shopkeeper	76	28
Shop assistant	47	9
Stay maker	3	4
Tripe Dresser	0	1
Umbrella maker	1	0
Ancillary worker	<u>110</u>	<u>67</u>
	716	148

No comment will be made on the Shops and Service Trades at this stage, since the group is examined in greater detail in Chapter 6.

TABLE 3:6

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
BUILDING AND ALLIED OCCUPATIONS GROUP

OCCUPATION	M	F
Bricklayer	42	0
Brickmaker	24	0
Builder	6	0
Carpenter and Joiner	83	0
Painter	25	0
Plumber and Glazier	15	1
Plasterer	3	0
Sawyer	26	0
Stonemason	13	0
Ancillary worker	<u>26</u>	<u>2</u>
	263	3

The building trades group shows no special features. It will be seen from the tables that agriculture was still an important factor in the life of Loughborough in 1851; an interesting social detail is the presence of so many farm labourers in a parish which, even at Domesday, had been smaller than many around it. Many of these men were either casual hands or needed to walk considerable distances to other parishes for work, and they were probably a deprived group, although there are no facts to support this assertion. Indeed, D.R.Mills thinks that they had been better off than framework knitters in the thirty years up to 1845.²

TABLE 3:7

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
AGRICULTURE GROUP

OCCUPATION	M	F
Agricultural labourer	242	0
Animals-workers with Farmer	12 33	1 21 (many 'wives', some daughters)
Farm Bailiff, Steward, Manager	3	0
Gamekeeper	1	0
Gardener	44	0
Market Gardener	2	1
Nurseryman	3	0
	340	23

The apparatus of commercial activity which is associated today with towns of quite modest size was absent from the Loughborough of 1851. It will be seen that 106 in this group were dealers, the term being used here to describe a broad class of people buying or selling various products, but not apparently having any fixed retail premises. They are dealt with in greater detail in Chapter 6. It may be mentioned here that they include hosiers, who were basically wholesale distributors rather than manufacturers.

TABLE 3:8

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
COMMERCE AND FINANCE GROUP

OCCUPATION	M	F
Accountant	3	0
Agent, Factor	7	0
Book Keeper	9	1
Auctioneer	4	0
Banker, Bank Manager	2	0
Commercial Traveller	3	0
Dealer	94	12
House Agent	1	0
Ancillary Worker	5	0
	<u>128</u>	<u>13</u>

The Professional group includes the large employers of labour, such as Paget or Warner, genuine hosiery manufacturers in that some garments were made on their premises, whereas hosiers had warehouses only, their knitting frames being in workers' homes or in independent workshops.

TABLE 3:9

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
PROFESSIONAL GROUP

OCCUPATION	M	F
Architect	1	0
Artist, Engraver	2	1
Civil Engineer	3	0
Clergyman	15	0
Large employer of labour	7	0
Manager	1	0
Musician	1	0
Publications (those engaged in)	3	0
Solicitor	5	0
Surgeon, G.Ps. (including Dentist)	11	0
Surveyor	2	0
Teacher	9	37
Veterinary Surgeon	2	0
Ancillary workers (including school monitors, assistant teachers, school dames)	17	16
	<u>79</u>	<u>54</u>

The Public Administration group is inflated by the presence of forty-six soldiers, mainly members of the force then

helping to police the town. Five of them were, however, living out and belonged to other regiments.

TABLE 3:10

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
PUBLIC ADMINISTRATION GROUP

OCCUPATION	M	F
Armed Forces: Officer	3	0
Armed Forces: other ranks	43	0
Board and other Public Officers	7	6
County Court Officer	1	0
Gasworks Employees	4	0
Police	6	0
Revenue Officer	4	0
Senior Union staff	2	1
Other Union staff	3	0
	<u>73</u>	<u>7</u>

Transport and Communications reflect the surprisingly slight influence which the railway appeared to be exerting on the town. This is discussed more fully later. In terms of employment, canals were still the most important means of transport, with seventy-six employees, followed by roads with twenty-six, as compared with twenty working on the railway.

TABLE 3:11

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
TRANSPORT AND COMMUNICATIONS GROUP

OCCUPATION	M	F
Boatbuilder	4	0
Boatman	66	0
Coachmaker	6	0
Coach Proprietor	2	0
Driver - road vehicle	15	0
Post Mistress	0	1
Other Postal workers	13	2
Railway engine driver/stoker	3	0
Other railway employees	17	0
Toll Collector (turnpike, canal)	1	1
Wharfinger	5	0
Road labourer	2	0
	<u>134</u>	<u>4</u>

The Personal Service group consists mainly of Domestic Servants, whose position will also be discussed later.

TABLE 3:12

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
PERSONAL SERVICE GROUP

OCCUPATION	M	F
Charwoman	0	29
Domestic Servant	71	386
Laundress, washerwoman, mangler	0	55
Nurse girl	0	14
	<u>71</u>	<u>484</u>

N.B.: Domestic Servants:
Males: Footman, Groom
Females: Maid, Cook, Governess, Housekeeper

TABLE 3:13

OCCUPATIONAL STRUCTURE FOR THOSE AGED OVER ELEVEN
'NOT EMPLOYED' GROUP

OCCUPATION	M	F
Annuitant, fund holder, pensioner, 'retired'	65	54
House and land owner	13	36
Pauper - out-relief	28	68
Pauper - in workhouse	52	35
Scholar, assumed to be at school	131	109
Scholar, stated to be at home	2	5
No paid employment or other details given	84	1,775
	<u>375</u>	<u>2,082</u>

c(i) A comment has already been made on the preponderance of females in the occupations ancillary to hosiery manufacture, at home or in the factories. In Other Manufactures the role of women was small and also mainly of an ancillary nature, but this does not mean that convention prevented women playing an independent part when circumstances were right. An unmarried woman was a needlemaker employing twelve men. She was fifty-one and lived with a mentally-retarded brother and a maid aged

fourteen. In Shops and Service trades women had three main sources of employment, beersellers, innkeepers, shopkeepers and shop assistants, apart from ancillary work in shoemaking. Although they played little part in building, the communications trades and public administration, they were prominent in the professions as teachers and assistants of various kinds. They also heavily outnumbered men in the Personal Service and Not Employed groups.

Any consideration of the role of women at work inevitably involves an examination of the nature of the family as an economic unit in 1851. The nature of the cottage industry has been discussed in the previous chapter. All available members, including any co-residing kin such as grandparents, worked together towards the manufacture of an identifiable family product. There was a practical necessity for every able person in the home to acquire appropriate skills and use them in the correct sequence in the teamwork cycle. In this sense, there were no unproductive dependants except the very young and the very old; all family members were pairs of hands paying their way. Here the 1851 census presents us with the difficulty of assessing employment among married women. A very high number of blank spaces occur in enumerators' books, in the 'Rank, Profession or Occupation' column for wives. The Householders' Instructions required that occupations of women 'regularly employed from home, or at home, in any but domestic duties, should be distinctly recorded'. The instruction appears to have been followed where some domestic work was concerned, for

example, millinery or dressmaking. Some householders also entered hosiery ancillary work. It is difficult to believe, however, that all those wives not credited with occupations did not work on non-domestic duties. Indeed, the Rector made the point in 1849 that mothers had to work, and that there was a consequent absence of maternal care in the home.³ Some husbands may have regarded hosiery ancillary work as a domestic duty for any woman married to a framework knitter, or may have felt that it was not 'regular' employment as they understood the instruction. Wives were also expected to find time to do work connected with the home and family. In this context, ancillary work may have been entered only when the woman did not undertake it for her own husband.

Nevertheless, an examination of the census and other related facts will be of help in assessing the economic role of wives in association with their husbands in Loughborough in the mid-nineteenth century. Mills, as we have already noted, had taken much spinning out of the home and tasks such as seaming and mending were being undertaken in large workshops, an overlooker controlling forty or fifty girls.⁴ These teams of young people, 'driven' by determined women, would undoubtedly have seamed many more stockings per person per day than a wife, sitting on her doorstep with young children around her, dealing only with the work produced by her husband. It may be of significance that none of the local framework knitter witnesses to the 1845 Commission referred to their wives in connection with their work. Most of them paid for seaming, although one had

help from his children, but all collected spun yarn from warehouse or factory. A separate study by Felkin of eight other local framework knitters includes only one whose wife earned money (one shilling per week), although two also spoke of seaming being done within the family.⁵

In Loughborough, with a total of 705 frames (one of which was operated by an eleven year old boy and so is not shown on the tables), there were 322 women whose husbands were framework knitters. Nevertheless, only 111 of them worked in any of the hosiery ancillary trades. Another thirty were themselves framework knitters and thirteen had occupations unconnected with hosiery. A question must be asked about the 111 ancillaries. Does the fact that they were married to knitters mean that they worked for their husbands or were they entered as being in employment because they worked regularly for payment by another person? There is the distinct possibility that some married women were working for groups of frames assembled in shops, rather more convenient for them than working in warehouses because of the probable greater flexibility in working hours. The knitters themselves were members of a basic product-co-operative which then employed married women for the finishing work, unless the hosier to whom they worked had this done in his own warehouse, or himself put it out to competent women. This is a modification of the cottage industry, but the workshops were probably small, perhaps accommodating no more than a dozen frames. There were 168 framework knitters' wives for whom no occupation was recorded at the census and we are left with the

intriguing thought that they may have been helping their husbands but did not regard this as 'regular' work. Parallel evidence suggests that the strictly domestic industry, and the employment of wives at home, had been reduced. There were 223 female factory and mill hands in the town and these young people would formerly have played important roles within their cottages. The family as a coherent economic unit must have been weakened not only by this withdrawal of such a useful source of labour, but also by the fact that fewer ancillary processes themselves were performed in the home. Females had factory or mill employment in all the main branches of the hosiery trade:

Cotton	65%
Angora	24%
Merino.	8%
Worsted	3%

The term 'spinner' is also used in the enumeration books. Since no references to mills are made, it is here assumed that these women were working at home, enumerators usually adding the words 'in factory' or 'in mill', if they were applicable. There were thirty four spinners in 1851; the mills had apparently not taken all the work, a little remained within the domestic industry. Seventy females and thirty two males were also working in warehouses. The most important development was, however, the employment of a few young women on hosiery machines, a double threat to the domestic industry in that they also replaced the knitting frame itself for the manufacture of a certain type of article, as we have seen. Although factory organisation was still in its infancy in 1851, the town was in the lead. The 1845

Report quotes in Felkin's evidence a figure of eighty-four steam frames in Loughborough as against only twenty-four in Leicester. ⁶ J. Ward, in his evidence to the Commission, stated that there were sixteen at Cartwright and Warner but the location of the others is not known, except that Paget also had steam (see Chapter 2). T. Clarke mentioned a second factory to be working a few months later at the 'Old Field Mill'. ⁷ His daughter was a seamer there and she could get home for meals, so the building was in Loughborough. Below the surface of stagnation, there was a little movement, but it had to be intensified quite markedly before it could produce economic growth.

The 1851 census had a general classification of 'hand' in enumeration books, preceded by a description of work done. This is taken here to mean a worker on a machine in a factory, as opposed to the fairly standard entry 'F.W.K.' for a framework knitter at home or in a small workshop. If this be so, there were fifty-six males and eleven females actually working with machines (both figures being included in the total for factory workers in the occupational analysis). The total is, of course, seventeen fewer than the number of steam frames quoted by Felkin in 1844, and the discrepancy cannot be explained. The Census actually quotes five females as power machine hands or steam frame tenders. A sixth is called: 'An Attendant upon a Machine for the Manufacture of Shirts'. She was aged seventeen and her grand description of herself may reflect her feeling that the future belonged to her and people like her. 5.2 percent of the

total female population of Loughborough was working in factories or warehouses. This includes nine girls aged less than eleven.

c(ii) Here we may mention those females not included in the occupational structure because they were under twelve years old. The instruction on the householder's census form regarding employment of wives also applied to that of children, and so the position is almost as obscure. Certain assumptions are therefore made here, that

- i) ages were correctly given by parents and accurately transcribed by enumerators;
- ii) children entered as being at work were actually in regular employment either at home or in factories or workshops;
- iii) those for whom no occupation is stated were neither at work nor at school, and
- iv) those entered as 'Scholar' may have been so for some of the time, but may also have done occasional work at home when required.

The extent of this employment cannot be ascertained. The poor quality of the enumerators' paperwork suggests that few of them spent time checking on facts, even assuming that householders were willing to be involved any more than was strictly necessary. As we have seen, however, factory work was usually clearly indicated and we have, therefore, a reasonable idea of the numbers of children working in a domestic hosiery occupation. The lowest ages shown were at age six, when four girls were seaming, each probably working at her mother's knee.

From ages six to eleven the total number of those working was one hundred; of these, sixty-seven can be regarded as being employed in a domestic work unit. The range of occupations was quite narrow, nearly all the girls were in textiles or personal service.

The occupational structure for these children is given in Table 3.14.

TABLE 3:14

OCCUPATIONAL STRUCTURE FOR GIRLS AGED UNDER TWELVE

Ancillary to hosiery manufacture	67
Ancillary to Other Manufactures	1
Ancillary to Shops and Services	1
Domestic Servant	6
Nurse Girl	16
Factory or Mill Hand	7
(The Factory Act of 1844 had secured a six-and-a-half day week for children between eight and thirteen, and in 1847 a further Act established the ten-hour day for women and children in the textile industry.)	
Warehouse Worker (textiles)	2
Pauper, out-relief	1
Pauper in Workhouse	7
Scholars at School	729
Scholars at home	8
No information given	740

6.3 percent of the girls were at work. The youngest girl 'nursing' another child was aged seven. This was often the task of keeping the baby quiet while the mother worked. The 'nurse' no doubt offered general help when she had succeeded in causing the infant to be quiet. There were not very many of these nurse-girls, only thirty are recorded up to and including age fourteen, and this may be a further indication that work at home for mothers was not as common as it once had been. The youngest domestic servant was aged nine, the youngest little helper in the shoe trade was aged eleven. Beyond the age range of the

Table, a hat maker and two framework knitters appear at twelve, when there were also eleven girls in domestic service.

The occupation structure for young boys is shown below:

TABLE 3:15
OCCUPATIONAL STRUCTURE FOR BOYS AGED UNDER TWELVE

Framework knitter	1
Ancillary to hosiery manufacture	49
Ancillary to Other Manufactures	6
Chimney Sweep	3
Ancillary to Shops and Services	12
Bricklayers' Labourer	1
Farm Labourer	1
Worker with animals	1
Dealer	1
Boatman	1
Factory or Mill Hand	6
Trimmer (textiles)	1
Warehouse Worker (textiles)	1
Pauper in Workhouse	6
Scholar at School	779
Scholar at home	11
No information given	720

Only 5.3 percent of boys worked, but their occupational range was wider. Twenty-six were in occupations other than textiles. One or two of the descriptions seem to reflect a desire on the part of the boys or their parents that they should be credited with man's status. The youngest boys in work were aged six, one as a winder of yarn and the other as an errand boy. It will be seen that there were three very young chimney sweeps. The Poor Law Amendment Act of 1834 stated that all sweep apprentices had to be at least ten years old and had to be taken for a trial period. If the boy then refused to be bound, the justices were not to approve apprenticeship. These provisions may have been regarded locally as inadequate. The Leicestershire Nottinghamshire and Derbyshire Telegraph of 22 December 1838 carried an advertisement of the Loughborough Society for

Superseding the Use of Climbing Boys. The Society provided a complete set of machinery `for the purpose of Mechanical Chimney sweeping' and also had men who would do the work. There were similar societies in other towns. There were older boys in trades such as rope making, basket making and other light occupations, and another eleven were helping in the service trades, mainly as errand boys. The bricklayers' labourer, the boatman and the farm labourer were aged eleven, while the youngest boy in a factory was aged ten. In the age group of twelve to fourteen, boys were working in twenty-six different occupations, the strongest being framework knitting (twenty-nine), hosiery ancillary work (sixty-eight), odd job work (eight), ancillary work in shops and service trades (twenty-seven), farm labouring (fourteen) and domestic service (eight).

Of the 184 children aged between six and eleven returned as being at work, 117 (the framework knitter and the hosiery ancillaries), that is, 64 percent of them, were probably working at home. The Factory Acts offered no protection for these children. It was a century in which no allowance was made for childhood; they worked long hours because adults worked long hours. Parents could be the greatest exploiters of children and the concept of the sanctity of the family was a defence against official interference. Parental authority was supposed to stem from the will of God and mid-nineteenth century children had few legal rights. Stories of small girls being forced to seam stockings late into the night, their clothes pinned to their

mothers' aprons so that they did not fall off if sleep overtook them, arouse incredulous anger today but they did not do so in 1851. Pinchbeck and Hewitt quote the claim that 'the progress of the State may be measured by the extent to which it safeguards the rights of its children'.⁸ By this standard the mid-nineteenth century State was moving slowly. There may well have been happy families working as teams in the domestic hosiery industry, but the price to be paid was the possible subsequent physical and emotional deformity of the younger members. In the twelve to fourteen age group 27.2 percent of all the girls probably worked at home and it seems likely that parents took the obvious course of using them in the family economy rather than their younger sisters, since there was not enough work for all. Twenty-three percent of all boys in this age group also probably worked at home or in workshops, and of these twenty-nine were on the knitting frames.

Although there had been some erosion of the closely linked cottage industry of the past, the knitting frame was still a household commitment. Many of the females working frames were related to the head of the household in which they lived. They therefore worked in branches of the trade roughly parallel to that of the men:

Cotton	48%
Worsted	37%
Angola	12%
Merino	2%
Silk	1%

A reason advanced in the 1845 Report for their employment on frames was that spinning, previously the principal female operation in the knitting cycle, had been taken into mills. This statement lends support to the proposition that some women who could not transfer to knitting frames were unemployed. The employment of nieces, nephews and even grandchildren on frames is, however, a kind of extended-family industry, while there could still be advantages in marriage between two framework knitters, although they were apparently infrequent. While they both worked, their family business could keep them in comparative comfort. When children arrived they could, as they grew older, help in winding and seaming, although a couple who married as late as 1851 might find this not as likely as it had been in their own childhood. The basic point of view was expressed in the 'Hinckley Ballad', which includes the proposal of a framework knitter, who made stockings, to his intended:

'I'm promised a three-legger soon, a nice house I've found and shop,
But without you're willing Mary, all this happy plan must stop,
For I want you, that is, Mary' (Thomas here began to stutter),
'If I get the legger working, will you come and be my footer?'

Had this tender plea of Thomas been spurned, he might have looked for a wife in another branch of the textile industry.

c(iii) The old also recorded occupations. Many had to maintain themselves, or wives supplemented husbands' incomes and parents had to contribute to those of the married children with whom they lived. In this sense, the commitment of family members persisted until late in life, but in an age when social insurance for retirement was not within their experience, the emotional hardship was not as great as it would be today. There

were 221 elderly women, classed here as between sixty-five and seventy-seven, and forty-three who were very old, that is, aged seventy-eight and upwards. Ten were in the Workhouse, thirty-two were paupers on out-relief, ninety-five were not classed as employed, while thirty-one had private income from funds or property. The remaining forty-seven were still working in a variety of occupations. Seventeen were hosiery ancillary workers, three (aged sixty-five and sixty-six) were charwomen and three domestic servants, the oldest being sixty-nine. Two were framework knitters, the oldest being seventy-one, and there were also a dressmaker, a brush maker, a baker, an innkeeper, a pipe maker, a shopkeeper, a tripe dresser, a worker with animals, a farmer, a market gardener, a dealer, a postal worker and a dame schoolmistress. Only two of the very old women were in employment, in the hosiery ancillary trades. They were both aged seventy-nine. The rest, having survived so long in an uncertain world, did not have to work either for their own living, or as members of extended families.

The majority of elderly men may still have worked, however. The reason could have been that the range of employment for men was not as limited as that for women, although the elderly ladies of Loughborough exploited the possibilities to the full. Men, the initiators in industry and more likely to have been employed in an independent role, were more able to find some work. Those not capable of doing so went to the Workhouse, where there were twenty-two elderly men as compared with ten women, but fewer of them outside it received out-relief

(fourteen as compared with thirty-two women). An analysis of their occupation groups is given in Table 3:16.

TABLE 3:16

OCCUPATIONS: ELDERLY MEN

Textile and Clothing	44
Other Manufactures	20
Shops and Service Trades	25
Building	12
Agriculture	24
Trade and Commerce	3
The Professions	4
Public Administration	1
Transport and Communications	4

Twenty-four had incomes from property or funds. No occupation was entered for the remaining four. Among the very old men, nine had private incomes, ten were paupers on out-relief, seven were in the Workhouse and one had no stated occupation. The others worked in nine different trades. Five of them were framework knitters, the oldest being eighty-three. the oldest tailor was the same age, the oldest farm labourer was eighty-two.

d(i) Some consideration may now be given to the occupations of members of households who did not belong to the nuclear family of the parents and their children. Many of the younger lodgers were of local birth, but from age ten onwards the percentage of non-local ones began to rise. Only eightyseven of all lodgers had been born in other parts of Leicestershire, but 238 elsewhere, and so opportunities in the town seemed greater to those coming from a distance than to those living nearby. Only fourteen lodgers born out of the district were in framework knitting, most were in unskilled work and, among those who could be regarded as labourers of various kinds, seventy-seven came

from other areas as compared with thirty-seven from the locality. More than two lodgers out of every three engaged in labouring or low-skill occupations were immigrants. Many were Irish, who may have left their native land because of the failures of the potato crop in the mid-1840s, and they offer an illustration of the semi-itinerant life of many lodgers. There was, for example, the gang of sawyers lodging near a local timber yard, who presumably found work where they could and lived where they could. Where low-skill repetitive work required some experience, locally born lodgers were in the majority. One-hundred-and-one of the 141 employed in the ancillary hosiery occupations had been born in the district. Three lodgers from out of town were teachers, as compared with one born locally, but this ratio changes substantially if Convent teachers are included, since they had all been born in counties other than Leicestershire. There was also the interesting situation that eight domestic servants, seven of whom were locally born, were living as lodgers, when it might be thought that they could have been offered accommodation at their places of work. Some of them may have been unemployed but quoted their trade for census purposes and others could have been day-workers for families with no space for them to 'live-in'.

d(ii) The other principal co-resident group, that of kin, shows no noticeable difference in the distribution of occupations between those born locally and those born elsewhere, except perhaps for private income holders, who may have had a little more mobility. Only eight out of the fifteen

with some money of their own were locally born. Seventy-three old people, aged between sixty and ninety-five, also lived as co-resident kin, comprising 8.7 percent of the population aged over fifty-nine, their average age being 71.3 years. Eleven of these had private incomes, ten were paupers on out-relief and thirty had no occupation, so only twenty-two claimed still to be active, among whom were the inevitable four framework knitters. They could perhaps work a little and may have felt that they were paying their way.

e) Two-hundred-and-seventy-four sons with a recorded occupation (that is, 34.7 percent) were in the same kind of work as that of the head of the household. The occupations sons entered, probably on parents' initiative, in 1851 covered a wide range, the largest numbers reflecting the size of adult workforces in these trades. Where the father was an independent tradesman, it was easy for sons to follow on. For example, there were eighty-three son framework knitters, eighteen son shoemakers, eight shopkeepers, fifteen tailors and eight dealers. In some other trades fathers may have been employees in other men's businesses, but opportunities for proposing a family member for a vacancy might still occur. In the absence of newspaper advertisements, job centres and selection procedures by personnel departments, a common method of finding work must have been by introduction, and fathers were well placed to do this if their own reputations were good. The largest groups were five son framesmiths, five needlemakers, nine carpenters, fifteen farm labourers, seven boatmen. If we also bear in mind the fact

that 24.3 percent of other male kin (that is, not sons) were in the same kind of work as the head of household, we shall see that this subsidiary form of the family economy was a flexible extension of the bonds of kinship into the world beyond the home. Income inter-dependence remained although fewer families experienced close work inter-dependence of the cottage industry kind. Here Loughborough was travelling along the road already taken by Preston. Anderson says that a high percentage of sons seemed to follow their fathers' occupations, especially in factories, but not in hand-loom weaving, because it was a dying craft.¹⁰ There were more factories in Preston and so there were also more men in senior positions; 56 percent of co-residing kin of higher factory workers were in the same occupations. A parallel here is with the hosiers of Loughborough, where a kinship relationship was common. For lower factory and unskilled occupations Anderson's figure falls to 30 percent, which is nearer the Loughborough experience. Preston also had a higher percentage of co-resident kin, which suggests that the greater the degree of industrialisation, the greater the breakdown of the nuclear family in the old order of society as identified by Laslett, in which only 3.4 percent of the population were co-resident kin.¹¹ The figure in Preston was 7.4 percent and that in Loughborough 5.7 percent.

f) We may now consider the general effect on the work of the town of people moving in from elsewhere. An examination of the influence of place of birth on work shows that, in all the very large occupations, workers who had been born locally were

in the majority. In only three occupations employing ten or more females were there fewer born locally than others (the figures in brackets for each occupation are the totals of all, local and non-local, engaged in it):

Beershop keepers
(employing twelve)

Although wives of male beershop and innkeepers were no doubt themselves involved.

Innkeepers
(employing twelve)

Teachers
(employing thirty-seven)

A feature of this profession has always been its relative mobility, and many teachers in 1851 were single women. Its structure requires employees to move if they seek advancement, and even in 1851 advertisements for important posts were placed in newspapers with a circulation outside the town.

An interesting detail that emerges from the analysis of women's occupations in relation to places of birth shows that, of those born locally, 41 percent had some occupation. For those born elsewhere in Leicestershire the figure was 35 percent and for those born outside the county it was 32 percent. The probable explanation is that local women, because of longer residence in the town, knew where and to whom to look for work, and were more adept at particular skills in the ancillary hosiery trades. Women born out of the locality could no doubt sew in a housewifely manner, but not perhaps at the speed required to seam or mend and acquire a worthwhile income.

Male occupations where the majority were not locally born are shown below.

Woolcombers
(employing thirty-six)

This is surprising in view of the popularly held opinion that this was a 'traditional' local occupation.

Leather workers (thirteen)

Chimney sweeps (sixteen)

Innkeepers (twenty-two)

Problems of finance may have been a handicap to some local people who wished to take up this calling.

Maltsters (fifteen)

Sawyers (twenty-six)

There are indications that they worked in gangs and were therefore less likely to be locally born.

Stonemasons (thirteen)

Workable stone existed in the neighbourhood and it had been used as early as the twelfth century by the builders of the Cistercian Abbey of Garendon. The accepted local building material was, however, brick.

Book-keepers (nine)

Nine of the occupations in the professional group employed a majority of non-native people. Interesting exceptions were veterinary surgeons, both of whom were born in the town, and surgeons/G.Ps., nine of whom were locally born, and this fact may well be related to the system of apprenticeship, attracting boys from Loughborough and district.

Only one occupation in the Public Administration group, classified by the writer as 'Board and other Public Officers', employed a majority of local people. This may be the problem of a small town, which had doubled its population in forty years, lacking either educational facilities or the able young people to fill important positions in the local community. It is perhaps more likely to reflect the facts that good administrators could go elsewhere and that, even today, probably only the clerical grades in local administrative and

professional life are occupied by predominantly locally born people. There was also a minority of local people in two occupations which, almost by definition, imply mobility:

Drivers - road vehicle (fifteen)

Railway workers (twenty)

There was a majority of non-natives among those with private incomes or who were property owners. It may be observed that, since the Census was taken on Sunday 30 March, there should have been no distortion of the occupational pattern because of immigrant seasonal labour, and the nature of the predominantly non-local occupations supports this assumption.

The basic hosiery trade and its associated occupations in other manufacturing processes was virtually a 'closed shop' to all those with no local connections. This was an important factor in the maintenance of a high degree of demographic stagnation. Hosiery was not subject to very much dilution of the local labour force. On the other hand, the particular skills required in Loughborough could be used elsewhere only in other hosiery centres, with the same broad economic problems. Migration was not, therefore, a viable option.

g) Domestic service was the area in which the town relied most heavily on workers from outside. 40.8 percent of house servants were not of local birth. There were differences in the age groups; for those over fifty the figure was 44.4 percent, but for those under twenty only 31.5 percent had not been born locally. This still represents a high immigration rate for the

occupation. Local girls preferred one of the other available occupations that did not carry with it the constraints imposed on servants. Even if the hours of work within the cottage hosiery industry were sometimes long, there were days when they were shortened by common consent. Hours of domestic service were even longer and maids were on call for seven days a week. Factory or warehouse work obviously required a more orderly working pattern, but freedom to meet other workers, perhaps particularly those of the opposite sex, must have been an attraction to many young girls. Their general familiarity with the hosiery trade would have been an advantage to them when vacancies were being filled. The social status of domestic servants is considered at greater length in Chapter 7. Their numbers are, however, some index of industrial activity. In pre-industrial society the proportion of servants in the population was 13.4 percent, but the figures include trade, as well as domestic, servants. For example, males predominated.¹² In 1851, Anderson found only 1,870 domestic servants in heavily industrialised Preston (2.7 percent of the total population) as compared with 463 (4.1 percent) in Loughborough. So far as the female population was concerned, however, the national percentage of domestic servants was 8.5, that in Loughborough was 7.3. These figures suggest that the town offered more alternative employment than the country as a whole. York was an example of the non-industrial community, there 58.9 percent of employed women were in domestic service, the comparable figure for Loughborough being 17.7 percent. Here the patrician city was still living in an age which Loughborough could faintly remember

but which Preston had quite forgotten, and in the two latter places industrial opportunities had become a greater attraction to girls than life in service. The Edinburgh Review of 1862 includes the words: 'Mistresses of households in or near every manufacturing town can bear witness to the difficulty of obtaining good and self-respecting servants'. There were advantages perhaps, on both sides in the employment of country girls. They may have been rather less 'independent' in their ways. They could be assured of board and lodging of a kind, a little money of their own, and some domestic training, although they probably needed this less than town girls. Their parents may have felt that the restrictions of movement imposed on their daughters would be some moral protection, although occasionally the risk must have been from the enemy within. Servants had little defence against ill-treatment. Until 1867, it was a criminal offence for a servant to break a contract of employment; for a master to do so was only a civil one.

h) Stagnation in Loughborough came after a period of prosperity, but there had been an intervening recession. The economy had been stabilised but such contemporary accounts that exist suggest that there was primary poverty; in any event the cyclical nature of the hosiery trade made this inevitable. It is unlikely that the town was ever fully at work. This question can now be examined, on the basis that primary poverty can be associated with:

- i) the number and ages of the people in the household,
- ii) the occupation of the head of household and

- iii) the ability of other members of the household to work also.

The Poor Law Amendment Act of 1834 was a recognition of the facts that poverty was widespread in the country, that its relief was likely to place a steadily increasing burden on the national income and that steps must be taken to control it. It was the apparatus of relief that was to be controlled, however, not the fact of poverty itself. The Commission which reported in 1845 on the Petition of the Framework Knitters seemed to be convinced that there was a great deal of it in the trade, although employers were naturally inclined to disagree. We may be sure that the threat of poverty was never far away, but obviously employers and their workers looked at the matter subjectively and therefore independent evidence must be sought before we can assess the extent to which real destitution was a daily prospect for working people in the town. More is known about framework knitters than any other section of the community and an attempt was made by the writer to relate their wages, quoted in the evidence given in 1844 to the Commission examining their Petition, to the prices of commodities. Details of local retail prices are scarce, however, and in any event the exercise would have related to 1844, not 1851, when conditions were better.

It was finally decided that primary poverty could be best assessed by pursuing Rowntree's assertion that a labouring man with more than four children was poor. The statement was

also quoted by Armstrong in 1974 and support was available from other sources.¹³ Evidence was given from Alfreton to the 1845 Commission that a man with four children under eight, and a wife, would have been in 'deep poverty and distress'¹⁴ and from Thurcaston that if framework knitters 'have families of four or five children, they cannot get a bed for them to lie on.'¹⁵ The Journal of the Statistical Society (1886) refers to 'Mr. Porter's Progress of the Nation' of 1836 in which a question was answered about subsistence in Suffolk: 'Every labourer who has a wife and more than three children receives relief for the support of all children above that number' and 'A man, wife and four children could subsist if the man was in constant work'.¹⁶ D.M. Smith believes that one knitting frame generally provided support for three people.¹⁷ There is here, therefore, a basis which does not depend on information about wages or prices, but on occupations of household members. The family structures of men in a number of low-earning or labouring occupations were therefore examined where there were six or more people in the home. There were 171 of them and relevant information was drawn up on the table in an Appendix.

The method used was to allocate points to the members of a family on the basis of their earning value. The total for each family was regarded as its income and called 'plus points'. Each family member also had to be maintained and total household expenditure for all its members was called 'minus points'. Families in poverty acquired more minus than plus points. Families with a balance of income over expenditure are shown in

the table as having a final total of plus points. It will be seen that some variation was allowed in the allocation of plus points, based on the assumed earning capacity of the person concerned. No such variation was allowed for minus points, which were allotted on the basis of one to each person. Although it was appreciated that some family members would cost less to keep than others it was felt that this would depend on the attitudes within the families, especially that of the mother. The basis of the assessment of plus points for family members was that the husband should be allowed five, that is, it was assumed that he would have been able to support himself, his wife, and three children, although D.M. Smith implies that this would have been unlikely if he had been a framework knitter. He is assumed here, however, not only to have been able to keep himself and the other four in food and clothing but also to pay the rent and for coal and other household expenses, such as sick clubs, school fees and lighting. In that sense, all the other residents were cheaper to keep. A wife was assessed at two points, on the assumption that employment quoted in the census was full-time. A working child was allowed one point because all such wages were generally taken by parents and in 1844 figures between 1s 6d and 2s weekly were quoted.¹⁸ A young person (that is aged over eleven) was assessed at one point, the practice being that about 60 percent of earnings were deducted by parents, the full wages varying from 6s to 2s 6d.¹⁹ Adult members of the family were also entered at one point, this being a time in the cycle of poverty when they had money to spend on themselves. Two points were allowed for lodgers, that is, it is assumed that they

covered their own costs and that of one other member of the household. There is some evidence that a lodger provided his own food. The second point is allocated as the total paid as rent or for other services such as laundry. The method is obviously open to criticism, but if its general nature is borne in mind, a useful estimate of the extent of primary poverty among large families may emerge, assuming that all those employed were in regular work. Booth, writing at the end of the century, stressed the irregularity of employment as a major cause of poverty but it is a factor that we cannot assess here.²⁰

All those families with minus points were regarded as being in poverty, although in regular work. There were forty-seven of them (27.5 percent of the sample) in family sizes shown in Table 3:17.

TABLE 3:17

LARGE FAMILIES IN POVERTY, BY SIZE

TOTAL NUMBER OF FAMILIES	SIZE	NUMBER IN MINUS POINTS	PERCENTAGE IN MINUS POINTS
78	6	17	21.8
42	7	9	21.4
27	8	9	33.3
14	9	7	50.0
8	10	4	50.0
2	11	1	50.0
<u>171</u>		<u>47</u>	

Its actual degree is shown by Table 3:18.

TABLE 3:18

DEGREE OF POVERTY BY FAMILY SIZE

SIZE	-1	-2	-3	-4
6	15	2		
7	5	4		
8	6	1	2	
9	2	1	3	1
10	1	1	1	1
11				1
	<u>29</u>	<u>9</u>	<u>6</u>	<u>3</u>

Twenty-nine families were therefore just slipping into minus points, nine were moving in more deeply and another nine, from the largest families, would have been living constantly in debt.

One way to avoid poverty was to take in lodgers but only thirteen families did so, a possible reason being that their houses were too small. Seven families had more than one lodger, however, and it seems unlikely that they would have provided each one with a separate room. Only two of the thirteen lodger-taking families scored minus points, and then only by a small margin. Another two families would have been in this condition without lodgers but the other nine would not, in any event, have been living in poverty and they were therefore operating a bonus income system. The presence of the wife at home was not a condition for accepting lodgers. Seven of the thirteen were working and so the extra money must have been regarded as a factor that outweighed any additional work involved, although this need not have been very much. Another feature operating towards loss of points also affected a few families. Thirteen had kin living with them who were not working, but in only three instances did this take a family into minus points although, of course, the fact tended to lower the standard of living of the relatives with whom they were staying, unless contributions were made by their parents, if alive. The two pauper kin recorded would presumably have contributed most of their out-relief money to the family purse.

The fact that a wife did not work led to a negative family score to some extent, but only in forty-seven of the 171 families. In twenty-six others the families were still in plus points, while for a further twenty-seven the budgets were theoretically just balancing. It follows therefore that fifty-three of these wives did not, strictly speaking, need to work. The most important factor in the avoidance of poverty was the number of older children, young people and adults living at home who were in employment. Even if the wife was at home, a family was rarely in minus points if the husband and two other members of the nuclear family were working. The exceptions were:

Four families of eight

Two families of nine

One family of ten

One family of eleven

Where three other family members were working, only three families scored minus points, two of nine and one of ten, but another family of ten was still in this condition with four members, other than the father, at work. The family of six with the wife not working is a frequent example of one slipping into minus points, but the position eased as the children became old enough to work. Poor families were therefore likely to be those of younger parents with children born close to each other and this was a fact of greater significance than non-employment of the wife, a state of affairs also observed by Anderson in nineteenth century Lancashire.

Employment of children in the town below the age of twelve is shown in Table 3:19, as percentages of all children in families of the size shown.

TABLE 3:19

EMPLOYMENT: CHILDREN AGED UNDER TWELVE BY FAMILY SIZE

FAMILY SIZE	MALES	FEMALES
3	3.7%	3.7%
4	4.0%	3.5%
5	3.9%	6.9%
6	5.9%	5.7%
7	7.8%	6.5%
8	7.9%	10.4%
9	5.2%	9.5%
10	7.8%	5.3%
11	16.7%	10.5%

The figures do not support any view that children of this age were frequently put to work, although in some families children had to earn additional income as soon as they were thought to be old enough. Anderson also found in Lancashire that children were sent to work where families were so poor that the extra earnings were essential. He felt this to be true in a large proportion of cases where young children were employed and that instances of child neglect or overwork were usually the result of ignorance, not lack of affection.²¹ The pattern for working wives is:

TABLE 3:20

EMPLOYMENT - WIVES BY FAMILY SIZE

FAMILY SIZE	WORKING WIVES AS A PERCENTAGE OF ALL WIVES
2	39.1
3	35.2
4	39.7
5	39.8
6	32.9
7	32.8
8	25.7
9	40.5
10	17.4
11	28.6

A line of regression plotted on the computer shows that only 32.2 percent of women's work can be explained in terms of the number of children in the family. There is therefore not a strong relationship between mothers' employment and family size and there were obviously many other factors involved, for example, the financial position of the family, the availability of work, and the fact that women with large families did not necessarily have to work in gainful employment, because they had children at home who were old enough to do so. It will be seen that the percentage of working wives actually diminished after family size five, although there is an exception for family size nine. These conclusions are again supported by those of Anderson. Mothers went to work in Preston because the extra money kept the family above the poverty line. 'Only before their first child did many women work because they wanted'.²²

A general comment may be added here about what W. Seccombe calls the 'male breadwinner wage norm in nineteenth century Britain'. He argues that the notion that the wage earned by a husband ought to be sufficient by itself to support his family developed from the middle of the century onwards.²³ It is reasonable to suppose that domestic economies would move more slowly in this direction than those with a factory base, since the former had always relied on family participation. Seccombe finds that children usually made up the family wage; there was a loss of public pride when a wife had to go out to work. The census evidence in Loughborough of wives at work suggests that the practice was not common, but that work within a domestic

hosiery economy may not have been entered because the word 'employment' carried with it associations of wages paid by a third party. Objections to the factory system could, therefore, have been based on the valid objection that it deprived husbands of the assistance of wives and, to a lesser extent, of children. It was an attack on the concept of the family wage economy. The practice in framework knitting was described in favourable terms in the Report of 1845 by J. Watson, a local hosier, who had much to gain from it: 'Here is the man himself and wife and perhaps one or two sons and a daughter, all together in their own house and they all work together and they go on comfortably: they do not get much each, but altogether it makes a very comfortable earning for the aggregate'.²⁴ This thesis is critical of the notion that such an arrangement was always 'comfortable', in the sense that it was pleasant and free from friction in personal relationships. In Loughborough in 1851 objections to older children working in warehouses and factories seem to have been weakening; it was considered preferable to employment in domestic service, where the child's wages were less likely to help the family economy.

While the analyses given here do not take wages into account, it should be borne in mind that those for men were higher in factories. In the 1860s power frame operatives could earn £2 weekly, as against a framework knitters' twelve shillings.²⁵ Seccombe believes, however, that 'only the uppermost stratum of working men in the skilled trades' could earn enough to be the sole family wage earner. Pay in some of

the occupations not included in the analyses may have been quite adequate by the standards of the time. Bleachers and dyers were described in 1855 as 'a very respectable class of work people with considerable earnings'. They also looked 'very healthy'.²⁶ There is no reason to suppose that this was not so in Loughborough. Conditions in the local lace trade were not good, but the particular circumstances applying there and also to the domestic knitting trade, should not lead us to suppose that stagnation had settled at such a low level that the local middle class suffered much more than some financial restraint. It is true to say that the town was not wealthy, but many inhabitants were still comfortably placed. This would have been true of the larger shop keepers, most employers of labour, the professional people, the annuitants, the property owners and those in trades allied to engineering. There were signs of a national improvement from about 1850 onwards, when 'the population was lifted for the first time in human history by a clear margin above a subsistence standard'.²⁷ The statement is, however, qualified by the assertion that benefit accrued particularly to factory workers and skilled hands, and Loughborough was not to enjoy it for some years to come. Many of those living in 1851 may have felt relief that the 1840s were over, but there may not have been much optimism in the air, and Loughborough, with the problem that its major industry was semi-skilled and semi-domestic, did not feel the wind of change as soon as other industrial areas.

There was undoubtedly secondary poverty, defined by Rowntree as the condition where 'total earnings would be sufficient for the maintenance of merely physical efficiency, were it not that some portion of it is absorbed by other expenditure', useful or otherwise. His causes of primary poverty were:

- i) death of chief wage earner (widowhood is studied in Chapter 7);
- ii) the incapacity of the chief wage earner: this is an unknown factor, there are references in the enumerators' books to a few handicapped people, but they are not shown as heads of households;
- iii) irregularity of work, also an unknown factor;
- iv) low wages of chief wage earner and
- v) large families.²⁸

The last two have already been examined. It is possible to quote some probable reasons for secondary poverty, but their impact cannot be assessed. The best evidence arose earlier than 1851. The Rector implied, on at least two occasions, that poor domestic management was a serious problem, not because of unwillingness of wives to learn but from lack of opportunities to do so. The independent witnesses to the 1845 Commission stress the poverty of framework knitters, but there appears to have been some disagreement about the causes. Rev. E. Stevenson, the General Baptist minister, said that he had recently visited two houses, one 'very decent, clean and respectable' and the other 'altogether as wretched'. He felt that families with children aged twelve and upwards did better because of their

additional earning capacity but that the 'moral condition' of knitters was low, the implication seeming to be that immorality had produced the poverty. Rev. Moses Furlong, the Roman Catholic curate, said that many knitters' families were half-starved and that they slept 'like animals in a sty', but that their moral standards were the product, not the cause, of their poverty.²⁹ J. Bryant, a pawnbroker, told the familiar story of poor women and girls taking in the family pledges, setting aside rent from money received, to avoid eviction, and then paying off enough of their various debts to keep shop doors open to them for another week.³⁰ He had no criticism of the way his advances were spent, he thought that money went first to the bakehouse and then to other retailers. He did not mention beer, but since his interest was 20 percent per week, he may not have wished to mar his image as a useful social servant.

The census returns give us no opportunity to examine aspects of the low life of the town except in lodging houses. Those who were forced into theft or prostitution did not quote those occupations on the census form. The term 'dealer' could have been a convenient one for those who lived on their wits, but any general occupation could have been quoted. A brief account of the town in the nineteenth century refers to the 'nightmare' of a walk through the centre as women sought 'business'.³¹ There were also three single women in their twenties recorded as living together in the 1851 census, none of whom apparently had any occupation or any income from other legitimate sources. They may have been soldiers' women, that is,

camp followers; they lived quite near to the Barracks. Mayhew thought there 'was not much to be said' about soldiers' women. 'They are simply low and cheap; often diseased, and as a class do infinite harm to the health of the service'.³² Walkowitz quotes the type of occupation which prostitutes could have recorded with truth on a census form as dressmaker, milliner, general servant, laundry woman, charwoman or street seller and describes them, not as rootless persons but as 'poor working women trying to survive'.³³ Prostitution occupied only a temporary stage in their lives, most women's entry into it was voluntary and gradual, as one of a 'series of stratagems' adopted for survival,³⁴ but after their mid-twenties many had resumed respectable employment or had settled down with a man.³⁵ Finnegan, in her study of the problem in York, thinks that rehabilitation may have been less frequent than is suggested by Walkowitz; life expectations could be short and the chances of returning to normal life slight.³⁶

The theme of this thesis is the flow of demographic, economic and social forces, reacting to each other, in a town with an unusual nineteenth century demographic history. This particular chapter is the first of three in which the flow of events has been halted, as it were, on one day, and each of the three forces has been subjected to the very close examination made possible by the census of 1851. The purpose has been to provide a detailed record of occupational structure in an east Midlands hosiery town in the middle of the nineteenth century. The structure itself has been examined in terms of the economic

events which preceded the year 1851 and it has been possible to trace signs of the developments which were to flow from them. The town of 1851 was dominated by the textile industry, which offered employment to almost every age group in the population, apart from the youngest children. Female work was essential in this economy and young women were already at work in warehouses and factories. Most of the elderly also had to work, and some children did. Work requiring no familiarity with the principal occupations of the town was often filled by those who had moved in from other areas, and this position was also true of domestic service, since local girls often preferred hosiery work. There were no real indications of the engineering developments that were to come later; the evidence of an older life style was still to be found in the cottage-based occupations and also in agriculture, which was still heavily manned. The concluding sections of the chapter suggest that primary poverty need not have been great when there was full employment. Since there may well have been some periods in the year when all members of a family could be in work, this and kinship support at other times may have made stagnation bearable.

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CHAPTER 4: HOSIERY AS A MAJOR FACTOR IN CHANGE

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CHAPTER 4: HOSIERY AS A MAJOR FACTOR IN CHANGE

This chapter is concerned with economic transformation. A fundamental change in the means of production of knitted goods, exploited by adequate investment from sound financial sources, produced a structural re-organisation of the hosiery industry, which became firmly factory-based. At first there was some resistance by those manufacturers who believed that they were to be left with a great deal of old machinery on their hands, but the chain of events soon obliged them to reconsider their position. Business improved; the old knitting frame was quietly set aside by its temporary accommodation within the factory structure. In this way the influence of the cottage system of production was steadily reduced. Female ancillary work in hosiery was still required within the factories; most workers gained and few lost in the short term. New occupations also arose, connected with hosiery machine building and with steam technology required in the factories. The final section of this chapter relates these changes to demographic development after 1851.

a) Chapter 2 ended in the middle of the nineteenth century, when the hosiery industry was still largely committed to manually operated machinery situated in workers' homes or in small workshops. Chapter 3 has shown that there was some movement away from this situation in 1851, but as late as 1844 that great authority, William Felkin, had damned factories with some very faint praise. He accepted that, even if they did not

raise wages, they could not depress them further, but at that time he did not see `reason for deciding that all labour in connection with weaving [sic] must be subject to the uniform, automatic, system of operation which obtains within the gates of a factory, in order to secure good work, fair wages or reasonable profit.'¹ Berg thinks that he `happily believed' that stocking making by hand would continue indefinitely and that he `blithely ignored the connections between the coming of the machine and the factory.'² Felkin put it quite plainly: `Steam power is not likely to be found advantageous in making the great bulk of hosiery goods'.¹ Brunel-type machines were then in use in Loughborough, driven by steam, and there was also a factory in Leicester, the machines being operated manually. They could be operated by `any boy or girl ... if there is anyone to look after them to see that they work rightly'.³ This Leicester type of workshop was still the concept of the `factory system' as the term was generally used in the Report of 1845. Few hosiers were prepared to go to the expense of erecting new buildings or adapting old ones to accommodate machines, when so many knitting frames were already available.

A series of nice calculations should have been involved in any decision to convert to steam in the woollen industry in the 1830s and early 1840s.⁴ Many firms may, however, have had only rough ideas of what their costs were. There was, for example, the cost of coal, of conversion of buildings, of new machinery, and the prospect that increased profits would not match so large an investment. The same considerations applied to

hosiery, with the additional problem that the early machines did not produce high quality work. Nevertheless, both Paget and Warner had been willing to take some risk in Loughborough. Probably they alone had the capital. It was also good practice to invest it where there were already large warehouses, good communications and availability of coal which, for Warner, could be delivered by canal direct to the factory. The great majority of hosiers traded only in a small way, however, and the price of innovation would have been beyond their capacity, even if they had believed that powered machines could command a large market. There are obvious parallels between the knitters and the weavers, whose Commission reported in 1838, but there is also the difference that, whereas the woollen industry had become 'dominated by the mill', hosiery was still generally operating under the complicated and conservative structure of a domestic type production system.⁵

Nevertheless, the factories were already improving the standard of living of those who worked in them. Women and girls could 'attend' powered circular machines and, according to Felkin, could earn from twelve shillings to £1 weekly in 1860,⁶ at a time when framework knitters' wages were 'lamentably low' in many branches in Leicestershire.⁷ Average nett earnings of 6s 10d per week were quoted by a Hinckley manufacturer in 1854.⁸ The circular machines were, however, limited in numbers; the old frames were easily available, and they offered some 'independence'. The same manufacturer said that there was 'great difficulty in persuading persons to attend during the factory or

regular hours'.⁸ To avoid this kind of restriction on their liberty and to maintain their craft status, framework knitters were still prepared to tolerate the low standard of living of the domestic type industry. They had, for example, complained again about wages, about which so much had been said and written ten years earlier. Nothing, however, had been done except that the Ticket Act had been rendered inoperative 'from a technical construction put upon its words'.⁹ The employers had found a loophole in the law and the grievances of the workers had increased. The Select Committee which was convened to deal with the problem was not willing to propose more than that the Truck Act could perhaps be adapted to deal with the broad question of stoppages from wages. The whole matter was so complex that general legislation was thought to be difficult but the indirect approach through the Truck Act could, it was suggested, place responsibility on the Courts to deal with specific complaints and, it may be added, on knitters, to take the necessary legal action, a procedure beyond the experience of most of them.¹⁰ The underlying theme of the Report of 1854/5 seems to have been that reform of a dying trade was unjustified but that some sedative could perhaps bring about a peaceful end.

b) The Loughborough witness was Robert Ratcliffe who, having entered the trade as an apprentice fifty-six years earlier, was now the doyen of the local hosiers. He went as the practical man, plain John Bull, determined to let the bureaucrats know what was what, and his evidence showed that he had grown no wiser since the publication of the Report of 1845.

Indeed, when the Committee put to him some highly pertinent questions, he became very evasive. When asked about the possibilities of arbitration in disputes, he gave his opinion that any form of it would be cumbersome,¹¹ and so it would have been for a hosier of the old type, unaccustomed to compromise. Ratcliffe was then nearing retirement. In 1861 the census described him as a property owner and his son was managing the business. Changing conditions, and the departure of men like him, altered attitudes more effectively than legislation. Steadier trade strengthened the hands of the workers, some of whom had moved into factories producing the cheaper goods. There they formed coherent groups freed from the concept of independent craft status and together they became the nucleus of a trade union movement. This led to the establishment of a Board of Arbitration and Conciliation in Nottingham in 1860, with an equal representation of workers and employers. This was a common reaction to threats by groups of workers, an attempt to contain wage demands made usually on the upswing of a trade cycle.¹² The employers, led by A.J. Mundella, placed greater emphasis on conciliation, 'open and friendly bargaining on both sides of the table',¹³ instead of arbitration, that is, a decision of an independent umpire, based usually on sliding scales of wages related to the selling price of the product and the competitive needs of the district.¹⁴ Here Mundella may have introduced a subtle way of controlling worker-militancy, which Porter thinks might have produced higher wages, because 'conciliation boards and agreements ... imposed substantial limits on the bargaining power of the operatives'.¹⁵ On the

other hand, there was a correspondingly lower risk of counter-attacks by employers in times of economic downswing. Loughborough was in the area covered by the Board. On one occasion local men complained about variations in the price of heeling, and a uniform one was fixed. The Board also stopped the practice of paying wages late on Saturday nights and in 1866 it drew up a list of frame rents recognised by most of the hosiers. The same year a similar Board was established for Leicester.¹⁶

During this period, other developments were taking place on which the superiority of the factory in public esteem as well as an economic unit was to depend. Real progress awaited improvements in working conditions and a Report of 1863 throws some light on the position.¹⁷ At Cartwright and Warner's warehouse in Loughborough, the work was mainly mending or making-up by hand or with sewing machines, and marking, sorting or folding goods, and Henry Warner was unwilling to change the weekly routine. Although a little extra time was allowed for meal breaks because the factory and warehouse were 'a little distance from the town', this consideration for some of the workers did not apply to other conditions. Henry objected to the Commission that warehouse hours were already better than factory hours, and that a Saturday half-holiday for those under eighteen would be 'very inconvenient' because of the system of processing framework-knitted goods on that day.¹⁸ The firm did stress that all their young workers had had some education and an overlooker thought that they all went to schools, but this evidence should be taken to include night schools. Mary Winter-

bottom, aged thirteen, made 'bands' and had been at work for three years. She went to night school during the winter and to make time for this she worked through the dinner-hour, 'finishing dinner in five minutes'. Her reward for this loss of evening and mid-day relaxation was her ability to read and to do multiplication and subtraction sums.¹⁸ Sarah Keed, aged fourteen, had been at day school for five or six years and was both literate and numerate, except in division. She was employed on running errands and sweeping up, with some mending. She earned 2s 6d weekly and her hours of work were from 7.30 a.m. to 6 p.m. in the summer and 9 a.m. to 8 p.m. in the winter. Dinner break lasted one hour and a quarter and tea forty minutes.¹⁸ These conditions of work for girls who today would be at school may seem depressing, but they may have seemed reasonable compared with what Sarah and Mary had heard about the past. A member of Warner's office staff told the Commission: 'There were formerly a few women who drove a team of girls for seaming, but there are none now'.¹⁹ W.E. White, who also had a warehouse in Loughborough, gave evidence that children were 'scarcely ever employed under mistresses', in 1863. If these harsh, unrelenting women had indeed disappeared, then the warehouses may have offered order and some companionship, compared with the irregular hours of the domestic industry.

White himself was no sentimentalist where children were concerned. He did not employ them 'as they are of no use'; he was, however, an enlightened employer. Harriet May, who was sixteen, had been there for three years as a seamer and before

that for a year at another warehouse as a mender. She had been at day school where she did seaming, writing and arithmetic. She still went to night school once a week and worked the same hours as Warner's girls, but she had no time to make up and she also had a Saturday half-holiday. Her foreman said that the half-day was possible because of an adjustment in the processing procedure. This was the change to which Warner had objected, but at White's warehouse it 'did not in the least interfere with the general arrangement of the business, and all like it'. The foreman added: 'Quite as much work is done since the change, and better, and people come in fresher on Monday'.¹⁹ The firm of W. and A. Paget put directly the point of view that warehouse conditions were better than those in private houses where, it was claimed, very young children still worked long hours. Employers were intelligent enough to see that 'children under the age of thirteen cannot work above eight hours a day, young persons more than ten, even adult men more than twelve, with advantage'. This firm wanted to avoid regulation which, it was felt, would be 'inconvenient', and would drive work back to private houses where self-interest was not so enlightened.¹⁹ Here, of course, the Commission was being invited to take the employers' goodwill on trust and some evidence from Leicester was far less favourable.²⁰ Nevertheless, there were indications that, when a powered machine was invented which could produce work of hand frame quality, conditions in factories would be such that young people would not be deterred from working in them. It was the generation of young people interviewed by this Commission who were to be the first to move with relative ease

into factories. Joyce writes of the 'shock' of the life for older age-groups but adds: 'The sons and daughters of fathers who had known the violent transforming power of mechanisation were often a tabula rasa on which the factory impressed its mighty stamp from childhood on'.²¹ In fact, Mundella could say in 1871 that 'the evils of the trade' had decreased with factory production.²²

c) The hosiery factory system could not, however, develop until it had a machine that could replace the knitting frame, and so drive the industry out of the cottages and workshops. The prospect attracted most of the inventive minds in hosiery as the second half of the century began. The actual breakthrough was achieved by a Loughborough man, Arthur Paget. Both he and Luke Barton of Arnold, Nottinghamshire, turned their minds to designing an automatic-fashioning, power-driven machine. They probably co-operated to some extent, since their devices were similar. The inventions of both men were patented in 1857, adding weight to the observation of Mathias that once an economy was on the move, innovation became cumulative.²³ Barton's patent was for a wide frame, handling several lengths, Paget's for a narrow, one-length machine. The fashioning devices worked on the same principle, however, a bar swinging in front of the needle row picked up the thread and moved it from needle to needle as required. Improvements were patented by Paget in 1859 and 1860; his machines subsequently enjoyed worldwide sales. A common method of operation was to set them up in groups of five on one transmission shaft; three made the legs and one each the

heels and the toes. This was the first successful mass production assembly for fashioned garments and Paget exploited his success by widening the machines and improving the gearing, to add greater speed to the accuracy for which they already had a high reputation. A contemporary described them thus: 'They operate safely and accurately and are truly ideal for the manufacture of fashioned goods'.²⁴ None of these Paget machines remain in England, although there was still one in France in 1964 and another in Holland. Paget had sold his patent rights in 1862 to Poron Freres of Troyes and other French machine builders. Improvements were made in France to widen the patterning scope and a French patent was granted in 1873.

Another Loughborough man was to take the inventive process to the decisive extra step. In 1846 William Cotton, an employee and former apprentice of the firm of Cartwright and Warner, entered into partnership with J. Harriman to manufacture warp fabrics. It was there that he began work on the machine which removed the last technical obstacle to the replacement of the domestic system by power driven factories. His career up to this point had been uneventful. The sources, perhaps following each other, all mention the apparently mediocre nature of the man. Deakin refers to his 'scant education',²⁵ Wells says that he had no knowledge of the principles of engineering or drawing.²⁶ This cannot be so. Cotton had the ability to look at machinery from an unconventional point of view and, in so doing, he designed a machine whose basic principles still apply today. His technical argument must have been that, since the hand-frame

could not be adapted for power working, it was necessary to discard it and look at the whole problem afresh. Occupation of his own premises provided him with the opportunity to work on his innovative ideas with the knowledge that any developments would be securely his. Within a year he had obtained a patent for a system to reduce the movements made by the knitting machine and in 1855 he patented a fashioning device which he used on his own machines. His principal inventions were quite original. Deakin says: 'The great feature of the new machine was, to use the expression common in Loughborough at the time, that "it turned the needles upside down"'.²⁵ The words of the patent specification were that the needles 'in place of their being held to point in a horizontal direction or nearly so, are supported so as to point in a vertical direction and the work passes away from them in a vertical direction'.

It was with this stroke of genius that Cotton found the final answer to the problems of automatic fashioning; his devices are still in use today. The basic movements of his machine are illustrated in an Appendix. On the knitting frame the needles were mounted horizontally on a fixed bar, on the Cotton machine they were mounted vertically, beard upwards, in a movable bar. The sinkers worked horizontally, the edge of the sinker-guide acting as a presser bar on the beard. (In the knitting frame a separate presser bar was needed.) The fashioning apparatus was placed above the row of needles and, by the turn of a screw, it could be set for narrowing or widening. The heavy moving parts of the entire machine were placed near the floor to

obtain greater stability and a knitting action which was free from vibration. The machine and its fashioning device was capable of making one stocking, but by mounting several such units in line on a flat frame Cotton was able initially to make four hosiery lengths at the same time. Perhaps fearing that his machine would not be accepted in England, he found a French builder, a M. Tailbouis, at St. Just. This precaution proved to be unnecessary; in 1867 the Cotton firm moved to a larger factory and began machine building as a separate business. The records of the Loughborough firm of Hanford and Miller show that they were using Cotton patent machines in 1870.²⁷ It is probable that, over the three years since the move, production had expanded. The firm of Hine and Mundella, and later that of I. and R. Morley, became Cotton co-patentees, but it seems evident that use of the machines was not restricted to those businesses. In 1878 the patent rights expired and Wells says that Cotton then set up on his own account, and that eventually he employed 200 workers making one hundred machines per year.²⁸ He later patented other inventions for knitting ribbed and highly patterned materials and died in 1887.

d) Although the inventions of Paget and Cotton were necessary, they were not welcomed by all those in the industry. Nineteen years after the pronouncement by Felkin in 1844, Warner of Loughborough was still unconvinced. He said in evidence to the Commission on the Employment of Children, in 1863, that fashioned hosiery could not be made 'without very complicated machinery'.²⁹ One of his objections was that they would

'render worthless' the hand frames which his firm still used. The rent he received from them offered a regular income which he was not willing to surrender in favour of inventions which he held to be of uncertain merit. There were other reasons why he should have wanted to hold back, and not tie himself up with substantial fixed capital investment which might not have been remunerative. It must have seemed to him that the existing policy of placing the costs on to the workforce was much more sensible. Boyson has dealt with this problem in the cotton industry, where new building and plant was purchased a year before it could be fully used.³⁰ Success could not be guaranteed, a safer way forward might have been to buy less labour-intensive machinery which promised an improvement in productivity but which was not the final answer.³¹ It was discovered for example, that with some improvements (self-acting mules are quoted) the marginal advantage was nullified if lower wages were paid, in this instance ten per cent less. The operatives did not lose financially, because factory re-organisation raised the productivity of the machines in use.³² The same practice was adopted in hosiery in the Midlands. Powered rotary frames could work more quickly than the hand-operated wide frames but improvements to the latter, and cheaper labour and overhead costs, helped to make the wide frames competitive. Astute management could achieve a great deal with reasonably efficient plant or, as Boyson puts it, there was an instinctive belief among many cotton operatives that a firm with old but not redundant machinery would withstand bad times better than a superbly equipped business, because of its lower capital

investment and because a pattern of production had long been established.³³ These ideas would probably have won Warner's full approval. L.G. Sandberg defines the economics of replacement thus: 'The old existing technology should only be replaced if the total cost of the new techniques is less than the variable cost of the old technique'.³⁴ Warner may not have been able to put it in quite that way, but his business instincts may have told him that this was so. Labour was cheap and more adaptable than the machine. Capitalists could 'engage in capital-saving rather than labour-saving investment, perpetuate low-intensity technologies, rely on workers' skills even when there was machinery ready, in principle, to replace them'.³⁵ 'Human beings were a great deal cheaper to install than a power house and much more adaptable in their action than machinery.'³⁶ Gains in productivity were sometimes only modest, for example, the new hosiery machines were subject to stoppages. There was no certainty that the manufactured article would sell. There was a gap between expectations of a machine and its actual performance, fancy hosiery could still best be made by framework knitters and intricate patterns could not be knitted on machines of the Brunel type.

Warner's attitude was shared to some extent by Cotton's financial backers. Even Hine, one of his first co-patentees, thought that it was 'questionable whether the power-made work will ever be sufficiently satisfactory to come into general use'.³⁷ This comment adds strength to the point made by C.Erickson that hosiery bought its technology from outside, from

hosiery machine builders. Firms were not run on 'vertical lines', combining all the processes from spinning to finishing and including their own engineering research departments. The merchant entrepreneurs of hosiery had no deep knowledge of the technical aspects of knitting, they had relied in the past on framework knitters to find technical improvements.³⁸ She states: 'Hosiery has had almost no technically trained leaders'.³⁹ In her British Industrialists, Steel and Hosiery, 1850-1950, she offers an interesting analysis of hosiery management. It was a small scale and highly competitive industry and offered opportunities for humble men. Firms came and went fairly frequently; it attracted 'local and petty' capital. Many firms were too small to employ salaried administrators, the early manager/owners being men with experience of the trade but not equipped to see beyond day-to-day operations. As late as 1871, the earlier work of the Nottingham hosiery manufacturers had been:

foreman or overlooker	4%
manual worker	11%
clerk or warehouseman	31%
salesman	2%
partner	52%

They had no depth of experience. Up to 1870, 54 percent of heads of hosiery firms in Nottingham had worked for only one business. Postan quotes the model of Salter, that the decisions of firms to adopt the 'best' in technical innovation 'are in the final resort dependent on the relative cost of capital and labour in terms of prices for its products'.⁴⁰ He doubts,

however, that all firms were rationally conducted in this way in the nineteenth century. Many employers were wedded to traditional ways, and this must have been particularly true of hosiery. There was one fact, however, that was plain for all to see. In a competitive economy, new technology cannot be locked away.

e) While Cotton was designing his new machine, the terms of trade were swinging heavily against British hosiery. Church quotes data relating to the price of raw cotton and wool compared with that for stockings and socks, using the period 1847-50 as his base years (all the figures at 100). In 1861-65 the price of raw cotton had risen to 342 and that of raw wool to 210, while prices of stockings/socks fell to 88.⁴¹ These figures reflect the impact of the American Civil War. It was, nevertheless, in the high cost/low income decade beginning in 1861 that Loughborough prepared to move out of stagnation. New factories were opened. Hine and Mundella are first quoted in Briggs' Directory in 1861 as having a business in Loughborough, as well as Hine and Parker, and in 1864 Kelly adds the name of Braund. Raw cotton prices fell quickly after the end of the American Civil War and steadily thereafter.⁴² In 1867 Buchanan's Directory includes E. and F. Caldwell, while Hanford and Miller opened a factory in 1870. This expansion had taken place prior to the provision of a reservoir controlled water supply in 1870. Although industrial use had not been seriously considered in decisions on its capacity, it was soon realised that its quality was 'specially suitable for the dyeing and

finishing of hosiery'.⁴³ The opportunity therefore arose for hosiery to benefit by easy access to finishing facilities, the additional work thus created being of advantage to the town.

Prosperity was not easily attained. The records of the Leicestershire Branch of the National Union of Hosiery Workers suggest that there were some difficulties in Loughborough in 1881, when £5 was donated to the Loughborough and Leicester framework knitters. Although rotary machine hands had been called out in the town in 1872, and after thirteen weeks had won their struggle for higher pay, the majority of the male power frame knitters in Loughborough still belonged to the hand frame knitters' Union and 'their wage rates were below the levels obtaining in Nottingham or Leicester'.⁴⁴ The records of the county branch of the National Union also show that improved business did not always mend broken relations between masters and men. There were problems with individual firms paying less than Union rates and there were threats of strikes against some of them. Disputes probably arose from the need to keep costs down because of strong overseas competition. In addition, sliding scale agreements relating to retail prices, where entered into, made employers anxious to apply the agreement when retail prices fell, as well as when they rose.⁴⁵

f) Nevertheless, Wells' figures for national hosiery exports over the period 1862-1885 demonstrate that there was a real recovery.⁴⁶

TABLE 4:1

NATIONAL HOSIERY EXPORTS 1862-1885

DATE	COTTON	WOOL
1862-65	£443,000	£348,000 (figures are for four years - 1862-5)
1866-70	£756,000	£286,000 (figures are approximations)
1871-75	£1,026,000	£288,000
1876-80	£866,000	£294,000
1881-85	<u>£1,102,000</u>	<u>£420,000</u>
Average per Year	£175,000	£ 68,000

Exports of cotton hosiery rose steadily and picked up substantially after the impact of the American Civil War had worked its way out, but Wells points out that the period was one of recurrent depression in the hosiery industry and average exports were lower in money terms than those of the years 1834-1843. The U.S. Market was restricted by tariff barriers and there was more competition, especially from Germany. Indeed, Wells has a column for net imports of cotton goods which, from 1861 to 1885, averaged about £28,000 per annum. Firms with adequate capital could however, continue to expand, although smaller ones often failed. The 1870s were a particularly buoyant period in Loughborough. A local authority on the hosiery industry regards it as its real 'golden age', rather than that in the mythical past of framework knitting.⁴⁷ There was also more money in the town. The Rector said in 1876 that the 'well-to-do population' was increasing and therefore needed better educational provision, which was available in a new Church of England School built by the Warners. The proposed fee of 6d per week suggested that it was intended for the superior artisan class.⁴⁸

As the town entered an era of expansion, it was well placed to achieve growth in the trade that had previously sustained it, in more difficult times. Frame rent, the deeply felt grievance of frame work knitters throughout the century, was abolished by the Hosiery Manufacture (Wages) Act of 1874; the kind of factory production which had its beginnings in Loughborough helped to make abolition possible. The manufacturer who had his machines under his own roof in factory or workshop no longer had need of protection against misuse. A.J. Mundella (who became President of the Board of Trade in the Gladstone administration of 1886) said to the Truck Commission of 1871: 'We can lock our doors and we know that our neighbours are not working our frames'. He was willing to support a motion in the House of Commons that frame rent should no longer be a legal deduction, but a 'matter of bargain between workman and employer'. He was perhaps in advance of contemporary opinion in the trade; Thomas Hill, a partner with Morley, did not think it as simple as Mundella thought, and regarded total abolition as 'a very serious interference with trade'. Even the secretary of the United Framework Knitters of Nottingham hoped for no more than a poundage payment, that is, a rent related to wages.⁴⁹ Nevertheless, abolition came.

Thirteen more framework knitter heads of household were recorded in the 1881 census than in 1851. This was 105 more than in 1841, when lace making was still a factor. The traditional frame enjoyed a temporary second spring as a maker of pieces of work ancillary to that produced by the powered machines. The

last refuge was the annual Government military pants order, divided between Loughborough and Nottingham, providing about six months' work each year for the older men still working frames. Deakin says that by the end of the century even this work was done on Cotton machines.⁵⁰ The 1870 Education Act would have been a serious matter for the old, completely domestic, industry in that one source of cheap labour was withdrawn. The Act, which was enforced in Loughborough in 1875, gave Local Boards powers to make education compulsory for children aged from five to thirteen, although there were exemptions for those who had reached a required standard after age ten. This stopped all child labour, not only under age nine, which by that time was no great loss, but also where more labour had been employed, between ages ten to thirteen, unless the child had been an apt pupil. Factory-based industry was able to accommodate this withdrawal of labour in a way that would not have been possible in the old cottage-based economy, where the children were part of the family production unit. The occupation tables in Chapter 5 show that, as more schools opened in the town, the number of head of household ancillaries, often widows or single women, increased. In 1851 the percentage of heads in textile ancillary work, as a proportion of all those in the textiles occupation group, was sixteen; in 1881 it was twenty-nine. There can be little doubt that the progress that had been heavily criticised by frame work knitters and some hosiers had placed Loughborough in a position where the factory and the workshop had prevented the hosiery trade from being destroyed by its own inertia, even if the old freedom of partial self-employment had gone.

The growth of Loughborough, based on new technology and a new system of manufacture, occurred at a time when the national economy had become sluggish and conservative. Hobsbawm regards the period 1871 to 1901, that of great population expansion in Loughborough, as a time of 'national industrial stagnation', particularly between 1873 and 1896'.⁵¹ He records the boom of the early 1870s, but for him it was the end of the era of unquestioned expansion.⁵² This is a debate of great interest. For Loughborough the early 1870s were the end of stagnation and the beginning of strong growth; the literature has to be read in the context that the economy of the town may here have been moving against national trends, as it was in the middle years of the century.

Saul disagrees with Hobsbawm in his Myth of the Great Depression, 1873-1896. He argues that 'the traditional commencement of the "Great Depression" has no long-run significance, simply marking the end of a vigorous boom', and that output per head had started to fall before 1873. He accepts that 'the rate of growth of industrial production in Britain slowed after 1870 and of real national income after 1890' but quotes evidence that U.S.G.N.P. also suffered a 'distinct retardation' after 1870. As for Germany, he says that 'the figures are much disputed but show no signs of rapid acceleration' and that 'deceleration of French growth for almost two decades after 1882 is well established'. There was therefore 'little evidence of marked upward trends in the other major countries to offset the well-established deceleration of growth

of industrial production in Britain'. But from 1871 onwards, German and U.S. increases in manufactures per capita were much greater than that of Britain, there was a decline in British business confidence in the 1870s and 1880s and the 'last quarter of the nineteenth century was a watershed for Britain as competition developed overseas and the rate of growth markedly slackened', although this process was probably under way before 1870.⁵³ The argument of P. Mathias is that the problems of the Great Depression 'defy a single unitary explanation', but he believes that there was a 'failure in innovation and development widespread and deep-rooted in the British economy'. He quotes figures of decline in output per man-year but comments that the 'picture of growth and retardation, innovation and stagnation, efficiency and failure to compete within the British economy was a complex one and such general post mortems on the failings of industrial efficiency and innovation in the economy after 1870 can be construed into an uncritically pessimistic picture'. He feels that in the last quarter of the century 'an earlier industrial tradition with innovation born of the gifted mechanic, the brilliant amateur, the practical man, with no systematic education in science or technology, was becoming a liability'. [This earlier industrial tradition had played a significant part in the industrial growth of Loughborough prior to the 1870s.] Mathias concludes that 'no nation can keep ahead all the time once other nations begin to industrialise'; to complain about this is to 'lament the inevitable'.⁵⁴

D.S. Landes argues that within Europe industrial leadership passed to Germany in the closing stages of the century because of German unity after 1870, the recovery of its domestic market from British domination, and the increase of German exports to Britain and to the countries formerly importing heavily from Britain. He rules out the explanation that British industrial resources were inferior to those of European countries. He regards as better explanations:

- i) Britain had been first and suffered from the 'legacy of precocious urbanisation';
- ii) there was a scarcity of new British venture capital; the rate of entry of new firms was high but many failed and
- iii) initiative had changed to conservatism.

In 1895 Germany was still far behind Britain as a commercial power, but she was growing more rapidly.⁵⁵ Best mentions credit booms during 1861-6 and 1869-73 when, he feels, the whole period was one of 'buoyant optimism and bold confident enterprise', but the conditions of international trade became less attractive in 1873, a time he regards as 'precisely datable'.⁵⁶ The entrepreneurs and factory owners of Loughborough were not, apparently, much affected by the 'Great Depression'.

One of the chief protagonists in the debate, D.N. McCloskey, admits that the information available on the late Victorian economy is of 'poor quality' and some of the areas of uncertainty which arise are quoted in the foreword by B. Supple to McCloskey's Enterprise and Trade in Victorian Britain :

'Whether the criteria of performance are to be found in earlier periods, later periods, other countries' achievements or some hypothetical contemporary potential; whether success or failure are to be indicated in terms of growth rates or economic structures or the balance of economic activity; and whether attention is to be focussed on the economy as a whole or on specific sectors within it, and if so which ones'.⁵⁷

McCloskey, himself, in this volume, claims that the economy was 'not stagnating but growing as rapidly as permitted by the growth of its resources and the effective exploitation of available technology'.⁵⁸ He argues that it has not been satisfactorily demonstrated that there was under-investment in research in the new industries, in marketing or the formation of cartels. A sustained growth of productivity in the 1870s, 1880s and 1890s was of a similar magnitude to that in the United States. He admits that his measure of productivity growth is 'a fragile foundation' but feels that the aggregate measures were consistent with success⁵⁹ and 'given the uncertainties of the data ... the most precise defensible statement is that there was little cause for alarm in the behaviour of British productivity down to 1900'.⁶⁰ He identifies the three senses in which Britain is said to have failed as:

- i) output grew too slowly because of sluggish demand;
- ii) too much capital was invested abroad and
- iii) productivity stagnated because of inept entrepreneurship.

Saul says that deceleration of industrial growth in Great Britain was well established during this period. This was

not true of Loughborough. Best implies that confident enterprise had declined after 1873. It developed in Loughborough. McCloskey holds that the economy was growing as strongly as permitted by the exploitation of available technology. Hosiery appears to have had better available technology at this time. There had been none of the failure in innovation described by Mathias; the early industrial trend of 'innovation born of the gifted mechanic' was still flourishing and so, while Landes may have been correct in referring to a general scarcity of new British venture capital, some was attracted to Loughborough. The town had suffered in the past from Landes' 'precocious urbanisation', but there had been time for recovery from it.

McCloskey's three senses in which Britain is said to have failed may therefore be contrasted with the local position. It will shown in the next chapter that:

- i) population increase was based on hosiery-led economic growth;
- ii) it follows that this expansion required capital investment, as factory succeeded factory and
- iii) local enterprise must have been very vigorous to have developed so strongly after a long period of stagnation.

The comment on the cover of McCloskey's Enterprise and Trade in Victorian Britain puts his point of view quite neatly:

Britain's present difficulties do not date from the failures of Victorian businessmen, 'it is in ourselves and not in our grandparents that we are underlings'. This appears to have been particularly true of the textile industry.

The contributors to The Economic History of Britain since 1700 support McCloskey's view of the 'Great Depression' and also make some specific points which have relevance to the situation in Loughborough. ⁶¹ C.K. Harley and McCloskey write that 'British exports remained the products of the old industries of the Industrial Revolution' and that Britain's competitive position was strongest where labour skills were of long standing. ⁶² This implies that textiles overcame overseas tariff barriers, or that they increased sales to those countries where such barriers did not exist, such as imperial possessions, to which, says M. Edelston, commodity and service exports were increasing. ⁶³ L.G. Sandberg points out that cotton textiles as a whole were the 'leading British industry in terms of value added'. Although their share of exports declined, it still remained high. ⁶⁴ Harley and McCloskey state that by the end of the century, textiles still contributed nearly forty percent of all British exports. ⁶⁵ Loughborough had been fortunate in that it had not been involved in coal, or iron and steel, but that it did have a modern hosiery industry.

The great advantage of the Cotton machine was that it ensured a British lead in technical development in hosiery; it was an area in which the country still held an advantage in the application of innovative ideas. The machine was an example of a type described by A.L. Levine as 'being introduced for the first time into certain formerly wholly hand processes' or the

`development and spread of the automatic principle'.⁶⁶ Levine goes on to write that there was a `considerable lag with respect to mechanisation in a number of British industries. This is also true of the automatic principle or, more precisely, of those examples, then few in number but each of tremendous significance, of the "fully automatic" device'.⁶⁷ Cotton had invented such a device, at a time when, according to Levine, manufacturers of other textiles (for example, woven materials) were becoming conservative because of `undue caution'.⁶⁸ If these other manufacturers were handicapped, as it is often claimed, by their early start in mechanisation, this could not have applied to hosiery, because the knitting frame had persisted for so long as the basic machine of the industry. There had been a long period of technical and organisational lag, but when it ended the industry quickly broke free from it.

The invention either came at the right time, or it was so comprehensive that it made the time right. It was introduced towards the end of `the great Victorian boom' which brought not just mechanisation but expansion in all ways. The period was succeeded by one marked by the `exhaustion of the old technology', domestic investment fell and more capital was placed abroad.⁶⁹ For hosiery there was a new technology and money had to be spent on its acquisition by any business interested in large scale manufacture. There were risks of opposition from those whose investment lay in existing plant, that is, in the knitting frame. There had, however, been some return to the owners in the form of the frame rent and the obsolescent plant was given a place in the manufacturing process

until it could be conveniently scrapped. A reason quoted by Levine for Britain's industrial problems of the later part of the nineteenth century was 'outright opposition on the part of the working class to mechanisation, and specifically to the displacement of hand by mechanical processes'.⁷⁰ He qualifies this by quoting contrary evidence, but his comment would have been a fair one as far as hosiery in the 1840s was concerned. If there were local complaints in the 1870s about automatic fashioning machines, they were not sufficiently strident to be recorded and, in any event, the base of the argument that the knitting of a fashioned garment could be performed only on a hand-frame was eroded.

It has already been suggested that the environment of the factories in which the machines were placed may not have been so hostile that they alienated the young workers who formed a large part of the workforce. If the head of the household lost his dominant role as the cottage industry declined, his older children may have found their independence in the factory. Berg quotes a Ph.D. thesis source on Manchester evidence as early as 1834 which 'demonstrated' that the health of children improved when they entered a factory.⁷¹ The evidence was compiled by local textile magnates, but if in 1834 a harsh but stable regime in a factory was genuinely better for children than a harsh and capricious one at home, then the young people of Loughborough in the 1870s may have been well satisfied with the course that events had taken. There has also been some gain for adult men. It must be remembered that the new machines were built in

factories; if the old labour hierarchy of the framework knitter was disappearing a new one was being created, dominated by the skilled engineer.

This chapter has been largely an account of new ideas and new industrial initiatives, accompanied by demographic growth. The chain of cause and effect is now clear but it should be said again that, at the time, many steps into the unknown were being taken. For example, there was some early reluctance to accept the new inventions for what they were, that is, as decisive in the history of hosiery manufacture as the bobbin-net machine had been in that of lace. This reluctance was increased by the high cost of providing a building and equipping it with expensive machinery to do what could be done already by the knitting frame, with very low overhead costs for the hosier. It has been pointed out that a decision to re-equip depended on a number of calculations which many firms in hosiery were incapable of making, because their entire experience had been with manually operated machinery. There was a possibility that any capitalist making an investment not based on careful calculation would fail, as men had failed in lace. This did, indeed, happen. Wells quotes the calculations of a contemporary observer that, of 105 firms throughout the hosiery counties known to have begun business around or after the date of the Cotton invention, only seventeen were believed to be still in business in 1891, although there was no information on a further twenty-one. He adds, however, 'as some producers were eliminated there were always others coming along ... so that the aggregate number

of firms tended not merely to remain constant, but actually to increase'.⁷² A particular piece of local good fortune was the active interest of Mundella, perhaps the most talented man in hosiery at that period. The machine was designed for powered operation, to be found only in factories, in which Loughborough also had longer experience than any other hosiery town. That is not to say, however, that factories were seen as the answer to all the problems affecting the trade. If they solved some, they created others; the regulation of the workers was more stringent, they were still objectionable to many. They did, however, provide the means of development in Loughborough which could not have been envisaged in the middle of its stagnant period. The factory workforce was generally of an age-group which was not resistant to change, but the price to be paid was the destruction of the cottage system, although this appears to have been managed with some consideration for the older workers. Goods became cheaper, new markets were found, hosiery moved into its 'golden age'. Engineering also developed and the population of the town grew as capital investment was made in the manufacture of new products.

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CHAPTER 5: SOME ASPECTS OF THE ECONOMY OF LOUGHBOROUGH
FROM 1841 TO 1881

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CHAPTER 5: SOME ASPECTS OF THE ECONOMY OF LOUGHBOROUGH FROM
1841-1881

In this chapter, the concentrated census material of 1851 is augmented by an analysis of all the useful censuses available. The material places hosiery and lace within the flow of the general industrial life of Loughborough over the whole period of the study. Commercial activities are dealt with in Chapter 6. The data are occupations of heads of households at each of the census years; reasons are given, and are supported by statistical evidence, for the choice of this group of people and it is argued that it offers the best guide to the industrial balance of the community. Subsidiary occupations occur, which gradually assume greater significance, so that by the end of the period a small engineering sector can be observed. The occupational history of other broad groups of workers, for example, those in building, agriculture and communications, is included, and related to the two basic groups, Textiles and Other Manufactures. The percentage of heads of households shown in each group reflects, however, the whole range of occupations, not simply those studied in this particular chapter. The material constitutes a running commentary on a town in general economic stagnation and the means it found to escape from it. The chapter concludes with a discussion on the part played by the railway in the economic life of the community.

a) In 1841 the first useful census was held, in the sense that, although it was imperfect in a number of ways, it makes possible some analysis of the occupational structure of a

British town. Thereafter succeeding censuses, up to 1881, present the opportunity to relate population movements to general industrial growth or decline. ¹ Heads of household are here regarded as of chief importance. Few of them lived alone, so that each head can be considered as the general cause for the presence in the town of the other people with whom he/she lived. His/her occupation was therefore more significant, in this sense, than that of any other person in the household. This argument is strengthened by the fact that an analysis of head of household occupations offers a better view of the occupational balance of the town than any other. Figures for all males above the usual school leaving age in 1851 ignore those women who worked as primary producers, for example, those in framework knitting. If all females over eleven are included, however, modifications occur which are illustrated in the Table 5:1, based on the 1851 Census.

TABLE 5:1
PERCENTAGES, OCCUPATIONAL GROUPS, 1851 CENSUS

GROUP	Col.1	Col.2	Col.3	Col.4
	M OVER 11	F OVER 11	POPULATION OVER 11	HOUSEHOLD HEADS
Textiles and Clothing	28.54	33.41	31.13	29.94
Other Manufactures	13.55	0.42	6.58	11.20
Shops & Service Trades	19.03	3.48	10.77	18.69
Building and Allied	6.99	0.07	3.31	5.87
Agriculture	9.03	0.54	4.52	10.10
Commerce and Finance	3.40	0.31	1.76	4.14
Professions	2.10	1.27	1.66	2.52
Public Administration	1.94	0.16	1.00	1.16
Transport, Communications	3.56	0.09	1.72	3.93
Personal Service	1.89	11.36	6.92	1.70
Not Employed	9.97	48.89	30.63	10.75

The figures for males over eleven agree in general with those for heads of households, but ignore the fact that some women also had their own homes, and that many of them were working. When they are taken into account they produce the modifications of Column 1 above shown in Column 4. It is argued here that only women householders should be included in any table finally to be used. If all females over eleven, shown in Column 2, are included with Column 1, alterations are produced in Column 3, because 48.89 percent of these females are not recorded as employed, many of them being housewives. The contribution of a housewife to society was productive in that she provided the domestic base on which the wage-earners of the family depended, whether they were occupied at home in hosiery or left it daily to do other work, but housework cannot be assessed as a factor in industrial performance. The 11.36 percent of domestic servants also played no part in the principal industrial and commercial activities. The occupation provided employment for girls and young women, and it was a considerable factor in the economy of the town, but again those engaged in it were not directly concerned in the process of manufacture. The Heads of Household structure does recognise female strength in the professions, especially teaching; it adjusts the figures for textiles by excluding many of the females in the finishing trades and deals with the imbalances produced by the very low female involvement in Other Manufactures, Building, Agriculture and Transport. At the same time the structure acknowledges the function of women in shops and in the liquor trade, where many beer houses still sold a

home brewed product. It therefore has some claim to be the least imperfect of the sets of statistics available, the one most likely to demonstrate the real economic thrusts of the town.

Tables showing the occupational structure of heads of household are given by occupational group in each of the sections that follow. There are columns for the description of each occupation and the numbers engaged in it in each of the census years. Totals are given at the foot of each census column, and below them the proportion of heads of household in that group as a percentage of all heads of household in the town for that year. For this purpose, the 'Not Employed' are regarded as an occupational group in the sense that they were household heads in the town and so reduced the involvement of them all in industrial activity. They have no other part to play in the general analysis. In the text that follows, references will be made only to those occupations in a group which are of particular importance, either because of size or because they reflect special features in the local economy.

b) This thesis has concentrated heavily on textiles as the basic occupation of the people of Loughborough, but the town had a number of other industries; their history is related briefly here, to set the context for the census of 1841. A brewery opened in 1790 had moved to better premises in 1801 and it can be regarded as a continuation of an old-established malt trade. ² In 1828/9 Pigot's Directory recorded three master basket makers, three boat builders, twenty-four shoe makers and

eight brickmakers, the basis of an industry exploiting the local marls until the late nineteen-sixties. In addition the building firm of George Moss had been established in 1822, to become in this century a firm of international status.³ The number of workmen employed by these masters is not known. There were also many trades ancillary to hosiery, which later became industries in their own right. A firm dyeing and finishing textiles was established in 1822. There were also that year six blacksmiths, four framesmiths, three machine makers, five needle makers, four wheelwrights and four sinker makers. Sinkers were ingeniously designed pieces of lead or iron used on knitting frames to loop the yarn and move it along the needles. These trades, with four watch makers, formed a body of skills later to be developed by the engineering works in the town.⁴ Some engineering also existed in its own right. In 1830 a foundry was opened at the side of the Leicester Navigation, the products being related to frame making. In 1840 John Taylor, who had been casting bells in Oxford, came to Loughborough to recast the peal of eight at the Parish Church. Further contracts persuaded him to stay and build a factory. Itinerant bellfounding denied him the use of advanced foundry techniques, while the locational advantages of Loughborough are given by Edwards:⁵

- i) its central geographical position, with access to all parts of the country;
- ii) coal (for furnace fuel) was available by canal and
- iii) sand (for moulding) was available at Mansfield, connected to Loughborough in 1840 by the Midland Railway. Foreign ores could also be brought in easily through Hull.

c(i) The first occupational group to be considered is that of Textiles and Clothing.

TABLE 5:2

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 to 1881
TEXTILES AND CLOTHING

	1841	1851	1861	1871	1881
Card Manager	-	1	3	1	-
Dressmaker	10	12	25	41	29
Elastic Web Maker	-	-	7	3	-
Factory/Mill Hand	39	42	41	40	58
Framework Knitter	273	365	343	351	378
Glover	4	4	-	-	-
Hosiery Clerk	-	-	-	-	4
Lacemaker	132	41	10	2	3
Milliner	13	10	13	13	8
Overlooker/Supervisor	2	12	5	6	-
Tailor	54	63	54	55	53
Warehouse Worker	14	26	29	27	8
Weaver	1	9	5	2	2
Woolcomber	20	21	2	-	-
Woolstapler	1	1	5	-	-
Ancillary	44	117	122	134	226
TOTAL	607	724	664	675	769
PERCENTAGE OF ALL HOUSEHOLD HEADS	29.14	29.94	27.81	26.25	24.69

The town of 1841 was one which had suffered economic decline that had been arrested. The Sanitary Report of 1849 estimated that between 1831 and 1841 'the number of persons, including adults and children, who left Loughborough during the ten years could not fall much short of two thousand'.⁶ Since the population in 1831 was only 775 more than that recorded in 1841, the implication is that there was demographic growth after 1831 but that after about 1835 a sharp fall occurred, as lace manufacturers went out of business. The 132 head of household lacemakers of 1841 may well have been clinging to what little work remained and 71 percent of these left the trade in the next

ten years. There were already, however, some signs of the innovations which helped to stabilise the economy during the middle of the century; application of steam power to some machinery had led to the employment of thirty-nine household heads in factories or mills. At the 1851 census, 1,186 additional people were recorded. There were no specific areas of improved employment, except textiles, that can explain the recovery, which was to establish a plateau of stagnation rather than a positive move forward. The percentage of heads of households employed in this group was greater in 1851 than at any other census. New occupations were entered, suggesting that some groups were broadening their scope, but this may also be a reflection of the greater care taken by enumerators. The Directory evidence is that knitting and its allied occupations had resumed their role as the basis of local industry and the 1851 census confirms it. Within the occupational group there had been significant changes since 1841. The number of lacemaker heads had decreased from 132 to forty-one, while that of framework knitters had increased from 273 to 365. There was doubtless some movement by lacemakers to knitting frames, but another factor was that throughout the county the introduction of the wide frames so disliked by the conventional framework knitters had produced some movement of population out of villages into the towns.⁷ For example, the populations of Shepshed, Kegworth, Hathern, Barrow on Soar, Prestwold and Thorpe Acre all fell (although those of Quorn and Mountsorrel rose). Some frames working in the glove branch had also been moved into the town from Leicester to avoid problems with the workforce there. A Union had been formed by the fine glove hands in the 1840s and the men had used their strength to

win relatively high wages. In contrast, a witness before the Commission which reported in 1845 said that if a man left his work in Loughborough without giving notice, the magistrates sent him to prison. The number of ancillary workers in the textiles group had also substantially increased, from forty-four to 117. The general occupational description covers a wide range of ancillary occupations and the rise may indicate that fewer young children were being employed, as suggested in Chapter 3.

Because of the greater concentration in this thesis on the census of 1851, it is possible to give accurate details of the range of materials used in framework knitting at that particular time. Enumerators generally understood the instruction to include the branch of the trade against the occupation of each framework knitter, heads of households and all others, although there is the occasional omission when a knitter was shown as being out of work, an unreliable description in an occupation in which work was uncertain virtually from week to week. In most cases, however, the branch is stated:

Cotton (incl. cotton warp)	45.9%
(Warp frames were used extensively in glove making)	
Worsted	26.7%
Angola	19.7%
Merino	5.8%
Cashmere	1.1%
Silk	0.5%
Lamb's wool	0.1%
Berlin	0.1%
Mohair	0.1%

There was therefore diversity of occupation within the trade, in that the materials used were related to seasonal variations of demand; therefore there should have been work for some of the knitters throughout the year, the general balance of this intermittent employment producing stagnation. A small textiles group usually forgotten in the town were the weavers, following a traditionally Nottinghamshire occupation although living just over the county boundary. While only nine were household heads, there were twenty-one of them in total. There were five on cotton hand-loom, some working on luxury materials, such as silk or velvet, and others on linen. They all worked at home.

Head of household factory workers actually employed in the main textile manufacturing process were still heavily outnumbered by those working at a similar process in the domestic knitting industry. The number of factory/mill hands was virtually unchanged and warehouse work affected only twenty-six heads, but it has to be borne in mind that much of this work was particularly suitable for girls and young single women, there being seventy females over eleven thus employed. It was shown in Chapter 3 that there were only ninety-eight male factory/mill hands in the town in 1851, but that there were 223 females. Another new factory occupation was that of card manager, employing one male. J.M. Jacquard, of Lyons, had invented a system using cards which, when fed across a cylinder, selected combinations of pins and levers which automatically modified the operation of the machine to produce any desired pattern.

Although it was designed for looms, it had been adapted for use on warp frames.

In 1861, a slight fall of 381 in the population was recorded. This was a general trend in the hosiery centres of the county.⁸ There had been a decline of 2.13 percent (sixty heads of households) in Textiles and Clothing, and the number of lacemaker heads had dropped to ten from forty-one in 1851. The new elastic web trade was employing seven heads, but the number of framework knitter heads had decreased by twenty-two to 343. Forty-one heads are described in ways which associate them with factory work and the terms 'steam power knitter' and 'steam shirt maker' now appear. The number of head of household ancillary workers rose throughout the period under review, but enumerators became much less concerned to ask if the work was factory, warehouse or mill based. The knitting frame lost little of its economic significance, although it contributed little to economic advance and, since younger people were moving into the factories, more heads of households, especially women, could find some work in the finishing occupations, although it may not have been full-time.

The population of the town at the 1871 census was 11,456, a rise of 626, and the decade was to be the last of those covering the period of stagnation, with the important population expansion to come. Nevertheless, the percentage share of the Textiles and Clothing group had fallen by a further 1.56 percent. As well as a shortage of cotton in the early 1860s,

there was also competition in export markets from Saxony. In addition, knitters made no real attempt to meet the demand at the end of the American Civil War, being content simply to live comfortably. Factory production had, however, begun to encourage far more aggressive marketing, as a result of which, Felkin believed, both prices and wages had risen.⁹ Mundella said in 1871: 'Nobody would think of building hand frames now'. He felt that it was difficult to improve the condition of the framework knitters still working the traditional machines: 'Many of them are old people and I believe they have no apprentices now. When a boy learns to work on a wrought hose frame, he gets out of it as soon as he can to a wider one'. Those on steam rotary machines could earn as much as £3 11s 0d per week working a ten hour day.¹⁰ The number of heads of household in Loughborough who can be positively identified as working in hosiery factories had, however, remained about the same. A reason is to be found in the sex balance of the labour force at the new factory of Hanford and Miller. It was twenty females and ten males. In this context, a heads of household analysis conceals the true picture. The ages of this particular workforce are not known. Individual workers were not attributed to particular firms in the census entries but there was often, as in this instance, a note on the total number employed under the name of the manufacturer. The figures quoted here do demonstrate the way in which female labour could be used to great advantage in the principal manufacturing process itself.

The old trade of woolcomber had disappeared in 1871 and the lace industry could support only one lace maker, with a woman head of household working as a lace mender. Another elastic web maker is quoted, employing six men, three boys and three girls. Only three were heads of households, however, as compared with seven ten years earlier. This business may well have been formed from the collapse of others; the trade is not mentioned at all in the 1881 census.

The census of 1861 shows that a basis for growth was being established, which had broadened by 1871, to lead to vigorous growth by 1881, when the population had risen to 14,681, that is by 3,225 people, almost as many as between 1821 and 1831, the period of great lace expansion. This time the occupational basis was much stronger, and population growth was to be recorded at each subsequent census. In 1886 the large scale O.S. maps of urban areas were produced, based on the 1883 survey. Buildings can easily be identified and they offer a directory of the substantial employers in the town:

TABLE 5:3

SUBSTANTIAL EMPLOYERS IN 1883

G. Braund	Woodgate	Hosiery
F. Caldwell	Churchgate	Hosiery
Cartwright and Warner	Nottingham Road	Hosiery
Hanford and Miller	Broad Street	Hosiery
Hine and Parker	Clarence Street	Hosiery
I. and R. Morley	Mill Street	Hosiery
Nottingham Manufacturing Co.	Trinity Street	Hosiery
E. White	Woodgate	Hosiery

Some of these names are familiar as men with experience of hosiery. Nottingham Manufacturing Company was the trade name

of Hine and Mundella. Erickson found in Nottingham that most factories began either when senior partners retired or when younger men were brought in. She also found that new men were attracted to the economy as capitalists, and there were fewer hereditary leaders than in the framework knitting era. This does not seem to have been particularly true of Loughborough; most of those named above had been in the trade for some time. In Nottingham, the new factories were handicapped by the lack of technical knowledge among the owners. Twenty-one firms advertised for managers between 1860 and 1890. A typical advertisement was: 'Wanted, a man of experience, who understands Cotton Patent Frames, to superintend a small plant'.¹¹ In Loughborough word of mouth would probably have been sufficient to fill that particular post. None of the local firms quoted above now trades under the names then used. Nevertheless, all the premises survived up to the period 1918-1939 and four still remain.

Although there was an increase of ninety-four heads in Textiles in 1881, the percentage of all heads had fallen again by 1.56. The number of framework knitters rose, however, from 351 to 378; although this was growth at less than the rate of population increase, the fact demonstrates that the first decades of factory production proved to be among the most prominent periods in the long history of framework knitting. As well as some continued demand for the hand-made product, framework knitters found extra work in adding feet to, and finishing, articles made on power frames.¹² Framework knitting is also qualified by some Loughborough enumerators as taking

place in factories, particularly where girls were concerned, for example: 'FWK (hosiery factory)'. In these two ways, the factory system accommodated the older domestic one, whose pains of death were thereby eased. There was, however, a subsequent decline. By 1892, there were said to be not more than about 5,000 frames at work in the Midlands, operated entirely by middle-aged or elderly men. ¹³

A further increase in the number of head of household ancillaries in 1881 illustrates the impact of compulsory education on general employment patterns. It is matched by the trend not shown in a heads of household analysis, that of the employment in factories of young people in their teens or a little older. Of all non-heads of households entered as 'hands' or workers in hosiery factories, 28 percent were young women and 61 percent girls aged under twenty-one. A further 10 percent were boys aged under twenty-one. Heads of household were still in charge of some machinery but they also owed their employment in factories to other occupations, for example, they were timekeepers, gatekeepers, factory clerks, or general labourers. Among those working at home or in small workshops, the number of dressmakers had fallen by twelve, that of milliners by five and that of tailors by two, reflecting a tendency, to be noted in Chapter 6, for service trades to weaken. There were three lace makers and one lace machinery comb maker in the town, although the time of the lace mania was now fifty years past. The elastic web trade, into which some lace manufacturers had retreated, had disappeared.

cii) The occupational structure in the Other Manufactures group is shown in Table 5:4.

TABLE 5:4
OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 to 1881
OTHER MANUFACTURES

	1841	1851	1861	1871	1881
Agricultural Engineer/ Machine Maker	-	-	5	5	2
Basket Maker	4	9	6	7	11
Bellfounder/Hanger	2	2	3	5	4
Blacksmith	27	19	24	26	34
Bleacher	2	7	6	14	14
Boiler Maker	-	-	-	5	11
Box Maker	-	-	-	1	2
Brazier	3	2	4	2	4
Brush Maker	2	4	8	8	6
Cabinet Maker/Upholsterer	6	3	9	10	14
Carpet Maker	-	-	-	-	1
Clock/Watch Maker	4	3	8	3	6
Coal Miner	-	-	-	-	1
Comb Maker (Lace Machines)	-	-	-	-	1
Cutler	-	1	1	-	2
Draughtsman	-	-	-	-	2
Dyer	17	12	11	15	23
Engineer's Clerk	-	-	-	-	3
Engineer/ Machine Maker (General)	3	4	4	2	1
Engine Fitter/Builder	-	-	10	21	53
Framesmith	23	31	32	30	18
Gunsmith	3	1	1	-	-
Horticultural Engineer	-	-	-	-	6
Hosiery Machine Maker/Fitter	-	-	-	2	16
Iron Worker	3	5	7	9	26
Leather Worker	12	5	9	14	3
Locksmith	-	-	-	-	1
Mat Maker	1	2	-	-	-
Machinist	1	5	1	19	19
Millwright	-	1	4	2	3
Musical Instrument Maker	1	1	-	-	-
Nailmaker	5	6	4	5	3
Needlemaker	16	15	12	14	34
Potter	-	1	-	-	-
Pattern Maker	-	-	-	1	-
Rope maker	2	2	3	5	6
Sinker Maker	11	11	3	6	4
Stationary Engine Driver/ Stoker	-	-	-	13	16
Tarpaulin Maker	2	-	-	1	-
Tent and Marquee Maker	-	-	-	-	2
Tinman	2	5	1	4	10
Trimmer	4	11	7	10	12
Turner (metal or wood)	4	5	4	5	12
Valve Maker	-	-	-	-	1
Wheelwright	7	12	7	11	13
Whitesmith	3	2	4	-	-
Ancillary	72	84	45	69	169
TOTAL	242	271	243	344	569
PERCENTAGE OF ALL HOUSEHOLD HEADS	11.62	11.20	10.17	13.38	18.27

In 1841 many occupations in the Other Manufactures group were directly related to textiles and textile machinery; they formed 30 percent of the whole. By 1881 the percentage had fallen to 21, although the actual number of heads so employed had risen. These figures illustrate the fundamental changes that occurred in this broad occupational group. The numbers in it increased 2.35 times and its share of all heads of household occupations rose by 6.65 percent. Most of the changes reflected by these figures took place after 1861 and accelerated after 1871, as economic stagnation was moving into expansion. There was no sign of them in 1851. The number of framesmiths actually increased from twenty-three to thirty-one. These were men repairing frames; by this time a much greater part of their work than building new ones. The number of blacksmiths fell from twenty-seven to nineteen; some of these men were probably general craftsmen, the connections of the others with hosiery had been more in making the metal parts of frames, rather than in repairing them, since these parts were less subject to wear and tear. There were only twelve dyers as compared with seventeen ten years previously, but some were 'blue' dyers, a special local skill. There were no indications here of substantial movement in trade, rather that business had reached a modest survival level. The older industries in the town were still making their contribution, particularly in brewing, where there were nine brewer and ten maltster heads, as compared with seventeen in both trades in 1841. There were also nine basket makers, as compared with only four in 1841.

The slackness of framework knitting in 1861, as compared with the census years either side of it, is reflected in the other trades dependent on it. The number of framesmiths had increased by one but needlemaker heads had decreased by three. This fact would be of little significance, except that the needlemaking firm of J.T. and C. Grudgings had been established in 1850. It had either found no new business or improved methods of manufacture had brought about a reduction in the adult labour force. There was, however, a highly important new occupation, that of engine fitter or builder. One of the ten specified that he was at an engine works, almost certainly Hughes' Locomotive Works. There were also five makers of agricultural machinery, another product of this firm. In the early 1860s engineering was poised to assume its place in the industrial life of the town made possible because hosiery had maintained an economic base which provided for some engineering activity. It will be convenient to consider this development now. Goode and Messenger were the first of those men leading the town towards a more broadly based economy by developing a manufacturing sector unrelated to hosiery. By 1871 the firm employed fifty-two men and twelve boys, and in 1877 it was advertising as horticultural building and hot water apparatus manufacturers.

The arrival of Henry Hughes in Loughborough in 1855, as an employee of J.J. Capper at the Falcon Works, on a site adjoining the Loughborough Navigation, was, however, to be of greater significance than any other development of the period in engineering terms, and in some senses there was to be none

greater in the subsequent history of the town. Hughes took control of the works when Capper retired in 1859, and went into partnership with Hiram Coltman in 1862, trading as brass and iron founders. They moved to a site next to the Midland Railway in 1864, as Falcon Engine and Car Works, making tramway engines, locomotives, railway contractors' plant and agricultural machinery.¹⁴ This is the first evidence of the railway playing a constructive role in the industrial development of the town. It cannot be claimed that all the engineering growth was created by this company. The numbers of heads of household engine fitters or builders steadily grew but some must have been employed on stationary engines rather than on locomotives. There were sixteen stationary engine drivers or stokers in 1881, and hosiery factories must have employed many of them. Few records of Hughes and Company are now available, but the firm is believed to have employed up to 200 men. This was not enough to have had a substantial effect on demographic stagnation, but the development of Loughborough as a dual-industry town began from this time.

An undated drawing of a locomotive is held in Leicestershire Record Office. It is described as ideal for contractors and mineral railways, the wheels being small and the wheelbase short so that the vehicle could negotiate sharp curves and steep inclines. It weighed nine tons and could pull ten loaded wagons at 20 m.p.h. Locomotives of this type had been sold in South Africa, Wales and Liverpool.¹⁵ The firm also sent an engine to the Vienna Exhibition of 1873. It was one of forty-three

locomotives there, only two of which were from Great Britain, the main exhibitors being from Germany, Austria and Belgium. This in itself implies some initiative, but although the firm offered the local economy some product diversification, the product itself was not particularly innovatory. An article refers to their exhibit thus: 'A small four-wheel cylinder tank engine by Messrs. H. Hughes and Co., of Loughborough, requiring no special notice. The engine is of the ordinary pattern constructed by the makers'.¹⁶ Nevertheless, the firm was awarded a silver medal at the Paris Exhibition of 1878. By 1880 it had built forty-two tram engines, including twenty-four exported to France. Hughes' other interests ran into financial difficulties, however, and in 1883 he emigrated to New Zealand.¹⁴ The census also records three bell foundry workers, including one bell hanger. Taylor had removed from a site in Pack Horse Lane to new premises in Freehold Street in 1859 and there employed another three men in addition to the heads of household and also a boy.¹⁷ Bell founding is still regarded as a trade particularly associated with Loughborough, although it has never

* The true significance of this factory did not become apparent until after the end of the period covered by this thesis and the narrative must therefore be extended a little. The new owner increased the range of locomotives and sold them under the Falcon title. In 1889 he was taken over by the Brush Electrical Engineering Company Ltd., a firm registered that year to acquire the assets of the Anglo-American Brush Electric Light Corporation, an Australasian electrical company and the Falcon works, whose management continued on the same lines as before. Brush locomotives still bore the brass Falcon works plate, and its tramcars carried enamel plates with the words: 'Falcon Engine and Car Works, Builders, Loughborough'. The changes in ownership were therefore in name only; Hughes and Coltman had begun a continuing manufacturing policy and the factory is still an important centre of electrical engineering. In 1879 Coltman opened his own engineering and boiler-making works.

been a large source of employment. The presence of engine fitters/builders and makers of farm machinery is, however, a real indication that the small population decline after 1851 concealed the change of course already discussed, which was to be of permanent benefit to the town.

By 1871 Other Manufactures were clearly an important growth point, with an increase of 101 in the numbers of heads of households and a percentage points increase of 3.21. The Bell Foundry employed a total of five heads; there were also nine heads in general iron founding. The trade of boilermaker is entered, employing five heads, there were also eleven wheelwrights as compared with seven in 1861, and twenty-one engine fitters or builders (ten). Boxmaking also appears, an occupation related to hosiery packaging. The workforce corresponded to the norm for new enterprises, with one male head of household, a woman and six girls.

In 1881 there was a striking rise in the group, by 225 heads and 4.89 percent. A great many (169 as compared with sixty-nine in 1871) were general labourers and other ancillary workers, now required by factories in increasing numbers. The increment from hosiery was still important, however. There were twenty-three dyer heads of household as compared with fifteen in 1871, one firm employing a total of thirty-six men, two boys and fourteen women, and another employing a total of thirty-six men, five women and twenty-seven 'boys and girls'. There were also sixteen heads of household hosiery machine makers/fitters (two)

and thirty-four needlemakers (fourteen), the increases being caused by the requirements of powered machinery. Four needlemaking firms are quoted by Kelly's Directory in 1881, Grudgings employing ten men and fifteen boys, making specialist accessories for Paget and Cotton machines. In contrast to this expansion the number of hand framesmith heads of households fell from thirty to eighteen.

In the engineering trades, there were twenty-six heads of household iron workers, as compared with nine in 1871, the two foundries employing a total of fifty-six men and two boys. Among other household heads there were ten workers in tin (four in 1871), thirty-four blacksmiths (twenty-six), sixteen stationary engine drivers/stokers (thirteen), fifty-three engine smiths/fitters (twenty-one). Many new occupations also occur: horticultural engineer (six heads, Messengers, now owned by W.C. Burder, employed a total of sixty-five men and ten boys), valve maker (one head), draughtsman (two heads) and boilermaker (eleven heads, Coltman employing a total of thirty men and four boys). The Directories also quote a number of small businesses that had come into being as industry expanded, for example, Kelly has a list of eight engineers, six of whom had a short history. The lessons of unwise expansion in lace had perhaps been ignored by these six. Some of the traditional trades had also survived; it will be seen that they were not capital intensive. Six heads of households were still engaged in brush-making, there were eleven basket makers and four rope makers, some evidence that old crafts could adapt and grow.

In addition to the hosiery factories of Loughborough in 1881, there were three dyeworks, one firm of bleachers, three foundries (one casting bells), a hosiery machine manufacturer, a railway plant manufacturer, a boiler works and a firm of horticultural engineers. The economic history of the town since 1841 had been one of stagnation with some movement below the surface; by 1881 the economy was on its way to transformation.

c(iii) Two other occupational groups remain to be considered in this chapter. Building is an important indicator of economic growth, and it will be seen that its percentage share of all occupations more than doubled over the period, most of the growth being in the final decade, when the population rose sharply.

TABLE 5:5

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 to 1881

BUILDING AND ALLIED TRADES

	1841	1851	1861	1871	1881
Bricklayer	26	26	34	37	58
Brickmaker	8	15	9	9	18
Builder	5	4	3	4	6
Builder's Clerk	-	-	-	-	3
Carpenter/Joiner	37	43	41	54	99
Painter	7	11	15	30	52
Plumber/Glazier	4	10	11	14	18
Plasterer	1	2	1	2	4
Sawyer	14	12	20	9	12
Slate Cleaver	-	-	1	-	-
Steam Sawyer	-	-	-	-	1
Stonemason	6	10	10	7	13
Ancillary	-	9	21	45	68
TOTAL	108	142	166	211	352
PERCENTAGE OF ALL HOUSEHOLD HEADS	5.19	5.87	6.95	8.21	11.30

It should be pointed out that building was, to some extent, a spasmodic occupation and a census in March or early April could miss some of those engaged in it. Stonemasons, bricklayers and joiners were often the entrepreneurs in this trade; gangs were formed to complete contracts and afterwards they dispersed. Those men who called themselves builders were craftsmen themselves, although later in the period those controlling their own enterprises became more prominent. The low level of confidence in the town in 1841 is illustrated generally, however, by employment in building, with more men in the finishing trades than in the basic occupations of bricklayer and carpenter. By 1851 numbers in the group had risen by thirty-four heads, but it will be seen that the number of bricklayers remained the same as ten years previously, although there were more men in the finishing (and possibly at this time, repairing) trades. In 1861 there were signals that the town was replacing some of its houses. The percentage of the heads of households employed rose by just over one percent of the whole. Brickmaking was still only of minor importance, with nine heads as compared with fifteen in 1851, but the number of bricklayers rose from twenty-six to thirty-four. The numbers of those engaged in basic trades within the group, including painters and plumbers, also rose. Even so, the census returns appear to be responding only slightly to the activities of the Freehold Land Society in the town. This is mentioned in Chapter 9, where it is shown that about twenty houses per year had been built since 1851. It may be, however, that the trade depression of the late 1850s had reduced building work for the time being.

By 1871 the occupation group was buoyant, but growth was mainly in the timber, painting and plumbing trades. More builders employing over ten men were being quoted. The firm of William Moss, later to acquire an international reputation, still had only nine, however, and with a partner Moss made his own bricks. There were only nine head of household brickmakers in the town and here there is a problem. The local clays were regarded as being particularly suitable for this occupation, but it might well have been that local supply did not meet demand after 1871. On the other hand, it is known from Directories and the census that in 1881 there were four brickmaking firms. Only eighteen head of household brickmakers are recorded in the census, but one of the firms employed a total of thirty men. The likelihood is that most of them were young. Claygetting and moulding were occupations for the unskilled and a gang of boys and youths could probably produce a great quantity of bricks per day for firing. There was heavy demand. White's Directory of 1877 remarks that building land in Loughborough had nearly doubled since some unspecified date and adds: 'building operations are in progress in all directions'. This statement was not true in a geographical sense, but the census details do show that the building trade had expanded, William Moss alone employing a total of fifty-two men and two boys. There were twenty-one more bricklayer heads and forty-five more carpenters and joiners. There were also twenty-two more painters, four more plumbers and six more stonemasons.

iv) In 1841 Agriculture was the third largest occupation group, numerically stronger than even the multi-occupational Other Manufactures sector.

TABLE 5:6

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 to 1881

AGRICULTURE					
	1841	1851	1861	1871	1881
Agricultural labourer	201	165	193	133	78
Animals - worker with	8	10	13	16	13
Castrator	-	-	-	-	1
Farmer	30	26	31	19	17
Farm Manager	1	3	-	2	5
Gamekeeper	-	1	-	2	-
Gardener	26	34	30	41	71
Market Gardener	-	2	6	6	2
Nurseryman	2	3	2	3	8
Steam Ploughman	-	-	-	-	1
Steam Thresher of Corn	-	-	1	1	-
Threshing Machine Proprietor	-	-	-	1	1
TOTAL	268	244	276	224	197
PERCENTAGE OF ALL HOUSEHOLD HEADS	12.87	10.10	11.57	8.71	6.32

Very little is known about the group in Loughborough, except that the clays which provided local bricks were more suited for pasture than for arable farming. A great deal of manpower was used for the fairly small area that was within the parish, although much of the work on the grassland must have been economical in labour. The occupation group must have been virtually a pool of men to be used elsewhere, when the work was available for them. That time had arrived by 1881, when only seventy-eight farm labourers were quoted in the census, (as against 201 in 1841) whereas 169 labourers were employed in Other Manufactures. It seems likely that here there was a direct transfer. In this sense, the land was feeding the industry it had

created. Pollard traces the development of industrialism in the Midlands to the clay belt and the growth of stock farming after enclosure. Poor agricultural opportunities thereafter made the supply price of labour low for industry. 'There is a striking negative correlation between areas of agricultural comparative advantage and areas of industrialism'.¹⁸ Another stimulus of heavy soils to local industry which he does not mention is that hosiery developed because of the availability of wool grown on the backs of local sheep.

In 1851 the number of those engaged in agriculture had fallen by 2.77 percentage points and in actual heads of households from 268 to 244. The number of farmers had fallen from thirty to twenty-six and that of labourers from 201 to 165, although in the county as a whole the figure had risen. Only seventy-nine labourers are quoted as being employed by Loughborough farmers; the others were either the surplus of under-used labour or worked for farmers outside the parish. In 1861 the sector grew from 10.1 percentage points (244 heads) to 11.57 (276 heads) and this can be explained almost entirely by an increase of twenty-eight in the number of farm labourers. It is less easy to explain the increase itself, other than in the context discussed above. At this time hosiery was in recession and casual farmwork may have been of some help in providing subsistence. There may have been, however, more labour-intensive arable cultivation; the price of wheat was 53s 3d per quarter in 1860, a rise of 13s on 1850.¹⁹ A new Corn Exchange was opened in the town in 1855; this fact and the increase in the number of

labourers suggest that more land was under the plough at this period. If this be so, then it is an example of economic forces balancing each other so that the basic stagnant stance was not seriously upset. There was, however, a new occupation, steam thresher of corn, which must have reduced the chances of casual labour later in the year. In 1871 the number of farmers fell and farms probably became larger, which made for even greater economy of labour. Here local agriculture was conforming generally to national trends. In 1841 it employed 22 percent of the national work force: in 1871 the figure had fallen to fifteen.²⁰ Another outlet for farm labourers was as gardeners. In 1871 many of the forty-one were classed as 'occasional only'. Nevertheless the rise in 1881 to seventy-one of them, many in domestic service, may reflect a more gracious lifestyle in the large new houses then being built on the outskirts of the town. In 1881 there was further pressure on the labourers when a steam ploughman appeared, but by then their numbers had fallen to a realistic level.

d) This section concludes with a summary of the principal occupation changes in the local economy over the period 1841 to 1881. Three stages are shown, at 1841, at 1871, when movement out of stagnation was beginning, and 1881. A Shops and Services Group is added to those already examined in this chapter; it will be treated in detail later.

TABLE 5:7

CHANGES IN ORDER OF OCCUPATIONAL GROUPS

	1841	1871	1881
Textiles	1 (29.14%)	1 (26.25%)	1 (24.69%)
Shops and Services	2 (18.39%)	2 (17.69%)	3 (15.41%)
Agriculture	3 (12.87%)	4 (8.71%)	5 (6.32%)
Other Manufactures	4 (11.62%)	3 (13.38%)	2 (18.27%)
Building	5 (5.19%)	5 (8.21%)	4 (11.30%)
Transport	6 (3.85%)	6 (3.62%)	6 (3.59%)

As employment in the lace trade fell, the textiles group settled at a steady level, judged by the number of framework knitters quoted in censuses. The Other Manufactures group gradually raised its status within the economy; by 1871 there were signs that it was to be a factor in movement out of stagnation and by 1881 this had occurred. Agriculture, which had been important in terms of manpower in 1841, gradually released unskilled labour, particularly to the newer industries and perhaps some to building, which grew to some degree because of general maintenance work and some new housing within the period of stagnation, but at a much greater rate when new estates were needed to house a growing population. Transport and Communications provided direct work for thirty-two more people in 1881 than in 1841, but its percentage of heads of households employed had fallen. The total number of railway employees and boatmen in 1881 was only three more than that of boatmen alone in 1841, but this factor is less important than the apparent inability of the economy to take advantage of quicker methods of transport. Shops and Services were always important in Loughborough, but it will be seen from Table 5:7 that its share of employment fell as that of Other Manufactures and Building rose.

e) An underlying factor in the economic life of Loughborough during the period under review in this chapter was the presence of a railway but, after some demographic recovery after 1841, the population of the town remained at about the same level for the twenty years beyond 1851. It is difficult to see why the railway apparently brought so few advantages that might have attracted people to the town, particularly when good communications had been so important in establishing its earlier basis for growth. Little comment has been made here on this. An extension of the Midland Counties Railway connected Loughborough with other lines both to the north and the south from 1840 onwards, but no benefits seemed to accrue until the locomotive builder, Henry Hughes, set up a factory on a siding near the station, in 1864. Even so, as late as 1897 the lifting machinery manufacturers, Morris and Bastert, built their Loughborough factory by the navigation when one mainline railway was in existence and another was about to be built a few hundred yards away.

f The presence of a railway almost always brought some growth to an industrial community in the nineteenth century. The reasons why this was not so in Loughborough are related partly to the limited horizons of the company itself and to stagnation so deeply rooted in the local economy, in spite of existing good communications by road and water, that a third transport system, no matter how convenient it was, could not relieve it. Indeed, there was a negative effect because of a reduction of traffic on waterways, on which the town was well situated, although any

gain on the railway may well have compensated for this. The Midland Counties Railway was conceived almost entirely as a weapon in the struggle between east-Midlands coal owners for sales in Leicestershire. Derbyshire coal, from the Erewash valley, had a virtual monopoly in the Soar valley market because of the navigations from the Trent to Leicester, via Loughborough, which became more than a canal port. It also established a boat building industry; the handspinning of worsted yarn, dyeing and other trades settled or expanded after the opening of the canal, to the extent that the town displayed 'a face of commerce hitherto unknown at that place'.²¹ There was no real competition, apart from an unsuccessful attempt to open a waterway from the Leicestershire pits to Loughborough, until 17 July 1832, when a railway line was opened from Swannington direct to Leicester itself. Coal was sold there at ten shillings per ton. Immediately the tonnage passing along the Soar navigations from the Trent was reduced, and Erewash canal stock fell 'practically to nothing'.²² This seems to have been an over-reaction. There was still waterborne coal traffic from Derbyshire in 1836. Although there must have been a general reduction in tolls, the Loughborough Navigation was still able to charge on 3,400 tons weekly passing along it, 856 tons being unloaded on to its own wharves. The reaction of the Erewash coal owners was, however, just as immediate as that of the canal shareholders of 1832. On 16 August that year they met to consider the construction of a railway from their coalfield to Leicester, via Derby, to move the coal which had formerly attracted, in tolls and wharfage charges at Leicester alone,

£53,333 per annum. ²³ A line was proposed and objections to the Parliamentary Bill were duly registered, principally from the Soar Navigations, the Erewash Canal Company and the Leicester-Swannington Railway. ²⁴ A Mr. Bere was the counsel for the two Soar Navigations at the subsequent enquiry and his cross-examinations are the nearest we can get to the point of view of local interests. They saw the issues as relating to coal carriage only; other traffic did not concern Bere. His aims were:

- i) to stress the price competitiveness of waterborne coal;
- ii) to stress the availability of waterborne coal, quoting details of movements, as a weekly average:

To places short of Loughborough	454 tons
To Loughborough	402 tons
To places between Loughborough and Leicester	320 tons
To Leicester	752 tons
Beyond Leicester	<u>1,472</u> tons
	3,400 tons;

- iii) to stress that speed of delivery was not a factor. This argument appeared to ignore the fact that reliable and speedy supplies enable customers to hold lower stocks and have much less money tied up in them;
- iv) to criticise the line of the proposed railway to the east of Leicester when, he said, most industry was, because of the navigation, on the western side.

The idea that the railway could open up new prospects on the eastern side was not taken up.

Leicester witnesses did not see the railway as an attraction for new industries, but the hosiers among them did see some trade advantages. They saw the railway as a more efficient carrier of raw materials for, and the products of, the knitting frame. They quoted specific improvements in service and costs, but not access to new outlets which they hoped might be created. J. Rawson, a worsted manufacturer, needed better communication both with his suppliers and his customers. Leicester wool could meet only 5 percent of his requirements and West of England wool was not only frequently delayed for four or five weeks, but often damaged in transit. Delivery of his finished goods, sent mainly to London, the Continent and America, was handicapped by indirect canal communications which greatly lengthened routes taken. Rawson also thought that a 'more direct and speedy communication between Leicester and Nottingham would be of advantage to Leicester' (and therefore presumably to Loughborough). A further advantage of a railway was that transport from Leicester to Birmingham took two days, but a line to Birmingham via Rugby would reduce the time to a matter of hours. William Grey, another hosier, agreed. Carriage of hosiery goods between Bristol and Leicester cost £4 per ton and was slow. Carriage-by-road, which could be quicker, was almost twice as expensive. ²⁵ Nowhere was the railway seen as a route to fresh fields; it was simply intended to bring the old pastures nearer. To do so, it was expected to take 17,732 tons

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of light goods and 167,500 tons of bulk goods from the waterways, the largest revenue being expected from the transport of stockings and lace. ²⁶

The impression is also given that the coal owners who originally required the railway were interested in the route only as far as Leicester and that its southern connection to another railway was of secondary importance to them. Most of the Parliamentary Committee's time was spent in discussion of a connection other than that proposed at Rugby. It was argued that a line running through Market Harborough to Northampton would open up a whole new area to commerce, but the gradients were quite severe for locomotives of the time and a Rugby connection had advantages for the traffic immediately available. Here, however, was a progressive proposal. A railway could still have been built to Rugby from Market Harborough along the valleys of the Welland and the Avon (and was, in 1869). A great opportunity for growth was, however, not taken. In a lesser sense, this was also true of the route through Loughborough to Leicester, which was along the Soar valley and therefore generally parallel to that of the navigations. Had it followed the line of the later Great Central Railway, which was admittedly more expensive to build, it could have reached into areas either side of the valley, developing trade in districts not adjoining the waterways. The promoters were, however, concerned with limiting their financial risk and from their point of view they were right. There were always unforeseen expenses, which a line moving out of the level ground of river valleys, and then going

on to Northampton, would have produced, while there was no certainty that there would be an increase in traffic. At the very best the Midland Counties line simply offered the same villages alternative transport. The railway was committed to nothing very new; it was to do the old things better. It took employment from the navigations. It reduced the flow of money into local trade through tolls, wharfage fees, boat repairs and chandlery. Navigation shares and dividends fell.

No railway replacing a canal ever offered immediate advantages as great as those provided by the opening of the canal itself, which brought much greater relative reductions in transport costs and a greater relative increase in the availability of bulk materials over existing land transport, than the train did over the narrow boat. The railway in 1840 had to be considered as an investment which would mature later. Its immediate advantage was speed, if business men could make use of it. A table presented to the Parliamentary Committee gave the time taken by a boat to travel between London and Leicester as sixty hours.²⁷ A slow goods train could do much better. Another table of expected traffic estimated 466,072 passenger journeys per annum and here, of course, business requiring personal contact could be conducted much more easily.

f) Crouzet quotes two advantages of a railway to a community as being job creation and greater human mobility.²⁸ The Midland Counties line did nothing for local employment in Transport and Communications for some time, although it may have

done so in other areas of the economy. The occupations of heads of households in the Transport and Communications groups are shown in Table 5:8.

TABLE 5:8

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 to 1881

TRANSPORT AND COMMUNICATIONS

	1841	1851	1861	1871	1881
Boatbuilder	4	2	1	1	1
Boatman	54	42	25	28	25
Coachmaker	4	4	2	10	15
Coach Proprietor	-	2	-	-	-
Driver - road vehicle	5	12	9	13	17
Post Mistress/Master	-	1	1	1	1
Other Postal Workers	6	10	12	10	11
Railway Engine Driver/Stoker	-	2	-	-	2
Other Railway Employees	4	14	16	21	30
Road Contractor	-	-	-	-	1
Road Labourer	1	2	4	6	4
Toll Collector	1	1	1	2	1
Wharfinger	1	3	1	1	4
TOTAL	80	95	72	93	112
PERCENTAGE OF ALL HOUSEHOLD HEADS	3.85	3.93	3.02	3.62	3.59

It will be seen that in 1841 waterways employed fifty-nine of the eighty heads of household engaged in this occupational group, that is, 74 percent. There were only four railway employees. Their number had increased to sixteen by 1851, and those on waterways had decreased by twelve. The railway was, therefore, taking some employment from the navigations, but improvements in postal services had provided another five jobs. Hill had introduced the penny post in 1840 and in 1846 some mails were carried by train, the local service offering two deliveries and collections north and south each

day,²⁹ as compared with one each day in 1828/9.³⁰ There were also ten more heads of households employed in road transport, and it seems likely that, since traffic attracted by the railway was increasing, carriage trade to and from the railhead was also developing. This was the national pattern. As railways extended, the increase in the numbers of dray- and cab-horses was much greater than the decline in the number of stage-coaching horses. 31

Around 1861, however, communication employment fell. The number of boatmen decreased from forty-two to twenty-five, seven of whom were passing through and recorded in this way for the first time. The total rail workforce remained the same and road transport appears to have been reduced. Any benefits conferred by the railway up to this point were only marginal. By 1871, Loughborough was poised for expansion, although little extra employment had been generated at that time. The railway still employed fewer men than the navigation but there was another firm increase in road traffic. The number of head of household coachmakers rose to ten, from two in 1861. Highway labourers also rose from four to six and drivers from nine to thirteen. Three of the drivers were 'cabmen', Hagar's Directory of 1849 notices that each train was met; these men were probably doing so and in that sense owed their employment to the railway. Other vehicles were in use for journeys within the urban area and to villages away from the railway. The number of boatmen actually rose by three, although five were passing through, and that of railway employees by five to twenty-one. Road and rail were developing together but water had lost a status it was never to

regain, although the number of heads of household boatmen was maintained at an even level.

In 1881 the number of railwaymen actually exceeded those on the waterways, largely because more maintenance gangs were at work. Construction had begun in 1870 to turn the Loughborough stretch into a four line track and a new station had been opened in 1872. The decade was, however, still one of the roads. A road contractor occurs, there were four more drivers of road vehicles and coachmen appear as domestic employees. Five more heads were employed in the coachmaking trades. A commentary on the status of the navigation is provided by the census entry for John Barnsdale, who had been the local boat builder for a long time. His occupation in 1881 was recorded as 'Pleasure Boat Builder (formerly boat builder)'. Hadfield prints accounts of pleasure trips on canals as early as 1867. ³²

g) The railway had deprived Loughborough of its role as a road transport centre, well placed on the turnpike network to offer services to the thirty or more coaches and their passengers, who passed through daily. The Midland Counties line destroyed this trade quite quickly. It will also be seen that the proportion of heads of households employed in Transport and Communications, as a percentage of all heads of households, actually fell between 1841 and 1881. Railways can, however, stimulate growth by providing a faster service for raw materials and finished goods if the economy has articles to transport, and

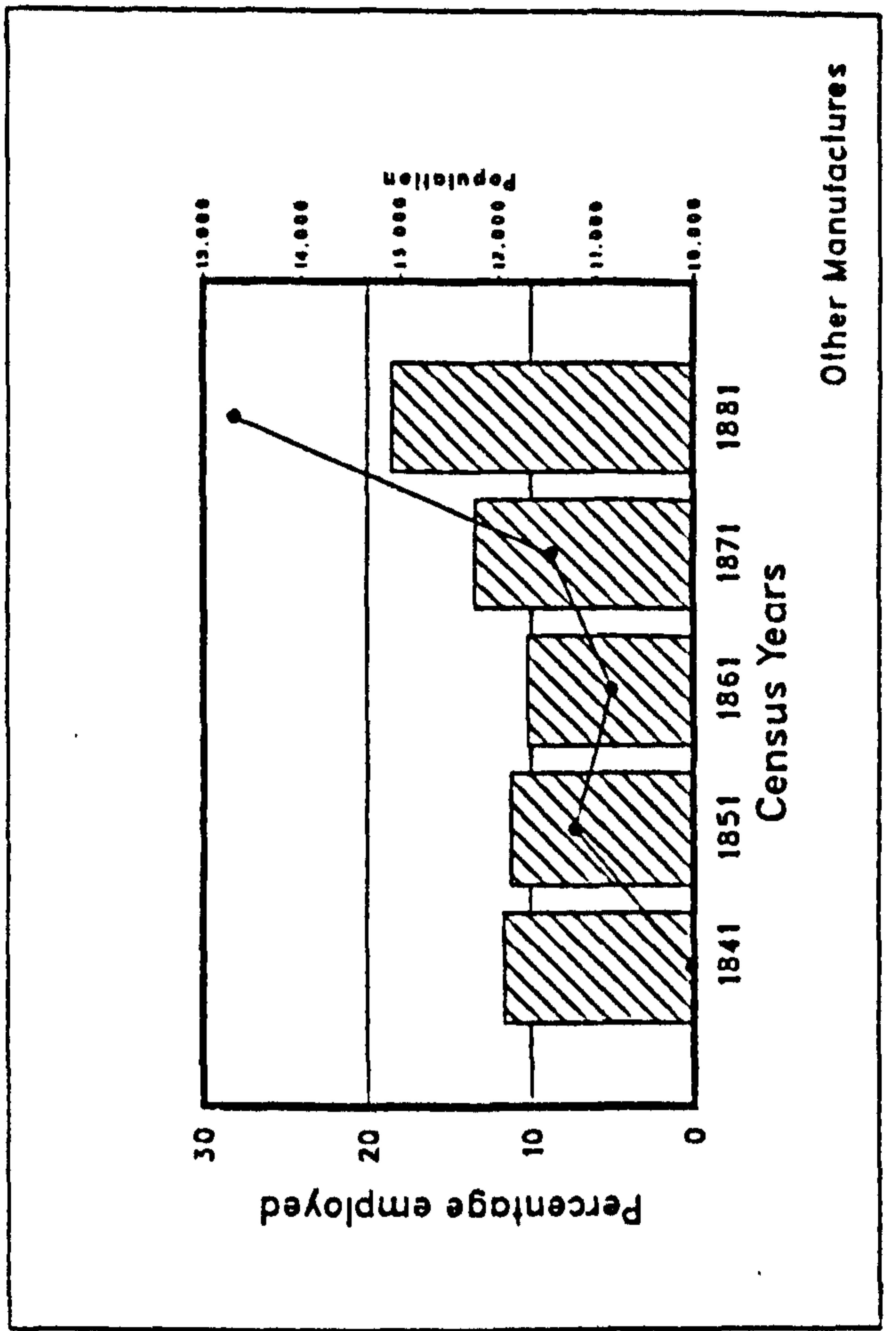
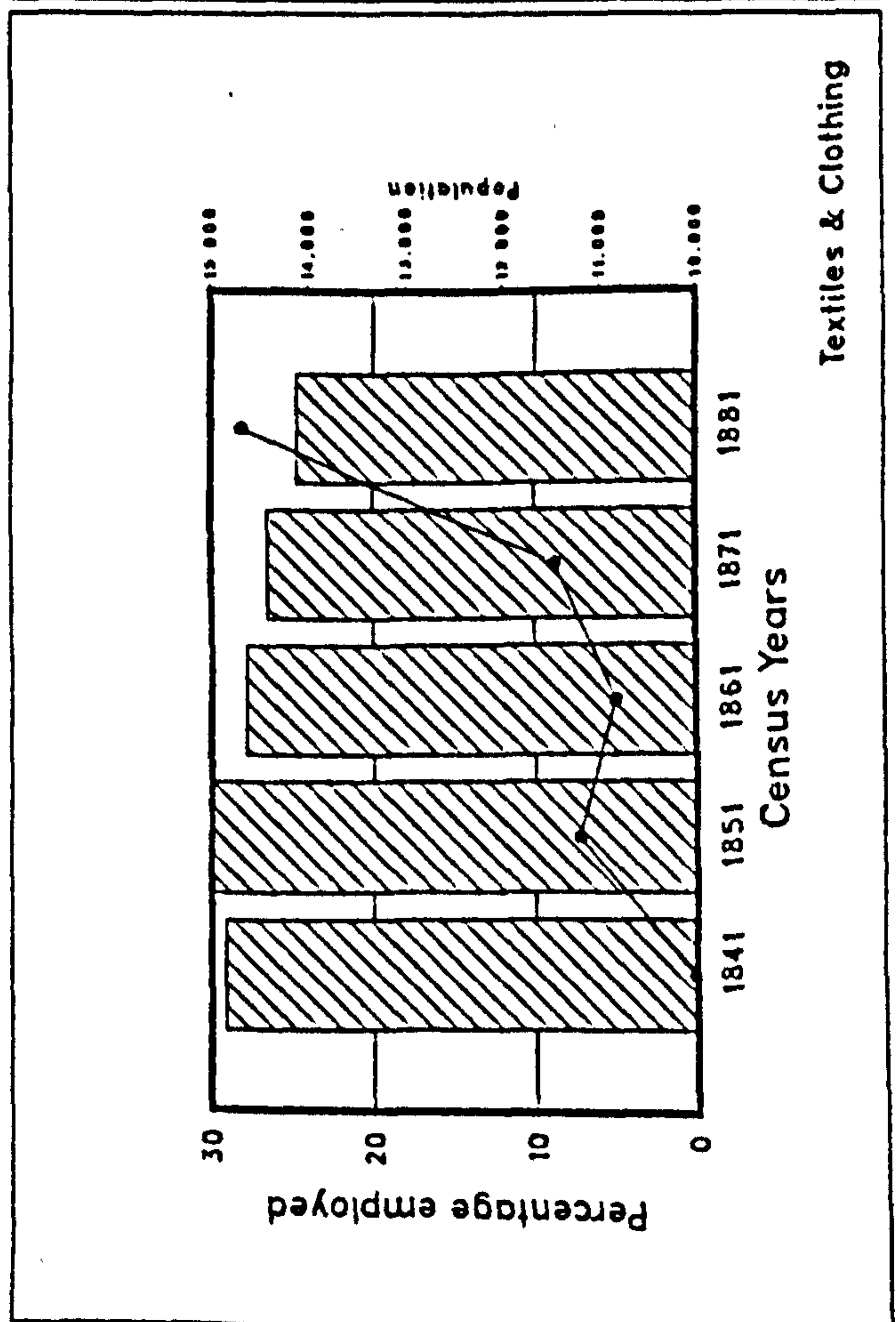
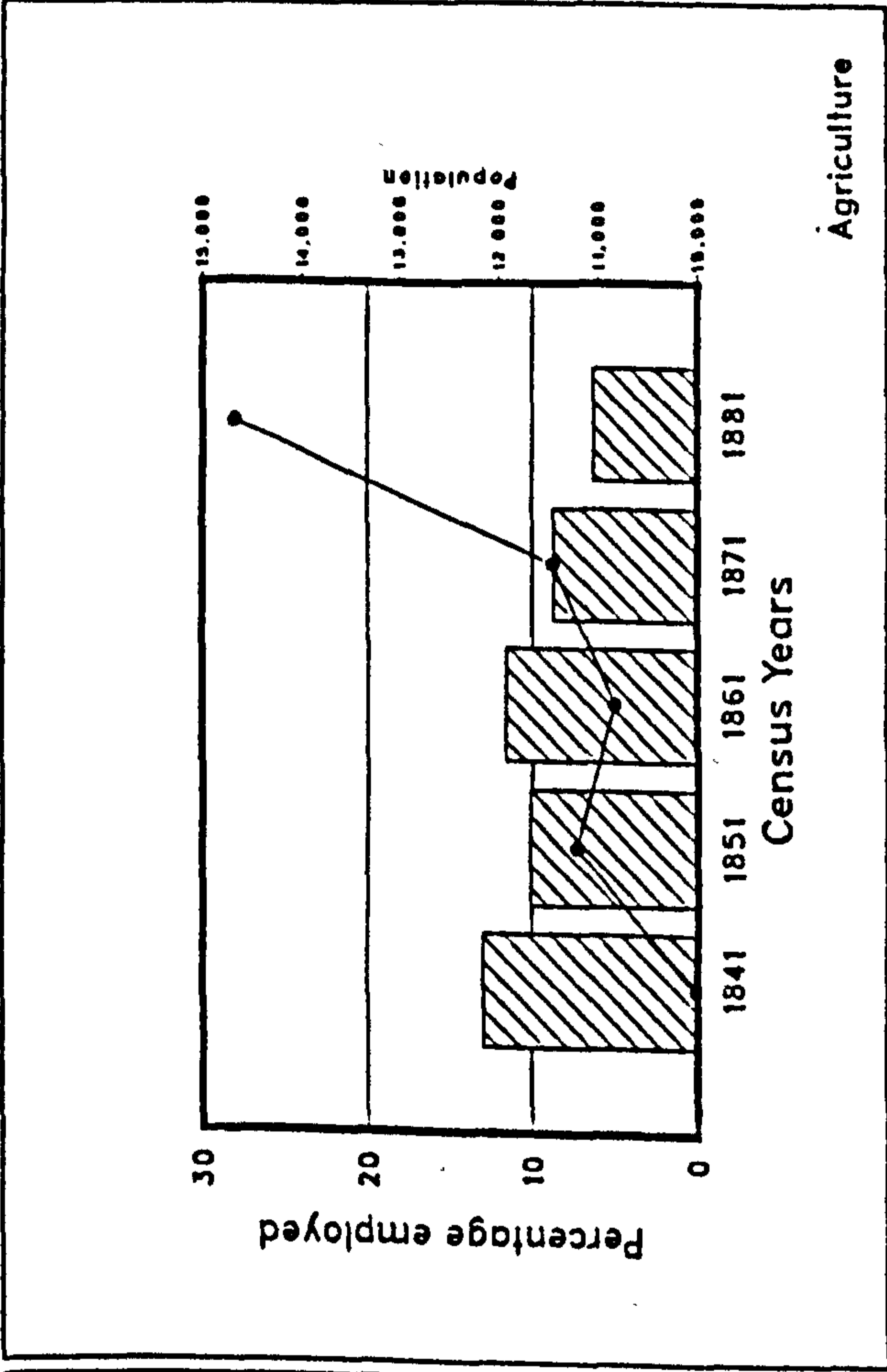
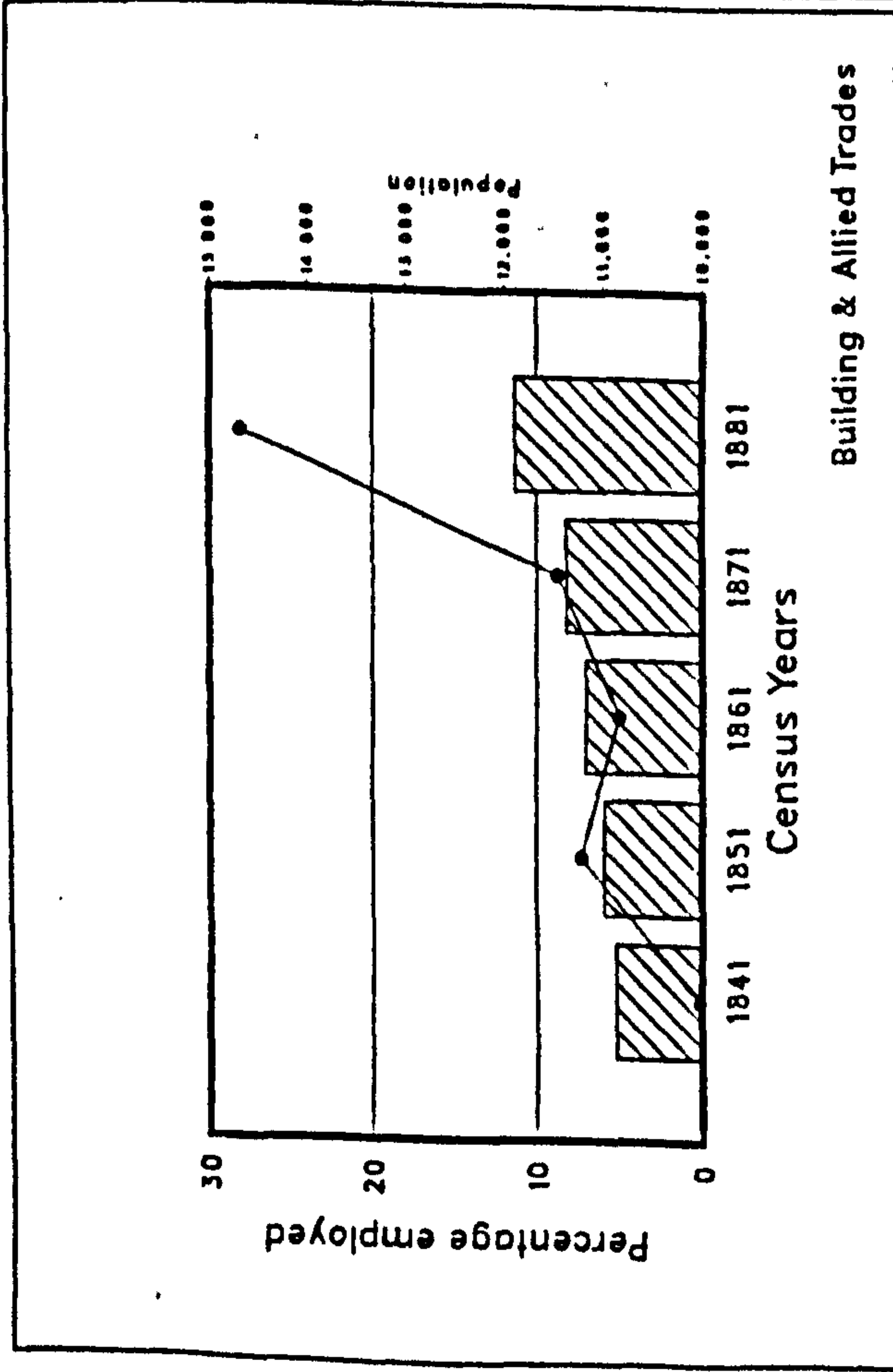
something to gain by more efficient transportation. Lower carrying costs can be a useful factor but this value is related to the volume of goods moved. Loughborough might well have benefited at the height of the lace mania, but the railway arrived too late. In 1840 the town already had cheap coal. Speedy transport for non-perishable goods like hosiery was only a marginal advantage, although Leicester manufacturers had indicated in 1836 that it was useful, presumably because of the quantities they produced. They were able, therefore, to compete more effectively against Loughborough; the same factors also worked in favour of Nottingham.

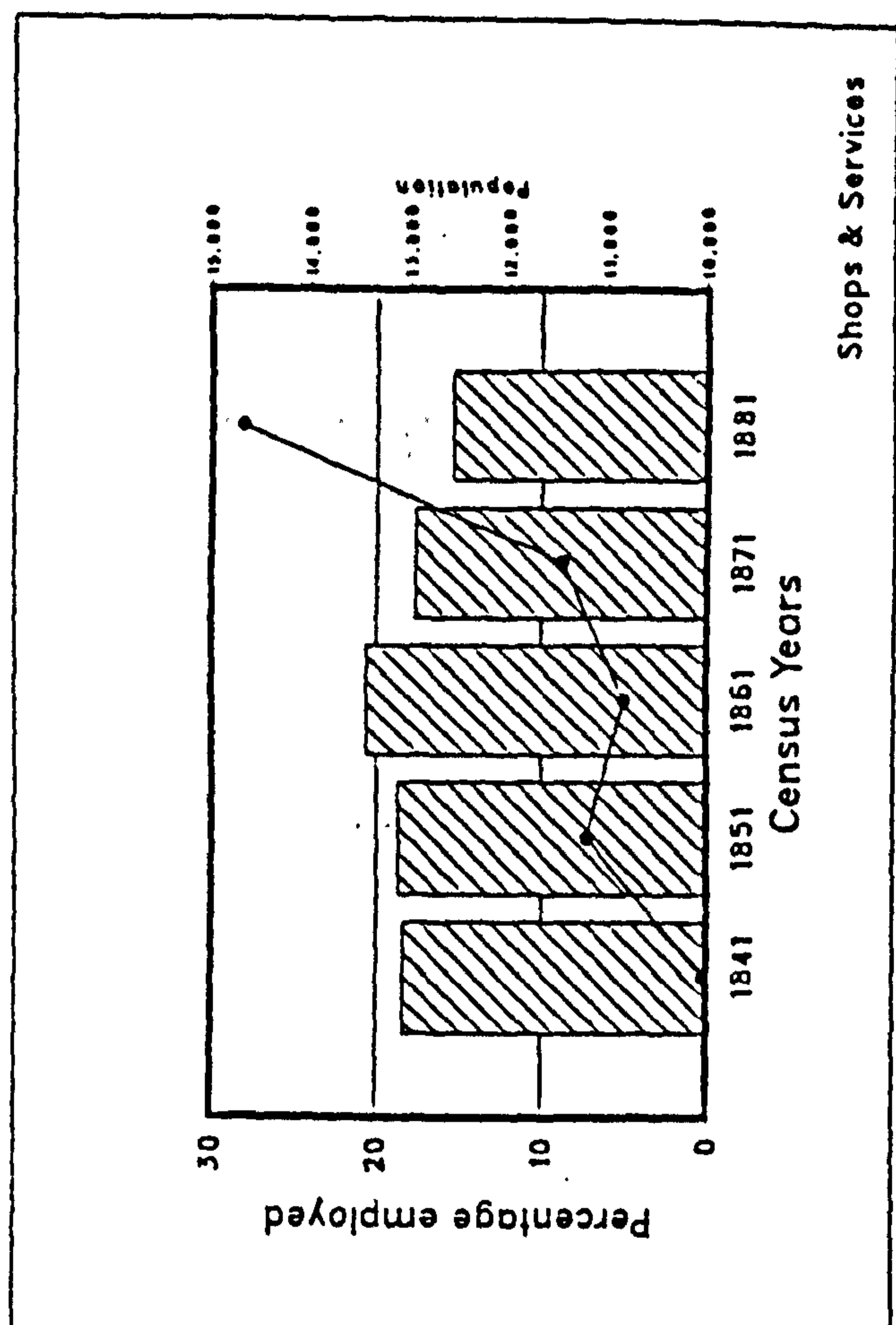
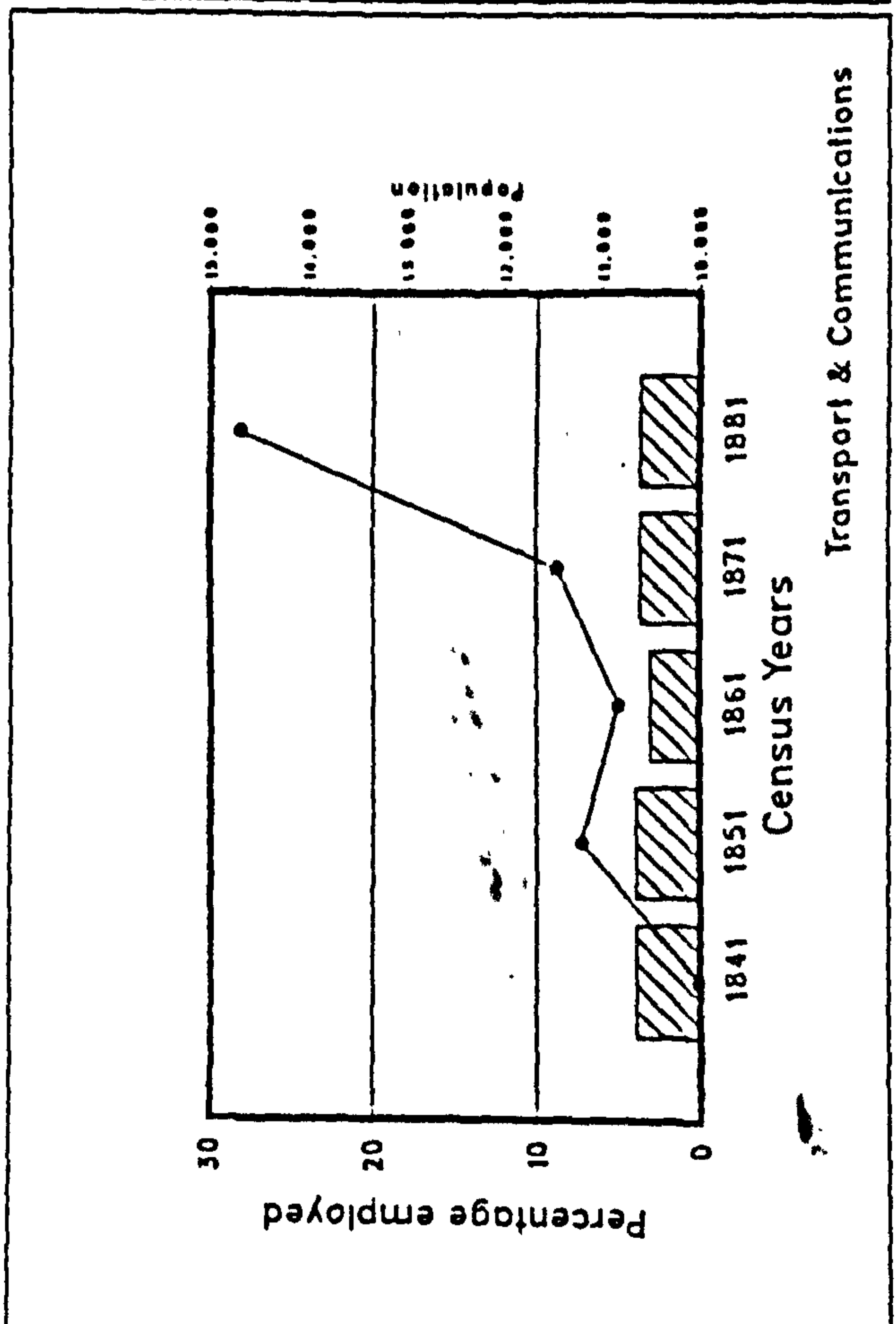
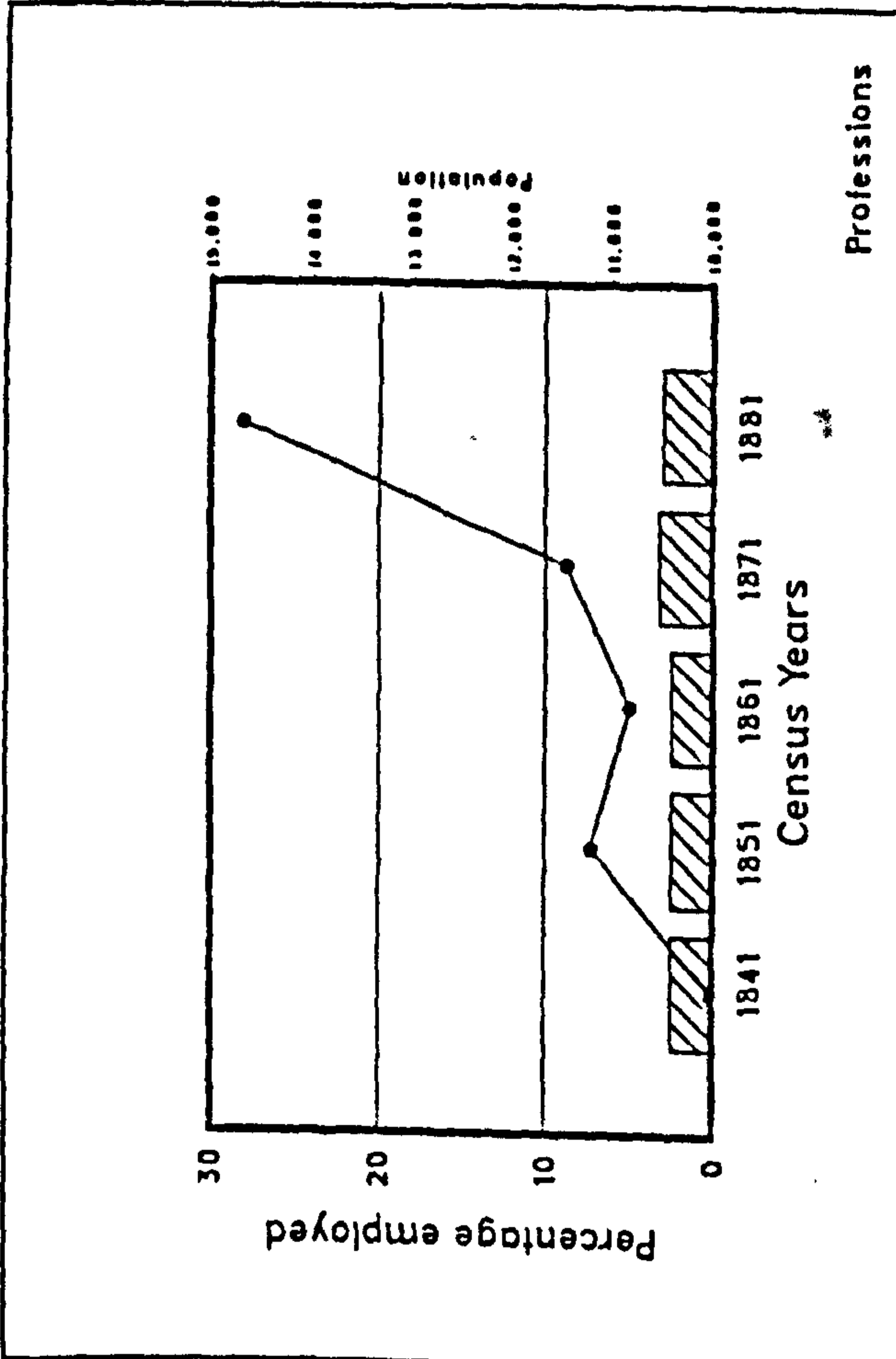
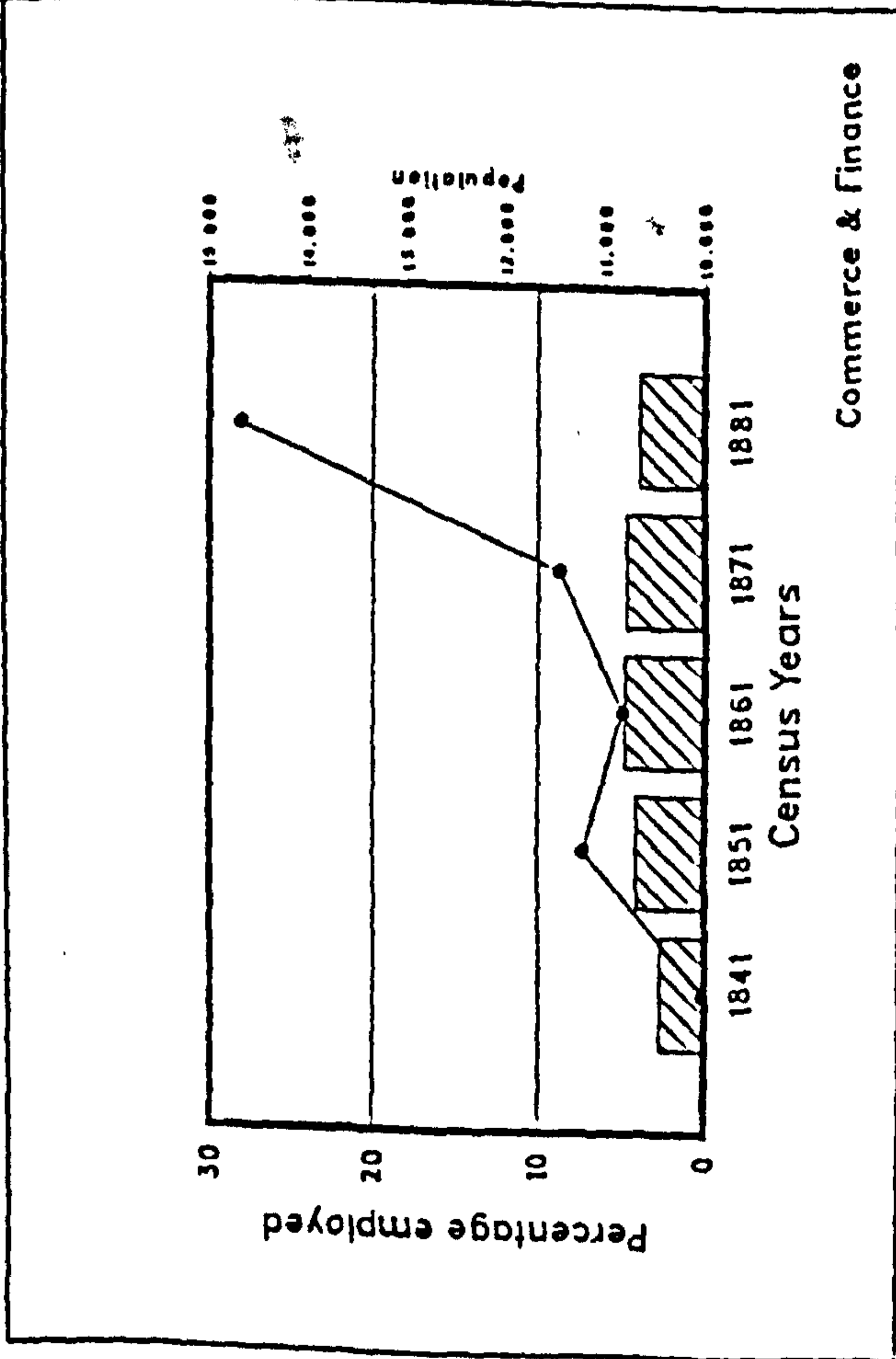
Loughborough also lost its role as an important inland port. A wharf was built at the railway station, but this was simply the transference of a facility from one part of the town to another site on the outskirts. It did not offer any commercial growth and was a poor substitute for the part-idle and formerly profitable wharves along the navigation. The Annual General Meetings of the Railway Company were actually held in the town in 1837 and 1838; hopes may therefore have been entertained that Loughborough was to become its administrative headquarters, but they moved, first to Leicester and finally to Derby in 1844. Here then, was a town which had quickly seized its opportunities in 1778, when its navigation opened, but which appeared to miss them all in 1840. Pollard finds that, in international terms, only the advanced regions of Europe derived economic benefits from railways. They were of no value if 'out of harmony' with the economic stage of development of the area,

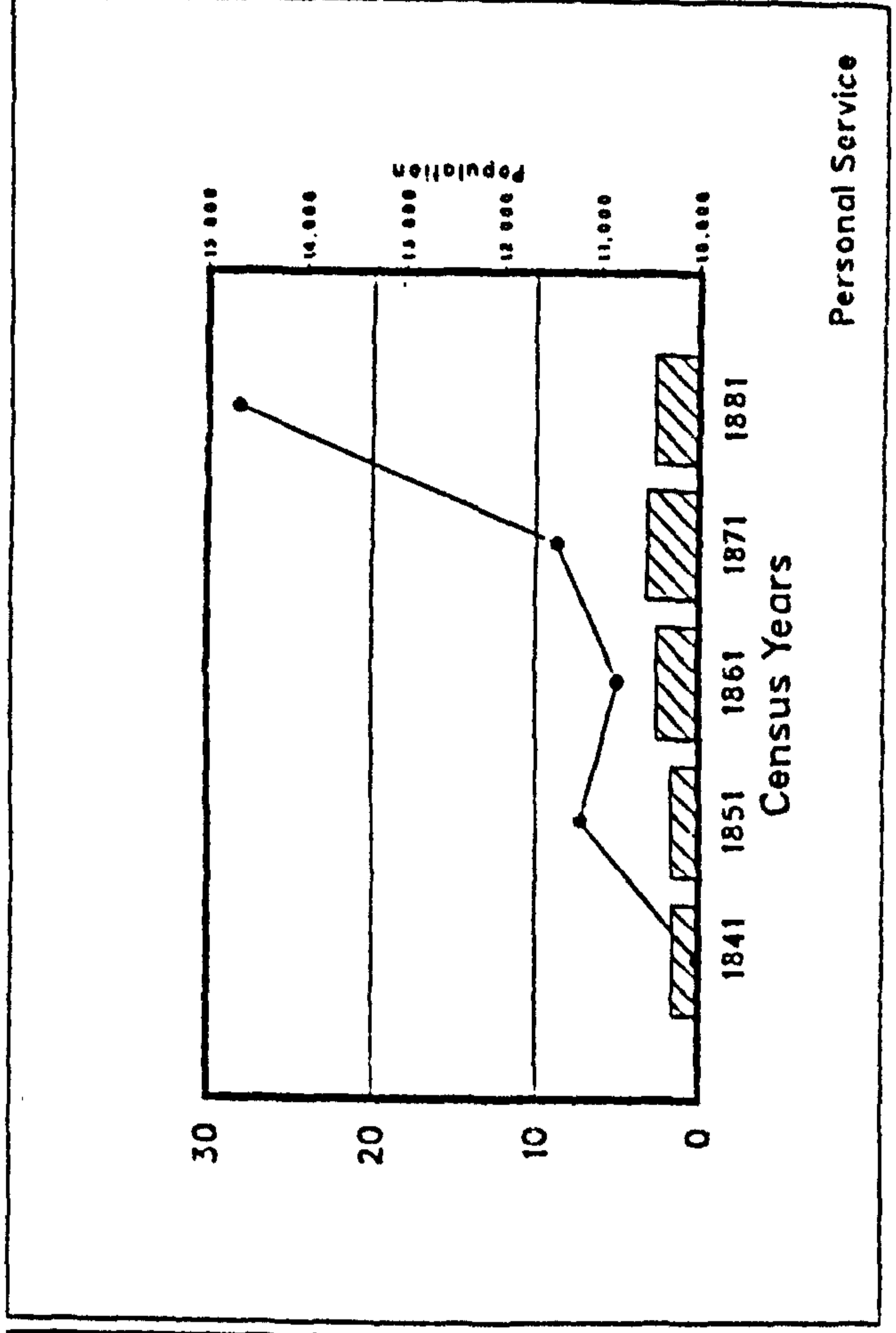
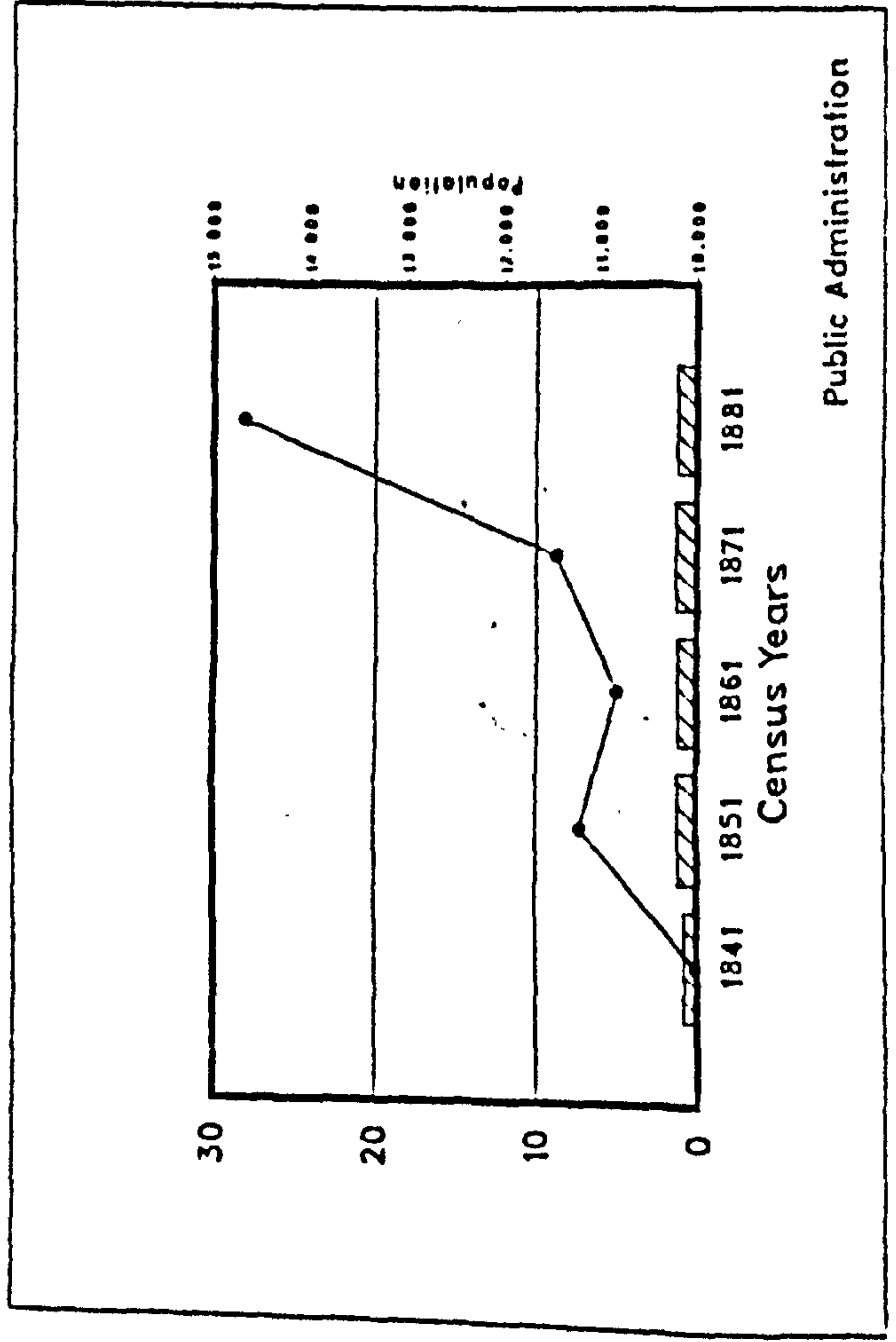
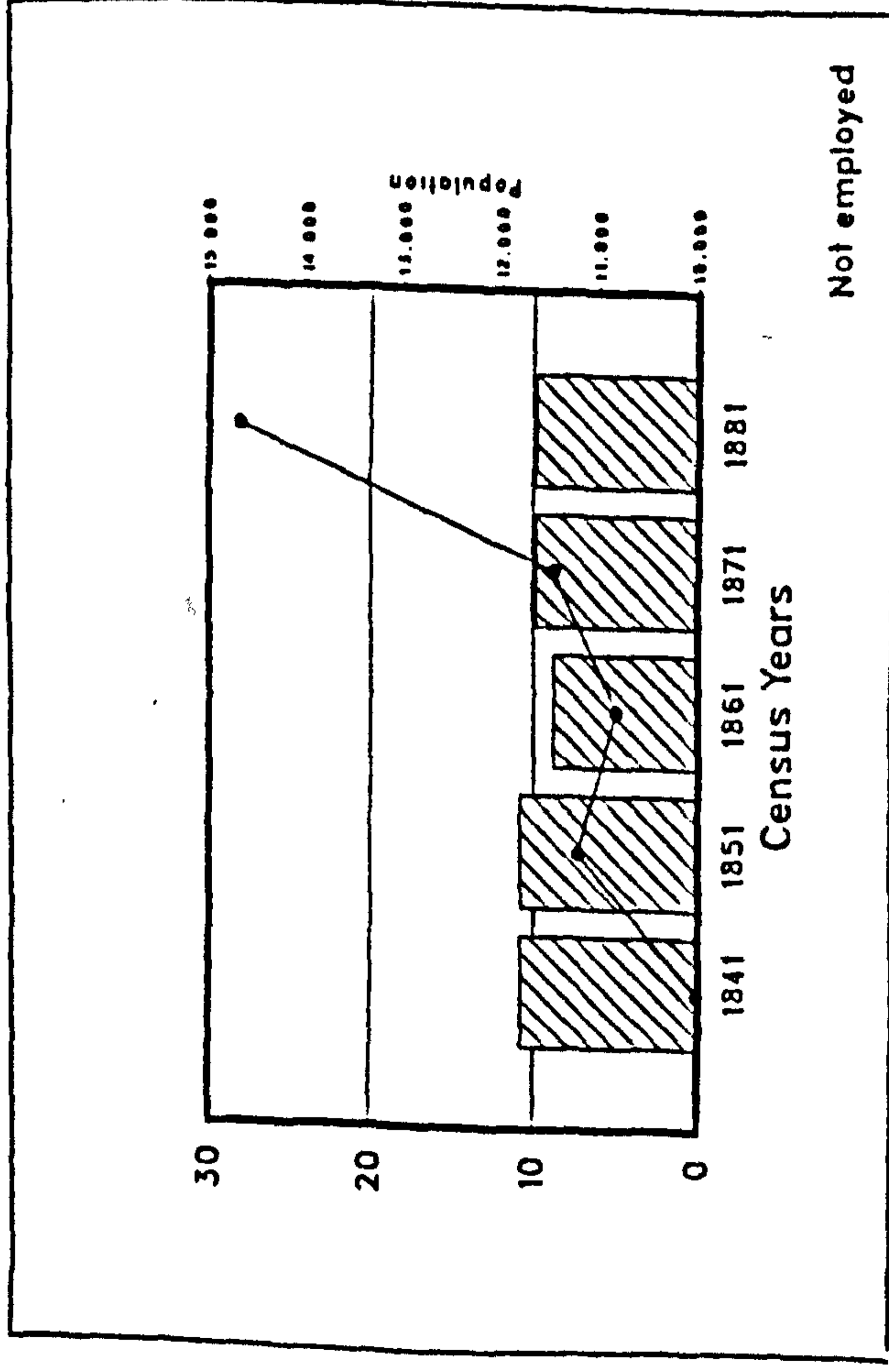
'communications are of little use if there are no products to transport'. 33

A theme of this chapter has been the general flow of economic life from 1841 to 1881; its conclusions are best illustrated by the graphs attached, which show the connection between the main elements in the economy and demographic trends. The proportions of the heads of households in the different occupational groups are shown in relation to the size of the total population at each census. It will be seen that in the major occupational groups, Textiles and Clothing was always predominant, although the proportion of household heads fell after 1851. The growth of Other Manufactures after 1861 emphasises the subsequent importance of engineering, especially in the period between 1871 and 1881. Building activity rose fairly evenly up to 1871, the great rise coming after that date, as new estates were built to house a population increasing rapidly on a rising economy. The Transport and Communications group was never a large employer; the impact of a railway on the local economy has already been discussed. Agriculture seems to have absorbed some workers from Textiles and Other Manufactures in 1861, but otherwise it steadily declined as manufacturing industry required labour. This trend is also to be observed in Shops and Services and is discussed more fully in the next chapter, in which details are also given of smaller occupational groups, including Commerce and Finance, the Professions and Public Administration. The graphs are kept together in this chapter so that an overall position may be seen.

The graphs which follow show the variations in percentages of household heads in each occupational group, related to demographic change, 1841 to 1881.







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CHAPTER 6: LOUGHBOROUGH AS A MARKET TOWN

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CHAPTER 6: LOUGHBOROUGH AS A MARKET TOWN

a) Several of the villages within Loughborough's natural catchment area held market charters, but they were all unimportant in the nineteenth century and perform no market functions today. The great advantages of the town lay, first, in its road transport network; it stood at the centre of a system moving out along the four main points of the compass. Its canal connection also gave it status as a canal port, its function as a railhead steadily developed in the second half of the nineteenth century. It served industry in the neighbouring villages because of its activities in hosiery; it served agriculture through its November Hiring Fair, its regular corn, cattle, butter, egg and cheese markets, its five fairs for horses, cows and sheep and its two fairs for cheese. This chapter deals with a function of a local economy which can persist in times when there is no actual industrial growth, that is, the ability to offer a wide range of services and minor manufactures. It cannot be claimed that such a facility can persist always, for example, if there is deep industrial depression resulting in demographic decline then the home base for a services sector may cease to exist. In nineteenth century Loughborough that situation never occurred; the town was the market centre for its district. Omnibuses and carriers provided transport on all days of the week, except Sundays. The market days, Thursdays and Saturdays, were by far the busiest. Details of these services are given in Hagar's Directory of 1849 and are shown in Table 6:1.

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TABLE 6:1

DAILY ROAD SERVICES IN 1849

OMNIBUSES

Ashby: Monday, Wednesday, Thursday
Leicester: Wednesday, Saturday

CARRIERS

Six days per week: Barrow on Soar, once daily except:
Thursday - three times
Saturday - twice
Leicester, twice daily except:
Thursday - once
Wednesday, Saturday - three times
Nottingham, once daily except:
Monday, Wednesday, Saturday - twice
Walton, once daily
Wymeswold, once daily except:
Thursday - four times

Three days per week: Shepshed: Tuesday, Thursday, Saturday

Two days per week: Derby: Tuesday, Friday
Kegworth: Thursday (twice), Saturday
Thringstone: Thursday (twice) Saturday
Woodhouse Eaves: Thursday, Saturday

Thursday only: Twenty-two other settlements
Three times that day: The Leakes
Twice that day: Castle Donington
Hoby
Osgathorpe
Seagrave
Willoughby

Saturday only: Melbourne

The distances covered by some of the vehicles, for example, the Saturday run from Melbourne, or the Thursday run from Bagworth, suggest that Loughborough's general trading connections extended much further than the five miles limit considered as the local place of birth area in this thesis, shown on the map at the end of this chapter. Throughout the period, road traffic was always heavy on market days, although by 1877 there were no carriers or

omnibuses running from Nottingham or Derby. It appears that the railway had taken over this business, but there was a corresponding increase in road traffic from intermediate places not on the Midland line.

b) The extent to which the surrounding villages depended on Loughborough for services is demonstrated here in a study of thirteen of them, based on the census of 1851, the total population of the enumeration districts surveyed being 13,143, that is, greater than that of the town itself. The town was a centre for 'putting-out' in the hosiery trade, the function of the hosier, the merchant-entrepreneur, to whose warehouse the framework knitters walked every Saturday taking in completed work and receiving their wages, as well as a supply of yarn for the following week. Many were no doubt accompanied by their wives, hoping that the money would be spent wisely and knowing that a penny would go further in Loughborough because of its greater number of shopkeepers and dealers. The local villages were heavily involved in framework knitting (even the very closed village of Stanford had one frame) so that, although there were a few hosiers in these places, particularly Long Whatton and Shepshed, many people would have needed to make the weekly walk to the town, unless they felt it worthwhile to pay somebody to do it for them.

The census analysis provides details of village tradesmen, which are compared below with the figures for the town. ¹ There were thirty-five bakers, fewer than in

Loughborough, which had forty-two, but only Stanford, Hoton, Normanton and Woodthorpe were without their own baker. There were forty-two blacksmiths, as compared with thirty-two in the town; Stanford, Woodthorpe and Knight Thorpe had none, but a figure of ten for Hathern may be inflated because of agricultural machinery manufacture there. Every village, except the four settlements quoted above, had a wheelwright, there being twenty-one in total (twenty-three in Loughborough). Most had a corn mill within the parish, except Stanford, Burton, Woodthorpe and Normanton. Since there were mills quite near to these villages, all these principal facilities were therefore easily accessible, except for a few very small settlements. All but three (again Woodthorpe, another closed village, Normanton and Stanford) had grocers' shops, Shepshed having eleven, Barrow nine and Hathern six. Only Woodthorpe and Knight Thorpe were without shoemakers/repairers, but there was, all told, only one to every 156 people in the villages as compared with one to fifty-eight in Loughborough and it may be that some of those in the town made fashion or specialist footwear that the rural workmen did not provide. A similar position could have applied to tailors, there being one to 312 people in the country districts as compared with one to 108 in the town. There was no rural shortage of dressmakers but it is of interest to note that in Long Whatton, where there was a very heavy female concentration on the ancillary hosiery occupations, there were only two. Some of the 168 in Loughborough may therefore have been former ancillary workers displaced by the transfer of their operation in the knitting cycle to factories and warehouses.

In other respects, the villages depended heavily on Loughborough. There were no rural banks. There was only one rural basketmaker, in Shepshed, so that the town, with fifteen employees, had a virtual monopoly, because of its position in the Trent-Soar valley area, which was among the best organised in England. ² There was also only one village brush maker, in Sutton Bonington, and only one cabinet maker, in Quorn, although village craftsmen could put together strong, if inelegant, furniture. There was also only one rope maker, in Hathern; Loughborough had nine and from 1820 the firm of Pritchard had been making rope, twine, sheep nets and tarpaulin covers, all essential for farming communities. ³ There was no large-scale village brewing, for which Loughborough was suited, beds of gypsum in the upper part of the local Keuper marl causing the water to be hard and therefore ideal for the purpose.

Where villages did offer professional services, such as those of the stay maker, the clock maker or doctor, they were less accessible to other villages than those in the town. The four doctors, for example, were in Barrow, Quorn and Woodhouse, to the south of the area. There were three solicitors, again in Quorn and Woodhouse, assuming they had offices where they lived; there was another living in Knight Thorpe but certainly not practising there. The only rural pawnbroker was in Shepshed, where there was also the only chimney sweep. The veterinary surgeons and the seedsmen were all in the town; there was no doubt some rural self-sufficiency in these fields but apparently

no specialisation. Most village shops were general stores. There were a few specialist retailers, for example drapers in Hathern, Barrow, Sutton Bonington, Quorn, Shepshed and Woodhouse, druggists at Quorn, Shepshed and Barrow, which also had a stationer, while Quorn had both a haberdasher and a chandler. Dealers were excluded from the survey, since they were probably fairly mobile within the distances covered here. Coal and cattle dealers did, however, live in the country districts.

c) In contrast the total Loughborough Market Place trading pattern was probably:

TABLE 6:2

MARKET PLACE TRADING PATTERN IN 1851

Drapers	6
Grocers	5
Chemists/Druggists	4
Shoe shops	2
Wine/Spirit merchants	2
Inns	3
Butchers	2

and one each of the following:

Bookshop
Clothier/Pawnbroker
Tailor
Haberdasher/Milliner
Jeweller
Seedsman
Ironmonger (another service available only in the town)
Leathergoods

There was also a bank and a doctor's surgery.

The list given above is compiled on the assumption that, since people of all these occupations were living in the Market Place, they offered services even if they did not actually own shops. This represents a wider range of retail trading than exists in the Market Place of 1986. The town also had a hardware shop

called Clemerson's, which developed into its only department store. Now it has none. The distribution of service and general trades was rather more widespread, but some were carried on in the main shopping area. There were, for example, a gunmaker, a brushmaker and a plumber in the High Street and a blacksmith, a chimney sweep, a wheelwright and a joiner in Baxter Gate.

Those engaged in retail trading in Loughborough town centre also practised many skills. Some villages may have been able to offer the occasional specific service, but none could match the range of experience and stock available in the town. Shopkeepers, such as grocers or drapers, and producer-retailers such as tailors, shoemakers or butchers, had generally served apprenticeships and catered for the better-off people, while the itinerant salesmen and the markets served the working class. Shopkeepers were knowledgeable, buying in goods which they reprocessed before resale, to meet customers' requirements. Coffee was ground and roasted, for example, and tea was blended. In 1851 working class demand had not extended to the point where co-operatives and multiple stores were to sweep away the independent and skilled shopkeeper and the decline of agriculture had not reached the level at which markets were starved of local produce. The skilled butcher still slaughtered on his premises, from which he also sold meat, to the great sanitary inconvenience of the town as a whole. The master baker was also becoming more important, although baking at home was still common, particularly in the villages. Bakers did not usually occupy central sites, they worked in areas where it was

convenient for customers to call in. There were none in Loughborough Market Place in 1851. Dairy farmers either sold milk from their farms, some of which would not be far from the town, or kept stall-fed animals in the town itself. They were therefore a group similar to the butchers; the commodity was convenient to purchase but there was a certain environmental loss.

The list of Loughborough Market Place shopkeepers is headed by the drapers, selling material selected with the discriminating customer in mind. There were also a haberdasher, a clothier and a milliner, as well as a tailor, but the bespoke tailors and dressmakers could work more cheaply in workrooms in or attached to their houses. The trades as described by the census enumerators covered a wide range of skills, but a proportion of men and women in garment manufacture must have been capable of meeting the wishes of those who wanted quality. The second hand clothiers and the travelling drapers would have been patronised by the others. There were two shoemakers in the Loughborough Market Place of 1851; the producer/retailer was the central figure, although footwear was also sold by drapers, or leather merchants, or at markets. The specialist footwear retailer was uncommon. The Market Place also had four druggists/chemists but in 1851 crude drugs and medicines, as well as herbs and chemicals, were also sold by grocers, or oil and colourmen, of whom there were two in the town. They had dealt originally in materials for painting, but had diversified to sell a variety of household goods, for example, soap, candles, starch, matches. ⁴

The single ironmonger in the Market Place also deserves some attention, since he would have supplied a range of implements for the household, the workshop and agricultural use, as well as providing a retail outlet for a range of metalwares and other factory-made articles, such as pottery.

d(i) Another function of the market town was the export of local goods. Road, rail and water communications enabled hosiers in Loughborough to deal with their London agents and send goods both inland and overseas. Agricultural surpluses could also be directed out of the area through Loughborough. The daily carriers brought goods in; they also took goods out or transferred them to other methods of transport. By the early eighteenth century, very few farmers still produced solely for personal subsistence.⁵ Loughborough could, therefore, have provided three market phases:

- i) for those selling their produce;
- ii) for those buying articles not available in their immediate locality;
- iii) as a staging post for rural produce leaving the area.

Colby, writing in 1972, lists forces then tending to cause functions to migrate to the centre of a modern city from the periphery, and these apply very well to Loughborough as a nineteenth century market town. Colby's centripetal forces are:

- i) site attraction, some natural advantage, for example, accessibility;
- ii) functional convenience, the area being the natural focus of a larger district;

(Master/Post)

- iii) functional magnetism, the concentration of certain types of activity;
- iv) functional prestige, some streets being centres for certain types of activity;
- v) the human equation, the attraction of the social and entertainments aspect. ⁶

If the pressures of these forces is taken back as far as 1221, the date of the Loughborough Charter, they can still be seen to apply in terms of the time. They remained, and still remain, aspects of Loughborough town centre, although the need for accessibility of the motor car has now led to the appearance of larger stores in the outer districts.

d(ii) There were also financial services. The first savings bank in the county had opened in Loughborough in 1816 and had just over 1,000 depositors in 1842. The bank of Thorp and Middleton (later known as the Loughborough Bank) was established in 1790 and by 1824 the Leicestershire Bank (usually known as Pares and Heygate) had a branch in the town. Soon after 1834 the Nottingham and Nottinghamshire Bank also opened a branch. The Leicestershire Bank was open only on market days; this fact in itself demonstrates the extent of its business with out-of-town customers. ⁷ The Loughborough Bank ceased trading in 1878 and news of the ramifications of its collapse dominated the local press for some time. It was regarded in the district as 'safe as the Bank of England'; a large number of farmers and manufacturers had accounts there, as well as public bodies such as the local Board of Health and the Guardians. The Loughborough

Advertiser of 8 August 1878 reported that the failure had affected, not simply the town, but the area around. The 'greater part of the principal tradesmen, and farmers and gentry of the neighbourhood' were heavy depositors and employees of the gentry had their savings there. On 15 August 1878 the newspaper added that the bank's closure 'gave rise to one of those paroxysms of general panic and great excitement which only great crises of commercial disaster and ruin can create'. The 'whole district' was reassured when it was thought that the bank could be saved. This was not to be and the issue of 29 August 1878 said that the collapse had 'struck its roots deep into the confidence and esteem' of the town and neighbourhood. It should be stressed that these events were not related to any downturn in the local economy at this period. They arose because of the low quality of the advice available to the remaining partner of the bank after his senior colleague had died. Capital was small compared to the extent of the bank's business and a local solicitor, fearing that the bank would not meet its obligations, advised that the doors should be closed. It was subsequently discovered that the bank's assets exceeded its liabilities and, even if this had not been so, it would have been supported by its London agents, had they been asked. ⁸

e(i) Occupations of all heads of households engaged in the service trade sector, as the term is used in this thesis, are given on page 239. The occupations of beerseller, publican and

innkeeper are discussed in a footnote below.* If they are taken together, in 1841 the sixty-five so employed, the sixty-six shopkeepers and the 101 shoemakers were the largest trades. Hoskins regards one shoemaker to every 200 to 300 persons in the population as necessary to meet local needs.⁹ It has already been suggested that the surprisingly high local figure may be partly related to the town's function as a district centre. The number of shopkeepers in 1841 was at its lowest and in 1851 there were twelve more; there had been demographic recovery and some increase in commercial confidence. In 1861 the population had fallen slightly but the number of heads of households in shops and service trades was at its highest. For example, there

* The 1851 census report links together Beershop Keepers and Licensed Victuallers in occupational class XIII, sub-class 2, but places Innkeepers in Class VI, sub-class 1. Publicans are not listed. This is the basis for the general classification used here. The figures given for adults in this trade in the Loughborough District in 1851 are: (PP Popn VIII, 1852-3)

Innkeepers	22 males and 8 females
Innkeepers' Wives	15
Beershop Keepers	72 males, no females
Beershop Keepers' Wives	15

The figures quoted above, compared with the heads of household figures given in this chapter for Loughborough in 1851, show that the town was rather better served by beer retailers than the villages within the district. In 1861, the occupation 'Publican' appears, in addition to that of Beerseller (PP Popn XV, 1863-73). With Innkeeper/ Hotel Keeper there were therefore three separate occupations instead of the two in 1851. This may have caused some confusion in the minds of the Loughborough enumerators. The number of innkeepers fell and it seems likely that some were classified as publicans. In 1871 the balance swung towards the use of the term 'Innkeeper' and in 1881 moved away again. Although innkeepers had responsibilities that did not fall on beersellers, if the trades are taken together the figures for the town appear quite rational:

1841	65
1851	67
1861	71
1871	76
1881	73

were twenty more shopkeepers but fewer customers than in 1851. There is therefore the possibility that the occupation, and some others in this group, were seen as ways of making some kind of a living during times of reduced industrial activity. After 1861 prospects in hosiery slowly improved and the percentage of heads in the service trades steadily fell. Printing was, however, a genuine growth area. The first local newspaper had been the Loughborough Telegraph, which appeared in January 1837, stamp tax having been reduced to one penny the previous year. Local sales were limited, however, and in July 1837 the paper changed its title to embrace the three east Midlands counties. If circulation did improve, it was not for very long and the newspaper disappeared in 1839. A lively and informative publication had been placed on the streets at a time when the town could not support it. Advertisement duty was abolished in 1853 and stamp tax in 1855. This time seemed appropriate, therefore, to publish a successor to the Telegraph; it appeared in 1858 as the Loughborough Monitor and News. This was not a good time to choose in the economic sense, but the paper survived.

The actual number and the percentage of heads in Shops and Service Trades fell quite markedly in 1871, by thirty-seven heads. There were forty-two fewer shoemakers and apparently fifteen fewer beer retailers, although there may have been some confusion in enumerators' minds because of the change in occupational classifications quoted in the footnote. There were another thirteen shopkeepers but they may also have added to a surplus in the town, since only another three were recorded in

1881, after a period of population growth. There had also been developments which suggested that better days might be coming, for example, H. Wills, Bookseller and Stationer, had established himself in the Market Place in 1867, in the enterprise that was later to develop into Ladybird Press, now a household name in this and other countries. ¹⁰ Among the new occupations in this group occur a photographer (a woman), the Manager of the Co-operative Stores, which had opened in the 1860s, and one belonging entirely to the Victorian era, a 'Tailor, Vocalist and Harpist'. The full glory of this calling is rather obscured by the fact that the policy in this thesis is to take the first occupation as the major one, if more than one is given. Their presence is some slight indication of an improvement in the quality of life and, so far as the Co-operative Stores is concerned, a suggestion that a retail outlet could survive on a working-class market.

In 1881 the group rose by only twenty-five heads, an overall percentage loss of 2.28. This occupation group was employing a smaller proportion of heads of households than at any other time in this survey of census material. There were many more opportunities in factories with none of the uncertainties of self-employment. As we have seen, the number of shopkeepers rose by only three, but that of butchers by six to thirty-six and, since they were heads of households, the probability is that they sold meat from their premises. It is difficult to reconcile the assertion, often made, that many workers ate no meat, except bacon, with the fact that a large

group of butchers is recorded in the town in every Census. By 1881 more families could buy meat, but there had been thirty butcher heads of household in 1851, only six years after the privations of framework knitters had been so fully reported. There had, in fact, been a proportional decrease from one butcher to 374 people in 1851 to one butcher for 408 people in 1881. Printing continued its growth, employing ten heads as compared with seven in 1871. The staff of H. Wills was now seven men, twelve boys and two girls. A new occupation related to printing was that of bill poster. Other occupations reveal a further improvement in the quality of life. As the town grew, so did the outward and visible signs of the inward Victorian graces. There were a herbalist, two mineral water manufacturers, a picture frame maker, a shop selling children's toys, a clerk in a cigar factory (but no information about the factory itself), two coffee houses and a restaurant, known rather less elegantly in 1851 as an eating-house. There were also a 'Naturalist (bird stuffer)' and a 'taxidermist'.

The full structure is shown in Table 6:3 (page 239). It is accompanied by Table 6:4, which shows movement in certain trades, in proportion to the population of the town and its surrounding villages, between 1861, when the Shops and Service Trades group was at its peak, and 1881, when it was proportionately at its lowest. The enlarged population includes the town's natural catchment area and therefore reflects the influence of its marketing facilities.

TABLE 6:3

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881

SHOPS AND SERVICE TRADES

	1841	1851	1861	1871	1881
Baker	25	26	21	23	34
Beerseller/Publican	47	41	60	45	55
Billposter	-	-	-	-	1
Bookbinder	-	-	1	1	-
Brewer	10	9	11	12	16
Butcher	25	30	30	30	36
Chimney Sweep	3	3	7	6	6
Cooper	8	8	9	7	3
Confectioner	12	9	6	8	6
Eating House Keeper	-	1	-	-	4
Hairdresser/Barber	7	9	6	7	8
Herbalist	-	-	-	-	1
Innkeeper	18	26	11	31	18
Lodging House Keeper	2	8	8	7	7
Maltster	7	10	9	6	10
Miller	8	9	2	8	5
Mineral Water Manufacturer	-	-	-	-	2
Oil and Colourman	-	1	-	-	-
Pawnbroker	2	1	1	2	2
Perfumer	-	1	2	-	1
Photographer	-	-	-	1	-
Picture Frame Maker	-	-	-	-	1
Pikelet/Muffin Maker	-	1	1	-	-
Pipe Maker	6	7	4	2	1
Printer	3	1	7	7	10
Saddler	5	5	4	3	6
Shoemaker	101	131	133	91	69
Shop Keeper	66	78	98	111	114
Shop Assistant	-	1	4	5	19
Stay Maker	2	3	2	3	1
Tallow Chandler	-	-	-	1	-
Tripe Dresser	-	1	1	1	-
Umbrella Maker	1	1	2	3	3
Ancillary	25	31	52	34	41
TOTAL	383	452	492	455	480
PERCENTAGE OF ALL HOUSEHOLD HEADS	18.39	18.69	20.60	17.69	15.41

TABLE 6:4

MOVEMENT IN CERTAIN TRADES

TRADE	TOTAL POPULATION	
	1861 : 22,272	1881 : 27,613
Beer sales	1 to every 314 people	1 to every 378
Bakers	1 : 1,061	1 : 812
Butchers	1 : 742	1 : 767
Shopkeepers	1 : 227	1 : 242
Shoemakers	1 : 167	1 : 400

There were proportionately more bakers in the town in 1881 but, as hosiery and engineering expanded, the ratios worsened in beer sales, butchering, shopkeeping and shoemaking. Shoemakers (the term may well have been an optimistic occupational description for some of them) were obviously affected by the factory production of footwear, which had increased substantially since the introduction of a method of inside riveting of the uppers to the insoles. In Leicester alone the number of factories rose from four to seventy between 1853 and 1867.¹¹ Their boots and shoes superseded the bespoke trade, except for the higher-class customers. Had the numbers employed in this occupation remained constant, however, since 1861, when it was at its peak, the entire occupational group would still have slipped below Other Manufactures in its percentage of heads of households employed. So far as shops were concerned, their number in proportion to the population of Loughborough itself in 1871 was 1:104; by 1881 it was 1:129. The day of the ubiquitous corner shop was to come to Loughborough after 1881.

e(ii) There are other occupational groups to be considered in this chapter, all having general relevance to the theme of the market town and its administration.

TABLE 6:5

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881

COMMERCE AND FINANCE

	1841	1851	1861	1871	1881
Agent, factor	4	6	8	5	5
Accountant	-	-	-	7	1
Auctioneer	4	4	3	3	8
Book-keeper	-	3	2	-	-
Banker, Bank Manager	3	1	2	5	4
Commercial Traveller	1	2	3	4	5
Commission Agent	-	-	-	2	5
Dealer	42	82	90	85	72
House Agent	-	1	-	1	5
Insurance Agent	-	-	2	1	6
Stocks and Shares Dealer	-	-	-	2	1
Ancillary	2	1	5	4	8
Money Lender	-	-	-	1	-
TOTAL	56	100	115	120	120
PERCENTAGE OF ALL HOUSEHOLD HEADS	2.69	4.14	4.81	4.67	3.85

The Commerce and Finance group moved with Shops and Services, in that its percentage share rose to a peak in 1861 and then declined. This can be related to the variation in the number of dealers, an occupation which included some who moved frequently into and out of it. Some were 'general' traders, others sold:

- cattle
- coal
- corn and seed
- earthenware
- furniture
- glass and china
- horses
- hosiery
- lace
- leather
- marine stores (which must have meant 'inland waterway' stores)
- oysters
- salt
- smallware
- rope
- tea
- timber
- tripe

Both smallware and tripe dealers were females, other women dealt in lace or hosiery, but on the whole the occupation was male dominated. No comment has been made so far on distribution methods in lace. They appear to have been similar to those used in hosiery. Mathias refers to the bagman, who sold the product from door to door, and the censuses refer to lace dealers. Judging from the income of one Phoebe Bakewell, mentioned in Chapter 1, the dealer was the equivalent of the hosiery entrepreneur, who was known simply as a hosier. This assumption is strengthened by the information available at the 1851 census. C. Rushforth was entered as a 'Lace Manufacturer and Dealer', but there is no note stating the number of hands he employed. He could therefore have been a manufacturer only in the sense that hosiers sometimes called themselves manufacturers, that is, lace was made for him by men not directly in his employment. Three women also dealt in lace, one a widow, the others single. They all had another occupation as well as lace dealing. This, and their marital status, suggests that they were struggling to make a living and that lace alone could not provide it. Two sold both lace and hosiery and so probably the two products had a common distribution network. Mercers or haberdashers also sold lace.

It is hard to assess dealers' commercial standing. For some the occupation may have provided a very modest income indeed, while others had maids and it might therefore be assumed that they were living comfortably. Some of the hosiers, for example, who are placed in this occupational group because they were merchant-entrepreneurs and played no active part in the

productive process, must have fallen into this category. On the other hand, 'undertakers' (the middlemen between hosier and worker) were regarded by the 1845 Commission as poorly paid for their status.¹² Lawton infers that dealers as a group varied so greatly that, if they were considered in terms of the Registrar-General's system of social classification of 1951, some of them would appear in each of classes II to V.¹³ The other occupations in the Commerce and Finance group suggest that some basis of commercial expertise slowly developed in the town, but it was still small in 1881.

c(iii) Tables 6:6 and 6:7 give occupations both for the Professions and Public Administration. Numbers grew steadily in both, but totals of household heads involved were so low that the transference of a few occupations to non-householders can affect the proportions at each census.

TABLE 6:6

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881
PROFESSIONS

	1841	1851	1861	1871	1881
Artist Engraver	-	1	2	-	1
Civil Engineer	1	1	-	1	5
Clergyman	10	12	10	12	19
Large Employer	9	5	5	8	6
Magistrate	-	-	-	-	1
Manager	-	-	1	5	4
Musician	1	-	-	1	1
Publications (engaged in)	2	2	2	4	4
Solicitor	3	4	6	4	4
Surgeon, G.P., Dentist	9	9	6	7	7
Surveyor	1	1	-	-	-
Teacher	13	19	17	20	19
Theatrical Actor	-	-	-	-	1
Veterinary Surgeon	1	2	1	2	1
Ancillary	2	5	10	19	20
TOTAL	52	61	60	83	93
PERCENTAGE OF ALL HOUSEHOLD HEADS	2.50	2.52	2.51	3.23	2.99

The population of Loughborough in 1881 was 14,681. It will be of interest to examine the professional structure of a provincial town at this time, in terms of occupations of heads of households. There were no architects but there were five civil engineers. There were nineteen clergymen and the same number of teachers, six medical practitioners (a cottage hospital had been opened in 1862), one dentist, one veterinary surgeon, a 'musician', four solicitors, four factory managers and six classed here as factory owners. In addition, there were those in ancillary occupations, such as lay agents for religious bodies, legal clerks, and surgeons' assistants. District nurses and midwives are also shown here in the ancillary category. Those engaged in the cure of souls, minds and bodies were in the majority. The extent of professional expertise available to a modern community did not exist in Victorian Loughborough.

e(iv) The table for the Public Administration group is:

TABLE 6:7

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881

PUBLIC ADMINISTRATION

	1841	1851	1861	1871	1881
Armed Forces: O.R.	1	4	-	3	2
Board & other Local Officers	4	10	10	12	11
County Court Official	-	1	-	-	-
Gas Works Employee	3	3	6	7	6
Lamplighter	-	-	2	-	1
Police	5	3	4	6	8
Revenue Officer	3	4	5	2	4
Senior Union Staff	1	1	-	1	1
Other Union Staff	1	2	1	-	1
Waterworks Employee	-	-	-	1	1
Vaccination Officer	-	-	-	-	1
TOTAL	18	28	28	32	36
PERCENTAGE OF ALL HOUSEHOLD HEADS	0.84	1.16	1.17	1.25	1.16

The occupational pattern in this group at the last census prior to the incorporation of the town as a Borough in 1888 was:

Twelve Board and other Public Officers, including a Town Hall

Keeper, a Town Crier, a Sanitary Inspector and a

Vaccination Officer

Eight Police

Four Revenue Officers

Two Union Staff (others were not heads of households)

Six Gasworks employees and one lamplighter: the company was

private but is included here as a public service. The works had originally been established in The Rushes by a London man, and were sold to a company of shareholders in 1838, who built new works in Greenclose Lane with a capital of £8,000. In 1868 a new Act was obtained.

One man was employed at the waterworks, opened in 1870.

Two members of the armed forces, one a Recruiting Sergeant, are included in this group. Like those in the professions, the great army of administrators now employed by local authorities had not been recruited in 1881. Incorporation may have been sought in 1887 because of the poor quality of local government; civic pride was also involved, the obviously inferior town of Ilkeston having already obtained a charter.

e(v) Tables of occupations for those in Personal Service or who were not employed are appended. They complete the analysis but have no significance in the context of this chapter. The point has already been made in Chapter 5, however, that the employment of servants or other household helpers was a considerable indirect contribution to the economy, while heads

of households not employed at all in census terms often maintained homes for relatives and others who were wage earners.

TABLE 6:8

OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881

	PERSONAL SERVICE				
	1841	1851	1861	1871	1881
Charwoman	11	14	21	26	16
Domestic Servant, living out	12	8	17	32	42
Laundress, Washerwoman, Mangler	11	19	24	25	26
TOTAL	34	41	62	83	84
PERCENTAGE OF ALL HOUSEHOLD HEADS	1.63	1.70	2.60	3.23	2.69

TABLE 6:9

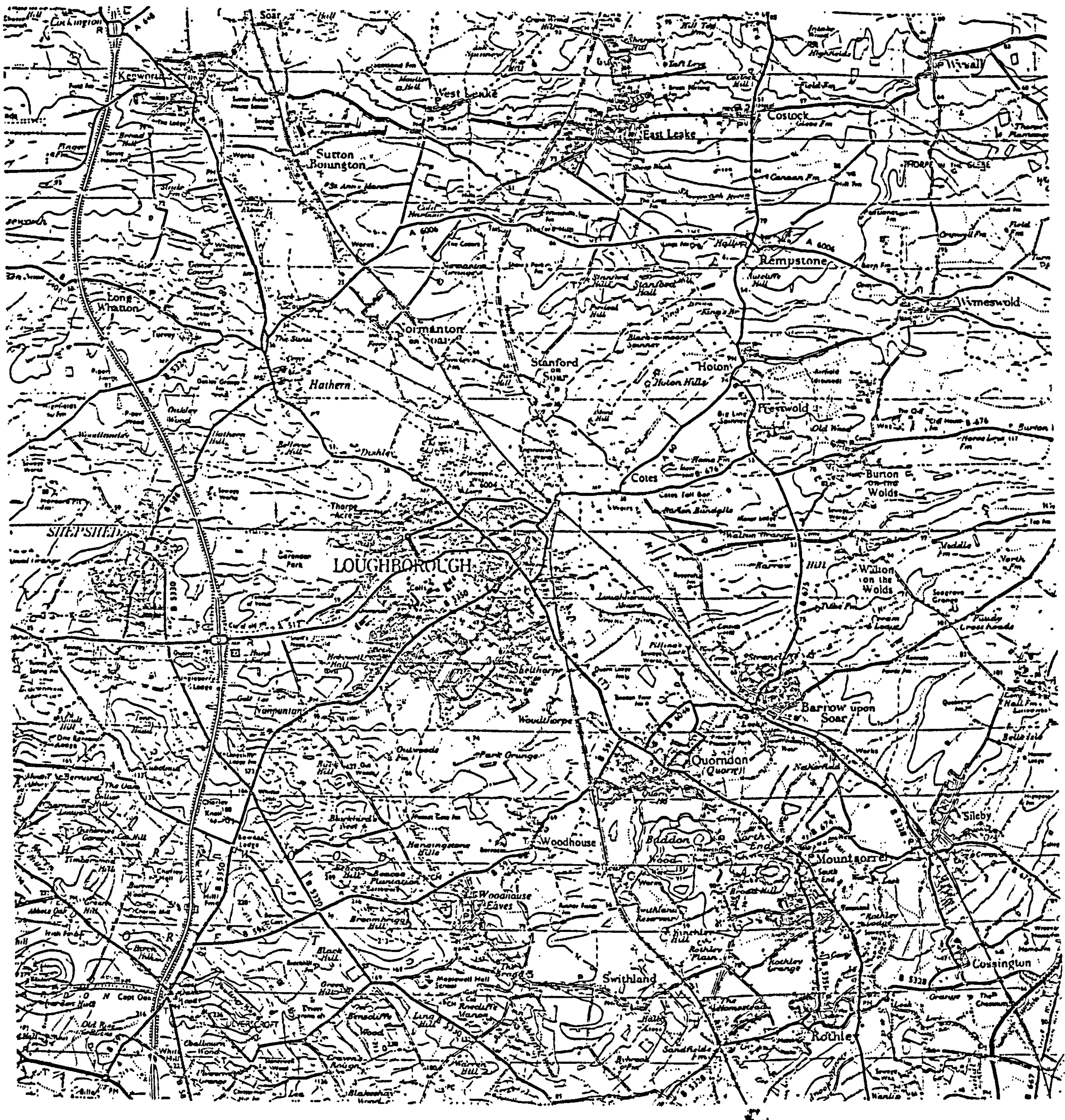
OCCUPATIONAL STRUCTURE OF HOUSEHOLD HEADS FROM 1841 TO 1881

	NOT EMPLOYED				
	1841	1851	1861	1871	1881
All Categories	235	260	210	251	303
TOTAL	235	260	210	251	303
PERCENTAGE OF ALL HOUSEHOLD HEADS	11.28	10.75	8.79	9.76	9.73

This chapter has stressed the importance of an additional services facility to a manufacturing economy. It should be considered in the context of the thesis as a whole, that Loughborough was for a long period in demographic stagnation. When the manufacturing base was weak, the services sector provided an additional income because of its part-

function as a supplier to surrounding villages. Loughborough might have existed as a rural market centre but without its industrial element the town would have been too small to support a services function of any size. Hosiery and engineering provided a platform on which it could maintain market facilities consistent with its status as the second town in the county. Manufactures and services supported each other. No causal links can be established between services and the demographic history of Loughborough at this period. The graph given in Chapter 5 shows, however, that the number of heads of households in the occupational group was at its highest at a time when the population had fallen slightly. There were, therefore, two elements, the one supporting a comfortable shopkeeper and specialist tradesman class, the other offering some kind of a living in difficult times for the local industrial economy. Those in the second group probably moved into manufacturing occupations whenever that sector could offer better wages to them at the unskilled level. The graph reflects the importance of this group to the town in terms of the number of heads of households employed within it. For most of the period it was second in importance behind textiles.

LOUGHBOROUGH AND ITS ENVIRONS



Scale in miles:



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P A R T B

SOCIAL ASPECTS

CHAPTER 7: SOCIAL STRUCTURE OF LOUGHBOROUGH IN 1851

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CHAPTER 7: SOCIAL STRUCTURE OF LOUGHBOROUGH IN 1851

The work of the people and the conditions under which they live combine to produce a social ethos, that characteristic spirit of a community which, as it can be traced in 1851, is the theme of this chapter. It consists of a wide ranging social survey in which the relationships of people to each other are studied. First the age structure of the local population is discussed, particularly in connection with mortality and the inter-reaction of generations within society. The household is then considered as a nuclear family, that is, the head, his wife and their children. The household also had two other functions, as the residence of the extended family, those people who for reasons of kinship were accepted into the home of a relative, and as the house in which servants, apprentices, lodgers and domestic servants might live. All these people were in relationship to the head through ties of blood or obligation, and are so described in the census. The incomplete families, those with a widowed or unmarried head, and the relationships of those who were single beyond the average age for marriage, are studied, as well as the influence of birth place on the marriage patterns and age structure of the town. There is a final section on the poor and the relatively wealthy. Although the economy lacked diversity, human intercourse was vigorous. There were

suggestions of social change and also echoes from the previous century, such as in the survival of a seasonal marriage pattern. The high mortality rate was partly caused by the more recent past; some of the blame can be laid on the overcrowding which developed as the lace trade grew. Society in Loughborough in 1851 was also becoming more mobile, but not to the same extent as in a factory community. The town was industrialised, but mainly in the domestic regime, unlike Preston, with which it is compared in this chapter. The less stable element in local society was attracted by the existence of work in those areas that were more outward looking than hosiery. Social movement was still tentative. Local society was not on the move, it was one faintly aware of new trends.

a) Table 7:1 gives population figures for both sexes, in years up to and including age nine and in groups of five years from age ten onwards.

TABLE 7:1

AGES: POPULATION OF LOUGHBOROUGH IN 1851

AGE	FEMALES	MALES
0	176)	196)
1	136)	140)
2	144 } 700	132 } 735
3	106)	133)
4	138)	134)
5	138)	126)
6	149)	140)
7	124 } 638	114 } 630
8	124)	140)
9	103)	110)
10-14	623	588
15-19	646	552
20-24	611	451
25-29	450	384
30-34	388	332
35-39	360	312
40-44	281	258
45-49	273	259
50-54	252	237
55-59	210	214
60-64	149	165
65-69	117	112
70-74	64	61
75-79	56	45
80-84	21	26
85-89	4	4
90-94	1	1
94-99	1	0
	<u>5,845</u>	<u>5,366</u>

The local figures broadly match those for the county as a whole. ¹ County trends were repeated in national figures. ² The balance of the sexes was, and had been, generally in favour

of females in Loughborough since the first census. The figures are:

TABLE 7:2

POPULATION: BALANCE OF SEXES, 1801-1851

DATE	FEMALES	MALES	
1801	2,367	2,179	
1811	2,788	2,612	
1821	3,739	3,626	
1831	5,496	5,304	
1841	5,219	4,765	+ 41 soldiers in barracks
1851	5,845	5,328	+ 38 soldiers in barracks

b) Table 7:1 shows the ages of all those living in Loughborough on one day in 1851. It is not a continuing history of a group of people born in the same year, on their passage through life, but it does demonstrate clearly the impact of the one certainty of life on varying age groups. In 1851 death struck earlier and with greater intensity than it does today, because of long hours of work in bad conditions, deficient diet, poor housing and, in Loughborough and most other towns, official disbelief that very inadequate sanitary procedures were a contributory factor. Local evidence has tended to concentrate on infant mortality and this is a sensitive indicator of the standard of living. The General Board of Health Sanitary Report, for example, gave the proportion of deaths in infancy as one in five; burials of children in the Parish Church and Baptist registers were one in four of all burials. The figures quoted above for year 0 were, of course, only of those who had survived to census day; the actual number of live births for Loughborough itself is not known. The Rector referred to infant and child deaths in his evidence to the Sanitary Board, complaining that

Godfrey's Cordial, a mixture of laudanum and treacle given to children to 'soothe' them, enfeebled their constitutions permanently. ³ Dr. Benjamin Godfrey, as he styled himself in his advertisements, claimed of his preparation that it 'quieteth froward children'. This was undoubtedly a piece of major understatement. The Report of 1845 on the Framework Knitters' petition found it 'not uncommon' for it to be given to infants about a fortnight old. If a child died of emaciation nothing was done about it. The high infant mortality in Leicester was attributed to 'general neglect of the mother', the context being that of neglect of the child by the mother, rather than that of the mother herself, although that would also have been true. ⁴

The Sanitary Report quoted the local average age at death as 23 years 11 months but for those who died above the age of 20, it was 55 years 9 months. ⁵ The census figures show that the average age of all females then living was 26.15 and that of all males 26.06. Deaths recorded in the Annual Reports of the Registrar General (for Loughborough Union, not the town), from 1848 to 1850, that is, during the three years prior to the census of 1851 and including a time of epidemic cholera, are shown below for children aged up to and including four. ⁶ They were:

Males: 363 (319 under two years old)

Females: 303 (242 under two years old)

The figures support the general assumption that death was more frequent among male infants. Even when the dangers of infancy

were over, children were still at high risk up to age 9, 3.5 percent of all deaths in the Union occurring in the age group 5-9. Deaths of males were generally greater than those of females up to age 24, when the pattern changed most markedly. During the childbirth span, many more women died than men (131 as compared with 68). The difference cannot, however, be attributed to childbirth alone, although it was a factor. In 1850, only 1.06 percent of female deaths in the county as a whole were attributed to childbirth. That year the principal causes of female deaths were:

Diseases of the Nervous System:	18.5 percent
Zymotic (epidemic) Diseases:	17.1 percent
Phthisis (usually pulmonary consumption):	15.6 percent

There may, however, have been constitutional weaknesses made worse by pregnancies, in addition to the strain of working, bringing up a family, and taking second best in food, which led to greater susceptibility to the many illnesses to which nineteenth century women were exposed. Deaths of women in the 25-29 age group were 5.1 percent of all deaths. This suggests that the years of pregnancy were those of greater risk to women, even if deaths attributed to actual childbirth were low. During the cholera epidemic of 1848, zymotic disease was the main cause of death in both sexes. In 1850, the three principal causes of male deaths were:

Tubercular diseases:	16.5 percent
Diseases of the Nervous System:	15.6 percent
Zymotic diseases:	14.5 percent

After age 44, deaths of the sexes generally kept pace with each

other, 290 females dying as compared with 274 males. Broadly speaking, the percentage of deaths did not exceed the level of the 5-9 age group until age group 60-64. Some increase in the number of deaths occurred, however, in the 55-59 age group, and we can believe that old age began during those years.

Loughborough Burial Registers are available for 1851 and the years either side of it, those of the Parish Church ⁷ and the General Baptist Chapel. ⁸ Addresses are given in the Anglican register, but only for some entries in that of the Baptists. It is not possible, therefore, to work out the incidence of mortality in the districts of the town, but in any event the absence of registers of other denominations would make this an unreliable exercise. We can, however, produce useful tables showing mortality over the year. The Baptist register can also offer insight into the expenses of dying. The depth and position of the grave is always carefully given, even when the address of the deceased in this life is not, and the charge is always quoted. The latter usually varied from 6d to 4s, but as much as a guinea could be paid. Death was not quite the great leveller. For the purposes of this chapter, details were taken of all deaths during Census Year and those on either side of it.

Figures for the three years were:

TABLE 7:3

BURIALS BY AGE GROUP, PARISH AND GENERAL BAPTIST CHURCHES
1850 TO 1852

AGE GROUP	M	F	TOTAL	PERCENTAGE OF SAMPLE
0	73	54	127	24.66
1- 9	56	61	117	22.72
10-19	6	18	24	4.66
20-29	12	28	40	7.77
30-39	8	15	23	4.47
40-49	13	9	22	4.27
50-59	14	18	32	6.21
60-69	26	28	54	10.48
70-79	26	19	45	8.74
80-89	12	11	23	4.47
90-99	2	6	8	1.55
	248	267	515	100.00

At the Sanitary Report's mortality rate of twenty-eight per thousand in 1848, these two registers might have covered about half of all local burials and therefore offer a useful sample. The figures support the observation of the writer of the 1851 Census Report that the chance of living through a given year increased from birth to the age of fourteen or fifteen, and it decreased to the age of 55-58 at a slightly accelerating rate, after which the decline was more rapid and eventually 'the lamp of life is not broken, but is softly burnt out'.⁹ Let us hope that this was true, even for the Workhouse, where twenty of the 130 deaths in the over-60 age group took place. It should be noted that female burials over the age groups 10-39, which cover the main child-bearing years, were more than twice those of males. There was a marked rise in burials in both Churchyards each year, although the Board of Guardians, seeking to avoid the operation of the Public Health Act in the town, had claimed in

1849 that deaths for the September half-year had decreased to eighty-nine, as compared with 126 in the same period the previous year.¹⁰ It seems likely that the figure of eighty-nine was not typical.

A table of burials by months is given below:

TABLE 7:4

BURIALS BY MONTHS, PARISH AND GENERAL BAPTIST CHURCHES, 1850-1852

MONTHS	BURIALS
January	47
February	35
March	51
April	53
May	49
June	26
July	34
August	49
September	50
October	38
November	37
December	46
	<u>515</u>

Armstrong places seasonal fluctuations as being, in order of high mortality:

1. January - March
2. July - September
3. October - December
4. April - June¹¹

The order for Loughborough was

1. January - March, when exposure to hypothermia was greatest
2. July - September, with a high risk of summer diarrhoea
3. April - June
4. October - December

The change of the order of 3. and 4. was on a difference of only seven recorded Loughborough burials and so the local annual

spread of mortality varied only slightly, over this sample, from Armstrong's pattern.

Wrigley and Schofield found that mortality was increased immediately by cold winter weather and also rose one or two months after hot summer weather.¹² This pattern was partially true of Loughborough over the period studied here, although differences between the three-monthly periods were small. Wrigley and Schofield actually calculated that one degree Celsius of warmth in winter weather reduced annual mortality by about 2 percent, while the same degree of cooler weather in summer reduced it by about 4 percent. They also found that rainfall did not affect mortality and changes in the cost of food had no great effect, unless prices became very high. If the months are taken out of the seasonal context used by Armstrong, the worst successive three in Loughborough were March, April and May, with 153 burials. Burials were at their lowest in June and July, but increased before the time-lag noticed by Wrigley and Schofield. August and September were bad months, probably because there was a greater incidence of diseases of the digestive organs. The risk then diminished until the cold weather, and the respiratory infections that accompanied it, returned in December.

Table 7:5 gives details of children aged less than ten:

TABLE 7:5

BURIALS OF INFANTS AND CHILDREN AGED UNDER TEN,
PARISH AND GENERAL BAPTIST CHURCHES, 1850 TO 1852

INFANTS	CHILDREN	TOTAL	MONTH
7	13	20	January
5	13	18	February
12	15	27	March
14	9	23	April
9	15	24	May
10	3	13	June
10	6	16	July
16	12	28	August
24	5	29	September
6	5	11	October
6	10	16	November
8	11	19	December
<u>127</u>	<u>117</u>	<u>244</u>	

The worst year for mortality in infants (that is, those less than one year old) was 1851. March, the month of the census, was worse than any month in 1850 and, apart from May, deaths were fairly high and rose to a peak in September. This peak was repeated the following September, with two high months either side of it. Over the three years, March, April, May, August and September were the worst months. Had family planning, apart from personal restraint, been possible, the spring and high summer would have been times to avoid births. As it was, death struck the ignorant and apparently wise. A surgeon's daughter was the first to die in September 1851.

If men perceived death to be the end of human existence, the funeral would have much less significance. Religions survive because they deal with the fears of those who sense mysteries beyond the grave and some Christian denominations have added greatly to them. It is not surprising, therefore, that in the nineteenth century, when importance was attached to religious

observance, there should be great concern with death and mourning, which could be a kind of self-indulgence heightened by the uncertainties of a life of discomfort and disease. Society imposed strict rules on those who mourned, especially for a widow, who had to play her role by observing conventions fitting for her dead husband's status. Fashion had to be considered; it was an outward and visible sign of inward grief. Both grief and the widow's dress were modified as the day of the funeral became more distant. The Queen herself laid great stress on mourning, and Society followed. The poor followed Society, going to great lengths to give their own as good a 'send-off' as the rich. All wished to do what was right and proper and also, they hoped, to earn some vicarious credit for the departed.

A rather more cynical point of view should also be stated. Wohl points out that infant burial clubs were popular, paying out between £1 10s 0d and £5 on a baby's death, against a premium of as little as one penny per week. A child's funeral rarely cost more than £1 10s 0d, so a 'profit' could perhaps be made. Wohl also quotes a witness (a judge) to the 1854 Select Committee on Friendly Societies as saying that 'child murder for the sake of the burial money prevailed to a fearful extent'.¹³ Insurance men were not persuaded that their policies were an incitement to infanticide and thought that maternal ignorance was a principal cause of child mortality. The comment may perhaps be made that insurance men, unless they have changed over the past hundred years, would have been quick to challenge any claim where infanticide was suspected. It does seem that

some indifference to death must also have been a factor in nineteenth century attitudes. There is, for example, the common reference to families 'dying down', which implies that as a plain matter of fact some children did not survive, and that perhaps it was better for a new baby to die rather than to suffer later. Anderson thinks that death was viewed with greater equanimity, because of its greater frequency.¹⁴ There were also the bereaved who lost those who can be regarded sincerely as 'loved ones', many of whom would have been children. Anderson found that Lancashire parents usually grieved heavily at the loss of even very small children. Provision for grief is valid in this context in that it enables mourners to come to terms with their loss. The close presence of death may have hardened the attitudes of some, for others there was an emotional blow to a tightly-knit family, as well as the practical tragedy if the loss was that of the chief breadwinner, on whom the welfare of the surviving children had depended.

A curious practical feature may be noted here. In spite of all the stress that was laid on the proper observance of mourning and funeral rites, no undertakers are quoted in the 1851 census of Loughborough and none was recorded in the occupational summary for the Loughborough District given in the Census Report, which placed this calling in Class VI, sub-class 2. The conclusion to be drawn is that this necessary service was not entered as a principal employment. Undertakers were not listed in the 1861 Census Report. The occupation does not appear

in contemporary directories, although that of stone and marble mason does.

c) We have discussed population in terms of figures, that is, the number in each age group recorded in the census and those who had been buried in two churchyards in the years 1850 to 1852. The rest of this chapter will be concerned with living people as they related to each other and as they used their relationships to seize the opportunities and deal with the difficulties of life. It was a society of tensions, as human groups always are. Julian Marias, in his Generations: A Historical Method, examines the literature on this theme, from J.S. Mill onwards, and develops Mill's thesis: 'The proximate cause of every state of society is the state of society immediately preceding it', that change is the process by which old elements in society are replaced by new ones. The rhythms of history are those of generations of people, who are much more than age groups. They are sets of people reacting physically and intellectually to the challenges of their particular time. Each generation tends to approach life from its own philosophical and chronological point of view, with what Marias calls the same vigencia - the laws, customs, usages, traditions and beliefs that currently prevail within it.

Marias is generally satisfied that the lifespan of a generation is fifteen years and quotes empirical evidence from three other researchers in this field, Soulavie, Dromel and Benloew. Therefore he would say that the static figures for

population in Loughborough on Census Day, 1851, conceal not only the turmoil of individual lives, but the inevitable pressures of groups divided from each other by the historical fact of date of birth. Vulnerability varies from generation to generation, for example, to death, to sex, to economic pressures, to the changing nature of the status of the individual in his family.

The age groups which Marias regards as generations are:

- 0-14 Childhood: no historical participation in life
- 15-29 Youth: a period of learning and passivity
- 30-44 Initiation: preparation for the task of life-modification
- 45-59 Dominance: the generation in power
- 60-74 Old Age: influence lost. ¹⁵

Ages overlap, as people vary, but the concept nevertheless seems to hold good. The figures quoted at the beginning of this chapter now take on a different character. They can be placed into fairly coherent groups, each with its own view of society. In Loughborough the sizes of the generation groups were:

TABLE 7:6

SIZES OF GENERATION GROUPS

	Female	Male	Total
Childhood	1,961	1,953	3,914
Youth	1,707	1,387	3,094
Initiation	1,029	902	1,931
Dominance	735	710	1,445
Old Age	413	414	827

It will be seen that the two most active generations in the community were less than half as numerous as the two younger ones. The balance of the population was heavily in favour of youth, which had little opportunity to state its own point of view. Alienation of youth from society is thought to be a modern

problem, but nineteenth century Loughborough no doubt had its difficulties. In all generations except that of old age, there were more females than males, but the difference is negligible in childhood, at its largest in youth and quite small in the dominant generation. It might be deduced, therefore, that the feminine point of view could not be expressed strongly in the years of courtship, because chances of marriage rested to some extent on subservience to males. In the dominant generation, however, many women had established themselves either as independent spinsters or as worthy wives on whom their menfolk depended, in the household at least. It does appear that the dominant group in Loughborough was well balanced in terms of male and female points of view.

There was no doubt of the importance in the town of the age group 45-59. It included all the household heads of the large residences that stood in their own parks, except two, one where the head was a rich widow, who would no doubt have graciously accepted that she fell into the Old Age generation, and the other, the home of the Rector of Emmanuel, who was in the Initiation group, as perhaps befits a man with a new parish. The large hosiers were all of the dominant generation, and some had also reached the point at which they opposed industrial innovation. On the other hand, Heathcoat was only twenty-six when he invented his lace machine and another great local inventor, William Cotton, was in the initiation period when he produced most of his new ideas. The Rector of Loughborough, who was forty-eight, had recently entered the dominant stage; his

behaviour made this clear. The initiation group included a lady who was to have great influence on the education of girls, the Headmistress of the Girls' Grammar School. It was her generation that was to achieve dominance during the years of great change in Loughborough, not only in education, but in environmental improvement and in industrial development. The series of tables and commentaries that follow later in this chapter will have greater reality if they are seen from the point of view that there were natural tensions within society; there was the inevitable thrust of youth working against the search for stability, in an age of great change.

d(i) The census adopted the household as its unit of measurement, with the implication that the head exercised control of and responsibility for those living under his or her roof. Households often contained non-family members, such as domestic or trade servants, lodgers and visitors. The family was, however, regarded as the institution which bound together these heterogenous groups. F. Mount has called the family 'subversive', in the sense that it persists as the major unit of society, unwanted by some social reformers, and given limited approval by some Christian churches, in the sense that their clergy regard marriage as inferior to celibacy and are presumably conscious of the warning that the Faith can set members of the same family against each other. Traditionally in England, a marriage was contracted after an exchange of vows (not necessarily with a clerical witness) and a subsequent full sexual relationship. Hardwicke's Act of 1754, which required

marriages to be solemnized in Church after the publication of banns, was concerned with legality rather than morality. Disputes over property, for example, could arise where a written record of a marriage had not been made. The Church was to keep this record. Mount believes, therefore, that the clergy became involved in marriage so that it could be controlled. The requirement of society for stability of marriage is, of course, supported by the Church in the blessing of the couple, but the subsequent condition of the family does not always conform to legal or religious orthodoxy. In this sense, it is, as Mount says, 'subversive'.¹⁶

Families of every kind were to be found in 1851, the broken ones, those with a widowed parent, those with an unmarried parent, those with few or too many children and doubtless the happy families. The reach of the family extended to other relatives, the grandparents and parents of the married couple, their brothers and sisters, their aunts and uncles, their nieces and nephews. Some of these kinship associations may have been impermanent, but the ties of blood were always there. In a town like Loughborough, family life was strengthened in practice, if not in sentiment, by the domestic hosiery industry, the work done by children enabling the family to stay together until their departure on marriage. In agricultural districts families broke up earlier as children left the village to go into domestic service or apprenticeship. In Loughborough in 1851 the family was the dominant social factor. It was always there, something one had, or acquired, or had lost. We can look

therefore at marriage as Mount described it: 'With all its tediums and horrors, it has more variety and more continuity than any other commitment we can make'.¹⁷

One thousand, three hundred and thirty-four households in Loughborough in 1851 consisted of families only. We have already considered the family as an economic unit (in Chapter 3); in this chapter we shall look at it in terms of kinship, as a group of people held together by a bond which does not depend on economic necessity or social standing, that is, where there is an innate sense of affection, loyalty or, at any rate, obligation. It will be appropriate, therefore, to discuss the extent to which families were sustained during this period by mutual affection, or whether this bond was destroyed by the bias of English law against married women, this law providing a less worthy tie. A wife was the chattel of her husband, who, it was widely assumed, could sell her if he wished to. Such sales were never formally sanctioned by law but the custom was an 'informal institution' within British society. It declined after 1850 and known instances in Leicestershire all occurred before 1831.¹⁸

In Common Law a husband acquired dominion over the property of his wife, because where a marriage existed there could not be two estates; of the two spouses, the husband was considered the more fit to own property. Since it was often working men, and not their wives, who were more likely to drink away the family income, this was a blatantly false premise. It was not until the Married Women's Property Act of 1882 that this Common Law Rule was set aside: A wife was also under a duty to co-habit and

could be physically compelled to do so. Divorce required the passage of a private Bill through Parliament, although some wife 'sales' were privately arranged divorces, in the sense that the buyer acquired the lady's affections prior to the purchase of her person. The Matrimonial Causes Act of 1857 made divorce more generally available, but the process was costly and humiliating and still biassed against the wife. Her adultery was a cause for the dissolution of the marriage, but she had to prove against her husband adultery aggravated by some other offence, such as desertion, bigamy or incest.

By the Infants' Custody Act of 1839 a mother had the right of access to her children and custody of those under seven, but not if she had been found guilty of adultery. Before the Infants' Custody Act of 1873 an agreement by both parents to give custody to the mother was void unless the father was proved absolutely unfit. It was not until an Act of 1886 that, in an application for custody, the interests of the child and the wishes of both parents had to be taken into account. The married woman of 1851 therefore enjoyed no rights of her own, and very few in relation to her children who, in their turn, had no real defence against a violent father. In the eighteenth and for part of the nineteenth centuries, children aged over seven were treated in law as adults, and were therefore subject to the same legal punishments.¹⁹ Since the doctrine of original sin implies that all men are born into that state, it seemed to the Victorian mind that children were not only by their nature

sinful but also reluctant to mend their ways. Heavy beatings could no doubt have been given with real religious fervour. It is not surprising that some women, especially those with money of their own, chose to remain single, or that an unmarried mother sometimes decided not to marry the father of her children, if she was in fear of him. Neither would widowhood always have been a cause for grief. Wives described as weeping at home on pay-day, awaiting their husbands' return from the beershop, or illustrated posing sentimentally outside the establishment itself, might have been regretting an affection turned sour, but were more probably lamenting the hopelessness of their situation, and that of their children. A defence of the truck system was that it forced the workman to take food home instead of going with his money to the nearest beershop, another that he was improvident and would always be in debt, no matter where he traded. 20

This can be related partly to the incompetence of some wives in household management, for which life had not prepared them. There was sometimes no counter-attraction in the home itself. The point is made in documents of the day that this problem often arose because girls who might otherwise have acquired a few domestic skills were put to other work. Even if they did no paid work after marriage, the damage had already been done. The Rector complained in his evidence for the Sanitary Report of 1849 that a 'serious consequence of the necessity which compels mothers of families, and their female children as soon as they are able, to work for the support of

the family, is, that the female population must certainly, to some extent, be brought up ignorant of the thrifty management of a household'.²¹ If the Rector was suggesting that most mothers had to work, the 1851 census evidence does not support him. His statement was correct for some mothers, and largely so as far as older female children were concerned. Therefore the difficulties may not have been that most wives had other work, but that as children they had not had opportunities to acquire domestic skills. Felkin said in 1843 that he had seen 're-iterated instances of the lamentable fact of families in the receipt of good wages being destitute of that cleanliness and common comfort which would induce a husband to spend his leisure time at home'.²² The Report on Children's Employment of 1843 noticed an additional hazard. Many of the girls who worked long hours at hosiery ancillary trades 'became, to a great extent, disqualified from discharging their duties as wives and mothers in consequence of their debilitated frames being unequal to the efficient performance of common household work'.²³ In other words, it was because female (as well as male) children were obliged to work to supplement the low wages of heads of households that the girls later became inadequate mothers. They were often poor managers, as some wives still are today, but in 1851 they had very little margin for financial error. Many wives may, nevertheless, have been happily, or enduringly, married to their lives' end. Families, both nuclear and extended, must also have tended to sink their differences in the face of great stress, at times of great poverty, illness, death or childbirth, since escape through divorce was not possible. The hosiery trade

induced stagnation, with its advantage of a certain kind of stability, and the disadvantage that it offered few grounds for optimism. Its effect on society was similar; it tended to keep the family together, but it rendered the womenfolk unfit to provide more than limited housewifely services for those near to them.

Even where there was great affection, the pressures in the poorer houses of monotonous diet, long working hours, cramped living conditions and the uncertainties of the next day must have placed many families in a state of permanent strain. A man and his wife could do little but ride out the storms, but their older children could do rather more, especially if they were treated harshly. Fathers were more often left to fend for themselves in their old age because of their greater harshness to their children. Nineteen percent of widower non-householders in Loughborough were in the workhouse, as compared with nine percent of widows. The Report of 1865-7 on Children's Employment also referred to the fact that young females in Nottingham who had good earnings when trade was brisk frequently threw off 'the restraints of home'.²⁴ The rights of parents to administer punishment were limited in theory by the Common Law for assault. Prosecution was unlikely, but there was little to stop sons and daughters from leaving. Those who did so, for whatever reason, are considered later in this paper under the heading: 'Co-resident Groups'. We shall first make a detailed examination of nuclear family structure. The method used here cannot uncover all the mysteries of the flexible domestic arrangements

characteristic of the period. The matter of deserted wives is also difficult. Enumerators were either silent on the subject or entered 'Husband Away' or 'Husband temporarily absent'. If the statement is followed by an occupational description such as 'Commercial Traveller's Wife' then there is a ring of truth about it. There were, however, 2,002 married women living in Loughborough in 1851 but only 1,962 married men. There may, therefore, have been some desertion.

d(ii) The average age of all married men in the town was 42.6, and that of all married women 40.2, and the census report regarded the tendency of females to understate their age as a 'minor factor'.²⁵ The youngest married woman was sixteen and there were three aged seventeen, while the youngest married man was a year older. The minimum age for marriage at that time was fourteen for boys and twelve for girls. There was no minimum age of consent. The numbers of each sex in five-year groups are given in Table 7:7. There were more married women than married men in each age group up to 42-46 (except 37-41), after which the balance changed up to death. The figures do not reveal, of course, how many of these men and women had remarried after the deaths of their partners, or those who did not remarry and were therefore removed from the tables, since they are recorded in the Census as widow(er)s.

TABLE 7:7

MARRIED PEOPLE: AGE GROUPS

AGE	MARRIED WOMEN	MARRIED MEN	MARRIED WOMEN TO 100 MARRIED MEN
16	1	0	-
17-21	86	40	215
22-26	259	207	125
27-31	268	247	109
32-36	301	277	109
37-41	236	257	92
42-46	215	186	115
47-51	199	209	95
52-56	170	204	83
57-61	126	140	90
62-66	73	93	78
67-71	40	51	78
72-76	19	29	65
77-81	6	16	37
82-86	3	6	50
	<u>2,002</u>	<u>1,962</u>	

Table 7:8 below shows the percentages of marriage partners living together on census night, born in each of the three areas used in this thesis:

L = an area broadly defined as being within five miles of Loughborough Market Place

C = rest of Leicestershire

E = elsewhere

TABLE 7:8

MARRIAGE PARTNERS AND PLACE OF BIRTH

	Percentage Men			Percentage Women		
	L	C	E	L	C	E
1.	50.97			50.97		
2.	7.44				7.44	
3.	8.00					8.00
4.		5.61		5.61		
5.			8.61	8.61		
6.			19.37			19.37
7.	<u>66.41</u>	<u>5.61</u>	<u>27.98</u>	<u>65.19</u>	<u>7.44</u>	<u>27.37</u>

Husbands and wives are related across one line, that is, on line one 50.97 percent of all marriages were between locally born people and on line two, 7.44 percent of locally born men had married women born elsewhere in Leicestershire. It will be seen that 66.41 percent of all husbands and 65.19 percent of all wives had been born in the locality. 15.44 percent of all locally born husbands had found wives who had been born out of the district, and 14.22 percent locally born wives had married men from other areas, but had settled in the town. The Parish Church Marriage Registers for 1850 to 1852 show that twenty-one (12 percent) of brides selected husbands who did not live locally, but of the twenty-one, five of the husbands were county-born.²⁶ This figure, based on residence at the time of marriage rather than on place of birth, tends to agree with that of 14.22 per- cent calculated from the census. The marriage horizon was at generally equal distances for both sexes. Local women were a little more adept at attracting partners from a distance than local men, but they did have the advantage that soldiers were stationed in the town. At least seven local girls married them between 1850 and 1852.

d(iii) Marriages at Loughborough Parish Church for each of the four quarters during Census Year and those either side of it were:

January	-	March	39
April	-	June	44
July	-	September	35
October	-	December	63 (11 on Christmas Day)

Wrigley and Schofield included Loughborough parish in the 404 used in their analysis. Their peak marriage season for North Leicestershire was October-November, a pattern they associate with the local system of farming. The peak periods were usually connected with hiring fairs.²⁷ This would have fitted Loughborough, except that by the 1850s industry predominated. Only a few of the grooms or brides were connected with the land, and so most of them did not need to confine their weddings to the last months of the year. The local Hiring Fair was held in November, but it could have had only a minor influence on employment in the 1850s. Nevertheless, the season beginning in October still remained the peak period for marriages, extending into December, when there were twenty-four. The quietest month was July (six weddings). There appeared, therefore, to be a survival of the general seasonal marriage pattern associated with an agricultural community.

d(iv) The mean size of nuclear families (that is, those where the parent was head of his/her household) was 3.69 or, if we exclude 299 people living with no close relatives, 4.07. Where a head of household had no members of his/her nuclear family living in the house, the family is regarded here as consisting of one person only. The number of children per family living at home was therefore on average just over two. The largest group of families was those of two people - a man and his wife. There

were 548 in this category, after which the numbers steadily declined:

TABLE 7:9
NUMBERS OF FAMILIES BY SIZE

FAMILY SIZE	NUMBERS OF FAMILIES
1	299
2	548
3	465
4	343
5	298
6	194
7	123
8	74
9	35
10	23
11	7

These figures include families of unmarried mothers, wives with no husband present on census day and widows and widowers living in their own homes.

The period of fertility was regarded in 1851 as between ages fifteen and forty-five. The youngest married woman with a child at home was, in fact, eighteen. Table 7:10 shows the number of children living at home compared with the ages of wives, in five-year age groups, beginning with the youngest married woman, and ending at age forty-six, when wives had generally ceased to bear children (although there may have been exceptions) and some other children had left home. It must be borne in mind that some children were not at home for various reasons. There were those living with relatives or boarded out as lodgers and those living at their places of work as domestic servants or apprentices. Deaths were also so common that, even if all living children could be traced to their mothers, the

figures for each family would not necessarily be that of all the children born. The figures are therefore only of families living together, not of the number of live births to each age group.

TABLE 7:10

CHILDREN AT HOME BY AGES OF WIVES (16-46)

AGES OF WIVES	NUMBER OF CHILDREN AT HOME	AVERAGE NO. PER WIFE
16-21	35	0.71
22-26	264	1.25
27-31	511	2.18
32-36	825	3.01
37-41	753	3.42
42-46	617	3.18

Thereafter there was a decline as children left home.

One twenty-year old woman had four children;

One twenty-eight year old woman had seven;

One thirty-four old woman had nine;

Two forty-year old women also had nine;

The average national age of marriage for women in 1851 was twenty-five, and that for men twenty-six.²⁸ If we take those wives aged over twenty-five and under thirty-six, when children would not generally have been old enough to have left home, the number of children at home for each year was:

TABLE 7:11

CHILDREN AT HOME BY AGES OF WIVES (26-35)

AGES OF WIVES	NUMBER OF CHILDREN AT HOME	AVERAGE NO. PER WIFE
26	73	1.55
27	75	1.83
28	107	2.43
29	112	2.28
30	125	2.04
31	95	2.43
32	143	2.51
33	123	2.67
34	171	3.22
35	210	3.28

The sequence does not follow a consistent upward trend, the number of samples being fairly small, varying from thirty-nine wives to sixty-four per year, but a line of regression demonstrates that married women of twenty-six could expect to have 1.7 children living at home, and those of thirty-five, 3.2. Over the nine years between them, therefore, the number of children increased by 0.17 per year and families had an extra child still living at home in March 1851 for about every five years ten months of married life.

d(v) The general assumption that the younger the age of marriage the longer the time available to produce children appears to be so undeniably true that a list of occupations of men who married earlier than the national average age of twenty-six will be of interest. The figures by themselves are meaningless unless they are considered in the context of the totals of married men in each occupational group. Table 7:12 therefore gives the percentages of early-marrying men, by groups:

TABLE 7:12

EARLY-MARRYING MEN BY OCCUPATIONAL GROUP AS A PERCENTAGE OF ALL MEN IN THAT GROUP

GROUP	PERCENTAGE
Textiles and Clothing	12.10
Other Manufactures	6.98
Shops, Service Trades	10.79
Building	8.33
Agriculture	5.76
Trade and Commerce	5.32
Professions	7.14
Public Administration	4.55
Transport, Communications	5.43
Not Employed	0.39
Personal Service	Nil

There was therefore a tendency for those in textiles and clothing to marry at a lower age than any other group. Levine noted at Shepshed that framework knitters, in particular, were more likely to marry earlier than other trades.³⁰ In Loughborough in 1851 three out of the six married men aged eighteen and nineteen were knitters, while another two were employed elsewhere in textiles. Of the 142 husbands below the average marrying age, fifty were framework knitters. The occupation was semi-skilled, young, strong operatives had a greater earning capacity, there was no apprenticeship to defer the age of marriage, houses were empty and frames were easily available. It was particularly true of framework knitters that they were no longer tied to the pre-industrial custom that a man waited for a vacancy in the village economy before he could acquire a house and get married. There were also eleven tailors, a trade description that could cover a variety of sub-trades, not all of which need necessarily have been skilled.

There were fewer young married men in the 'Other Manufactures' group. The early occupations here were two brewers, a labourer and a basketmaker. The first skilled tradesman occurs at age twenty-two, when a framesmith is recorded. At age twenty-three the scope widened to include other skilled trades, such as cabinet maker and engineer. The only two married stay makers were aged twenty-four and twenty-five, and it may well be that their wives were of particular service to them in their work. There were many more young husbands in the less skilled 'Shops and Service Trades' group, although it is surprising for us to

find a man of twenty years styling himself as an innkeeper. The fairly high proportion for building workers reflects the advantage of youth in many of the occupations, but apart from a nineteen-year old painter, a semi-skilled trade, the next entry does not occur until age twenty-three, when a bricklayer, a carpenter, two plumbers and a stonemason all appear, some evidence that the appropriate levels of competence could not have been acquired very much earlier.

It is particularly interesting to see that farm labourers did not marry at a young age. There was one of twenty, but only three more up to age twenty-three. This may have been connected with wage structures and it may have been related to the tradition of late marrying ages in the old rural economies, but it need not have been affected by tied cottages. Unless farmers owned property in streets within the urban area of Loughborough, most farm labourers' houses were on the rent-market on the same terms as those for other trades. Other occupations in agriculture showed no early marriages at all. Those in 'Trade and Commerce' were all dealers, probably men who bought a little here and sold a little there and may not have been stable members of the local community. The percentage of professional men married by age twenty-six is high. This may be related to the tendency of gentry to marry earlier than others in pre-industrial societies.³¹ They had money, a place in society and a house. So had nineteenth-century professional men. Among them in Loughborough were the only two veterinary surgeons, while another was a painter/engraver. The remaining

two were both aged twenty-five, a clergyman and a teacher. There was only one public administrator, a revenue officer also aged twenty-five. It should, of course, be pointed out that all the ages quoted were not those at the time of marriage but those on the day of the census.

The actual figures for the marital condition of all men and women in Loughborough below the national marrying ages are given in Table 7:13.

TABLE 7:13

MARITAL CONDITION OF MEN AGED UNDER TWENTY-SIX

AGE	MARRIED	SINGLE	MARRIED MEN AS PERCENTAGE OF ALL MEN
18	1	106	0.9
19	5	101	4.7
20	14	77	15.4
21	20	75	21.0
22	29	64	31.2
23	36	54	40.0
24	42	40	51.2
25	56	42	57.1
	<u>203</u>	<u>559</u>	

One man in every 3.75 was married at an age below that of the national average.

TABLE 7.14

MARITAL CONDITION OF WOMEN AGED UNDER TWENTY-FIVE

AGE	MARRIED	SINGLE	MARRIED WOMEN AS PERCENTAGE OF ALL WOMEN
16	1	117	0.8
17	3	117	2.5
18	6	115	4.9
19	15	121	11.0
20	29	105	21.6
21	33	86	27.7
22	53	74	41.7
23	43	64	40.2
24	58	66	46.8
	<u>241</u>	<u>865</u>	

One woman in every 4.59 was married at an age below the national average, but if we remove the distortion of the few girls

marrying before 18, when the youngest man was married, we arrive at a figure of one in every 3.66.

One hundred and eighty-one marriages are recorded in the Loughborough Parish Church Registers for the years 1850 to 1852. ²⁶ In seventeen both brides and grooms were minors. In four, only the groom was a minor and in another fourteen only the bride. The Registers do not give actual ages, the entries being simply 'Minor' or 'Of Full Age'. There were therefore twenty-one minor grooms but thirty-one minor brides, further evidence that women married at the younger age, but it will be seen from the tables above that there were still more single women than single men in the community. Beyond the age range of the tables, for those over twenty-five there were one hundred more single women than single men, for those over thirty, the difference was sixty-five, and for those over forty, it was nine.

d(vi) Table 7:15 gives comparisons between Loughborough in 1851 and Laslett's statistics for one hundred English communities between 1574 and 1821. ³² On the whole, the two sets of figures are remarkably alike and suggest that in Loughborough the values of a traditional, and mainly rural, society still had a powerful influence. It may be noted, however, that more of Loughborough people were married, by sex 1.8 percent men and 2.2 percent women. This may be some indication that people married earlier as a community became industrialised and that this affected women a little more than men.

TABLE 7:15

MARITAL STATUS IN LOUGHBOROUGH IN 1851, COMPARED WITH NATIONAL DATA, 1574 TO 1821

	Laslett (1574-1821)	Loughborough (1851)
TOTAL POPULATION		
Sex ratio	91.3M : 100F	91.8M : 100F
Proportion married	33.4%	35.4%
Proportion widowed	6.2%	5.9%
Proportion single	60.4%	58.7%
MALES		
Married	34.8%	36.6%
Widowed	3.5%	4.6%
Single	61.7%	58.8%
FEMALES		
Married	32.1%	34.3%
Widowed	8.7%	7.2%
Single	59.2%	58.5%

e) There were forty-nine married women in the town whose husbands were not at home on Census Day. The age structure of these married heads of households as compared with that of all married women is given in Table 7:16.

TABLE 7:16

AGES: MARRIED WOMEN HOUSEHOLD HEADS

AGES	MARRIED HEADS	ALL MARRIED WOMEN	PROPORTION
17-26	2	345	1 : 173
27-36	14	569	1 : 41
37-46	14	451	1 : 32
47-56	13	369	1 : 28
57-66	5	199	1 : 40
67-76	1	59	1 : 59

It will be seen that the proportion of married women heads of household, as compared with all married women, rose sharply in the late twenties/early thirties, when some husbands may have found work away from home but could not, or would not, find new accommodation for their wives and young families. The proportion

remained generally steady between the late twenties and the middle sixties, with the highest point between ages forty-seven to fifty-six. The phrases used by the enumerators to describe this situation were non-committal. Some quote the wife as head of household, others quote her as wife to a head who does not appear on the census, and it may well be that the second type of entry was used to imply that the husband's absence was only temporary.

It will be of interest to compare these women with single women who were also heads of households. Their age structure is given in Table 7:17.

TABLE 7:17

AGES: UNMARRIED WOMEN HOUSEHOLD HEADS

AGES	SINGLE HEADS	ALL SINGLE WOMEN	PROPORTION
17-26	16	832	1 : 52
27-36	30	210	1 : 7
37-46	13	80	1 : 6
47-56	11	38	1 : 3
57-66	5	24	1 : 5
67-76	4	14	1 : 4

Their proportion also increased in the late twenties/early thirties, but the rise was very sharp indeed, embracing women who were then over the average age for marriage. There is perhaps a certain air of inevitability in the statistics as single women steadily arranged their affairs to match their situation. Only twenty-three of the forty-nine (47 percent) of the married women had been born locally, as compared with forty-nine of the seventy-nine (62 percent) single women householders and it is therefore possible that some of the former had moved into Loughborough because it was a convenient centre from which their

husbands could travel to do their work. Twenty of them all had no work and therefore could have been fully supported by husbands who were normally at home or who kept in close contact. The proportion of those who did work, however, was higher than that for married women as a whole and three were paupers on out-relief.

Only one unmarried woman head was without employment and she actually had a family of seven lodgers living with her. Twelve of them had private incomes of some kind, thirty-three were in textiles and clothing, six were teachers, five were washerwomen/manglers, four domestic servants living out and another four were shopkeepers. There were also a farmer, an innkeeper, two beersellers, a needlemaker, a matmaker, a confectioner, a lodging house keeper, three dealers and the post mistress. Only one was a pauper on out-relief. The married women worked mainly in the hosiery ancillary trades, although there were three dressmakers and three shopkeepers. There had, therefore, been more opportunities for the single women to stretch the range of occupations available to their sex to the limits. They were evidently ladies of some enterprise, expecting to work to support themselves in their own homes.

Twenty-two of the married women still had only nuclear families with them, that is, they apparently had no need to invite kin or lodgers to stay with them, which might have been the natural reaction of a deserted wife with a young family. Only a few of the single women had children, families here con-

sisted usually of brothers and sisters with, in some instances, an aged parent. Ten of the forty-nine married women were without families, but fifty-five of the seventy-nine single ones were in this position. If we exclude the Convent, where obviously an unmarried woman was the head, the households of the single women included an average of 1.02 people who were not related to them, whereas households of the married women accommodated an average of only 0.70 non-kin. 2.4 percent of all married women in Loughborough were acting as heads of household on Census Day. Throughout Leicestershire there were 2,307 wives, out of 40,822, in this position, that is, 5.6 percent.³³ Their lives had obviously presented them with challenges different from those of the single women heads, and each group had dealt with its problems in its own way.

f) There were 1,075 households which included co-residential groups, those who, for various reasons, had left their nuclear families to live elsewhere. The fact alone illustrates the greater complexity of human relationships at this time, when other relatives, lodgers and servants could live in the same house, as compared with 1986, when co-residence of a grandparent is tolerable only in an annexe, resident domestic servants are virtually unknown and where the lodger group looks for - and finds - its own flats. A kind of separate living may have been sought by many in 1851, but the needs of the larger family, the financial help provided by income from a lodger, or the domestic help available from servants, was considered a greater priority. Some co-resident groups were quite high, especially those in lodging houses. One medical practitioner was head of a total

group (that is, family and others) of seventeen, a printer of one of fifteen and a clergyman, who was also a shopkeeper, of one of fourteen. There were 2,120 people living in the town (other than those at the Convent, the Barracks, the Workhouse or the Hospital), living in inns, lodging houses or - the largest group of all - with families, and, as far as can be seen, sharing the same table, with the exception of most domestic servants, and very probably as far as relatives were concerned, sharing the same bedrooms or beds.

The scale of accommodation available obviously depended on the size of the family and the house it occupied. Of the nuclear families of only one (people with no spouse or children living with them), 73 percent had co-resident groups. For those with families of two to five the percentage varied between 45 and 40, for those of six and seven the figure was 33 percent to 31 percent respectively, for eight it was 25 percent and for nine it was 17 percent. It will be seen, therefore, that the number of groups accommodated declined as the size of families rose, except for those of ten, where the percentage was 39. There were only twenty-three families in this group and so the sample is small enough to be untypical. The seven families of eleven had no co-residents. Enough was obviously enough. The average group was composed of 3.69 members of the nuclear family and 0.88 other, that is, 4.57, as compared with a mean household size in England and Wales in 1851 of 4.83. ³⁴

f(i) Of those not in nuclear families, the 635 people classified here as 'Kin' offer much information about the

extended domestic commitments of the town. No fewer than 446 of them had actually been born in the locality and 184 were under ten years old. Here was the group whose members, for pressing domestic reasons, were accepted by relatives, whose concept of family had by necessity to be less rigid than that of today. One family in every 3.8 provided a home for an 'in-law', a niece or nephew, or a grandchild. An age grouping will demonstrate how widely this notion of an active kinship was interpreted:

TABLE 7:18

CO-RESIDENT KIN BY AGE GROUPS

AGES	M	F
0- 9	91	93
10-19	81	95
20-29	35	73
30-39	12	34
40-49	11	19
50-59	10	8
60-69	12	24
70-79	11	14
80-89	5	6
90-99	0	1
	<u>268</u>	<u>367</u>

Twenty-seven of the children were still under one-year old, but it should be borne in mind that sixty-one married daughters or sons also lived with their parents. Some of the children would be theirs and others were those of unmarried daughters. Nevertheless, even in the 0-9 age group, forty-two boys and forty girls were unaccompanied by parents. The numbers scarcely fell while the children were in their teens but after that it may be assumed that marriage, or return to home because of their earning capacity, or movement out of the town, reduced the obligations of receiving families. The care of the old was also a responsibility, however, that fell on the children or grand-

children, in view of the fact that the 'Bastile' was the alternative. Forty-five widows and twenty-four widowers lived with relatives. It has already been pointed out that mothers were more welcome as co-resident kin than fathers. Females of all ages comprised 57.8 percent of those living as kin, perhaps simply because there were more of them in the population as a whole. The proportion of unmarried kin was almost the same between the sexes, the actual numbers being 279 females and 206 males. Beyond the early teens, female co-resident kin were more numerous in all age groups but that of fifty to fifty-nine. There were fewer unmarried men; they found it easier to make their way in the world. The pressure of accommodation was, as we have already observed, transferred to where it could be more easily accepted. Four hundred and fifty-three of all kin were living with families of one, two or three people, that is, there was one person so classified living with 2.9 of such families. Only twenty-eight were with families of seven or more, that is, one to every 9.4 families.

There was also thirty-nine married daughters and twenty-two married sons living with parents. The married girl of sixteen was with her parents on census day as well as one aged seventeen and another aged eighteen. The incidence is highest in the age group 20-29, where there were twenty-four. After that it is spasmodic, the oldest being a woman of forty-seven, probably looking after an ageing parent. The youngest married man of eighteen was also living at home, but no married sons lived with their parents beyond the age of thirty-three. Fifteen of them

were in their twenties. In general, therefore, the arrangement was not considered permanent and was probably terminated when circumstances permitted, with the qualification that daughters were either more likely to be needed longer by their parents or that they themselves were a little more reluctant to leave home. All but one of the married sons were at work, but seventeen married daughters had no employment. None had other sources of income. With two exceptions (a washerwoman and a domestic servant) all the daughters with work were in hosiery and textiles, the sons following a much broader range of occupations, although six were framework knitters. They were all able to stay in the family home because the primary nuclear families were quite small, forty-three of the total of sixty-one being of four or under. Six of the women and five of the men lived with one parent and house-sharing therefore had mutual advantages, especially when the daughters or daughters-in-law were at home during the day. Some had children, but although they were families in their own right, it does not appear that they lived as such. At least, the enumerators did not regard them as secondary households. Complete separation of families would have been possible only in the larger houses.

Twenty-one married daughters lived without their husbands in their parents' homes on census day, four of them had one child and two had two children each. Only seven married sons lived alone with their parents and none of them had children with them. The other married children lived in the parental home with their partners. Fifteen of these couples had no children,

fourteen had one child, two had two children each, and two had four children each. One of the four-children couples lived with a widowed mother, and the other with a widower father, otherwise one grandchild, and occasionally two, seems to have been the generally accepted maximum. In addition to these 'hidden' nuclear families bearing relationship to heads of household, there were another four at the Barracks, two families of three (that is, a soldier, his wife and one child) and two families of four. The wives of these soldiers were almost certainly on the regimental strength, the usual entitlement being four to six for each hundred men. They lived under the same Army regulations as the men and, when the unit was overseas, performed ancillary duties, such as doing the washing or tending the sick.

A general comment may be made here on the cycle of poverty. We need not doubt that in times of great stress relatives would care for children when it was better that they should not be at home. Orphans were also accepted. Figures for Preston suggest that nearly a third of all children could expect to lose one parent and 8 percent both, before they were fifteen, 'yet hardly any orphans grew up in the workhouse'.³⁵ Such children were brought up by kin or by neighbours (and quoted in the Loughborough census as lodgers), helped by the Guardians. Other low points in the cycle which governed the poor man's life were as much causes of stress as death or illness. The place of the family in the cycle depended on the age of the parents and the number and ages of their children. When some families were in a low phase, related families may have been in

a higher one and, on this basis, short-term help could be given, both sides knowing that, as the cycle turned, reciprocation could be expected. Co-resident kinship could also involve a degree of permanence, an indication of which is the proportion of male kin who followed the same occupation as the head of the household. This was so for thirty-seven of the 152 in employment, that is, 24.3 percent. By comparison, 274 of the 789 employed sons living at home followed the same occupation as that of their fathers, the percentage being 34.7. Anderson implies that in Preston occupation was also an important factor in the relationship, holding that towns undergoing industrialisation sometimes used kinship ties as a basis for the solution of new problems that arose during adjustment. He does not believe that this necessarily led to stable relationships. He feels that in Preston short distance movement into the town and general population turnover meant a 'kinship situation weak on trust, strong in calculativeness, but exhibiting a strong element of dependence on short run and low cost relationships'. That may be so; in Loughborough ninety-one of the 635 kin were aged fifty or over; their ages suggest that their presence was long-term and that here the bonds of extended kinship were probably strong. It is also difficult to believe that the other 544 were all accepted reluctantly and that they aroused no reciprocal feelings of affection.

The Preston migration pattern was similar to that in Loughborough, only about 2 percent of the sample being born more than one hundred miles from the town, excluding the Irish. There

could, therefore, have been some movement arising from family quarrels. Since by their middle-teens children could earn enough to pay some of their wages to their parents for their keep and still have some pocket money for themselves, they could also pay their own way. After any domestic explosion, a move could be made, perhaps to nearby understanding kin. The other options were for the estranged members to go to a house where they could lodge, the final stage being a lodging house or no roof at all. Young people in large lodging houses in Preston were, believes Anderson, persons who had largely terminated relationships with kin and he quoted the Chaplains' Reports on the Preston House of Correction: 'In many of these large lodging houses no questions were asked, no moral re-inforcements imposed. Family values, indeed, seem to have been systematically attacked.' 36

In the countryside, there was little opportunity for members of a nuclear family to live apart from each other, movement within a village, for example, being more obvious and productive of comment than that within a town. There were also greater social pressures forcing families to keep together, alternative employers were harder to find and any future inheritance, either to a better job within the community or to property, would certainly have been affected. These sanctions were much weaker in the industrial areas. There was a wide range of occupations and few families had a stake in the land. Laslett found that in pre-industrial England there was no great incidence of kinship co-residence. It was perhaps, therefore, a phenomenon of the expanding industrial society. Anderson's

figures bear this out. Co-resident kin in his Preston sample were 7.4 percent of the population. The figure for Loughborough is 5.7 percent, since the town was at an earlier stage of development.

f(ii) Laslett also found that lodgers were few in pre-industrial England, but they were the largest element in co-residing groups in the Loughborough of 1851, suggesting that this was another problem of industrialisation. Anderson traced 11.2 percent in Preston as compared with 6.1 percent in Loughborough. He thinks that when a family left the town, the children who did not wish to go remained as lodgers, a further example of family fluidity produced by industrial flexibility. The Loughborough evidence is that lodging was not always evidence of a complete family break-down; lodgers themselves were often living as nuclear families, although without the advantages of their own homes. There were 305 female and 381 male lodgers in Loughborough. Their average age was 29.29, that is, rather higher than that of the population as a whole. There is, of course, a difference between a boarder and a lodger and it must be assumed that there were both groups in the town. The census enumerators used the word 'Lodger' to describe any non-relative paying for accommodation except, rather curiously, at the Convent, where all but the senior nuns were described as 'Boarders'. The term may have been thought the nearest available to 'Member of the Community'. Table 7:19 refers.

TABLE 7:19

AGES OF LODGERS BY SEX

AGE	M	F
0- 9	33	50
10-19	52	58
20-29	127	110
30-39	58	29
40-49	42	17
50-59	30	14
60-69	26	17
70-79	10	8
80-89	3	1
90	0	1
	<u>381</u>	<u>305</u>

Most of the very young children shown in the table were living with parents who were themselves lodgers, including some married couples, but some lived with widows, single women, or married women not living with their husbands. In this sense, the nineteenth century family would not, or could not, always meet its obligations, and some children were apparently victims of 'the common Victorian habit of boarding out children for whom there is no room at home'.³⁷ Another possibility is that some parents were 'on the tramp' in search of work and had no kin with whom to leave young children. Two girls, one aged five and the other nine, were actually boarders at a 'Ladies' Seminary' in Gregory Street, but others, including two under one year old, were with people who had no obvious close connection with them. The group is, however, very much smaller than that of unaccompanied co-resident kin of the same ages. There may have been a social loss in lodging from the children's point of view, but it does not follow that they arrived as strangers in the households where they were placed, or were treated less well than if they had been sent to kin.

Those lodgers in Loughborough aged ten to nineteen who were single and living unaccompanied by a parent comprised 75.2 percent of the total in the age group, forty boys and forty-two girls being in this position, although four of the girls were at the Ladies' Seminary and another two were boarders with the Head of the Girls' Grammar School. If we exclude these six, then there were more boys lodging unaccompanied than girls. Seventy-six of the total in this age group were aged fifteen and over. There was a marked increase in the number of lodgers after age fourteen. After age nineteen the balance of numbers shifts firmly towards men, to whom the word 'lodger' seems more appropriate, even today when attitudes towards the sexes have changed so much.

Most lodgers were single, 205 females and 254 males being so, but, as the table shows, 430 of them all were less than thirty years old. There were also thirty widows and forty-seven widowers. The fact that 360 of the 686 lodgers had been born locally gives more substance to the idea that the social structure of the mid-nineteenth century town was based to a certain extent on improvisation. A section of the community had to deal with life as best it could. Of the eighty-three aged nine and under, sixty-one had been born in the district and had perhaps spent their lives in other peoples' houses.

Householders following a very wide range of occupations took in lodgers. Accommodation requirements, and services

offered, no doubt varied. A framework knitter giving evidence before the 1845 Commission appeared to charge for a room and cooking only, the implication being that the lodger provided his own food. This was, of course, the general practice in lodging houses. Children, however, presumably received food with the family and slept in the same beds as the other children. Where more than twenty lodgers lived with householders of any one occupation, the details are given below. In many respects, they bear a close relation to the size of the trade:

Framework Knitters:	106 lodgers
Ancillary hosiery workers:	83 lodgers
Low skill workers in 'Other Manufactures':	52 lodgers
Innkeepers:	37 (there were also 18 in beershops and victuallers' establishments, some evidence that the owners were more than beersellers)
Lodging House Keepers:	44 (it will be seen that they had a fairly small share of the 'market')
Shoemakers:	28
Ancillary workers in the service trades:	21
Farm labourers:	27 (a Report of 1867 comments that, unless 'carefully watched' they 'often fill their houses with lodgers' 38)
Annuitants, pensioners:	23 (the occupational description may have referred to some people living on very slender means)
Paupers on out-relief:	30)the function of lodgers with)these two groups is obvious
No occupation given:	21)

Of the 686 lodgers, ninety-five of them (13.8 percent) followed the same occupation as their heads of household, the principal groups being in hosiery and general labouring. Families with lodgers were smaller than the average for the town, at 3.0 as compared with 3.69. This suggests that households with some spare accommodation were more likely to take them in. It also follows that, their co-resident groups (families and lodgers) should be larger, at 6.74 against 4.57. If we exclude from the calculation those in inns, lodging houses, and some other houses where lodgers were taken in on a large scale, the figure becomes 5.93. It can perhaps therefore be assumed that families with spare accommodation tended to overfill it, accepting some discomfort in return for the advantages, perhaps in the company lodgers provided and certainly in the extra money they brought in. The presence of so many people, with no roots of permanent residence or of kinship in the town in which they were living on census night, is an example of social instability within general demographic stagnation. The point has already been made that this was a problem of industrialisation, It was exacerbated by improvements in transport. In Armstrong's York lodgers formed 10.8 percent of the population, suggesting that the railway played a much greater part in the life of the city than it did in Loughborough. Armstrong's figures also include apprentices and trade servants living in. York, as an important centre, would have employed many such. If they are included for Loughborough, the percentage rises to 7.8.

f(iii) Another element in the complexity of some households was that of the apprentice or trade servant living in. By 1851 a certain class of apprentice had some legal protection. The Poor Law Amendment Act had abolished compulsory apprenticeship and prescribed the responsibilities of masters to whom poor children might be sent. In 1851 an Act was passed for the better protection of poor children put out as apprentices or servants.³⁹ There were eighty-six co-resident apprentices, only twenty-eight of whom had not been born locally. Their ages ranged from twelve to twenty, rising to a maximum of twenty-one at age sixteen and declining thereafter. The largest employers of those they described as apprentices were shopkeepers, who had thirty-one. Tailors had eight, shoemakers and housepainters five each, and the others were in trades where it could have been mutually useful to employ young learners, such as blacksmithing, printing or basket making. There were also three surgeon apprentices. The group classified here as trade servants living in covered a much wider age range than that for apprentices; it was from nine to sixty-three. Of the 108, fifty-nine were aged nineteen or under and another forty were aged twenty to twenty-nine, but only eight were aged forty and over. Here is an example of single people needing accommodation, since fifty-six of them had not been born locally. Of the ten females among them, only one was married.

Householders in twenty-seven different occupations employed trade servants. Those occupations employing four or more are shown below:

Bakers:	4
Beersellers and Victuallers:	4
Dealers:	4
Surgeons:	5 (classed by the enumerators as 'surgeons' assistants')
Innkeepers:	6
Chimney Sweeps:	7
Shopkeepers:	18
Farmers:	23 (No doubt many, if not all, of these could have been classified as farm labourers. They were living in and were often described, however, as farm servants.)

Three of those classified as trade servants to surgeons were females. They may have been prudent appointments for male doctors in 1851, or they may have been receptionists. Two women were working and living at the workhouse and individual women were employed by a dealer, a beerseller, a confectioner, a shopkeeper and a framework knitter. Usually framework knitters could find relatives to work a second frame, but here was an exception.

f(iv) There were 384 domestic servants 'living in' the homes of their employers, including one civilian servant of an Army officer at the Barracks. The youngest servant was only nine years old, there were two aged ten, three of eleven and eight of twelve, the age distribution being:

TABLE 7:20

AGES OF DOMESTIC SERVANTS LIVING IN - MALE AND FEMALE

AGES	NUMBER
0- 9	1
10-19	208
20-29	113
30-39	30
40-49	16
50-59	10
60-69	5
70-79	1

Only nine of the 384 were married and still 'in service', but another fourteen were widows. The occupation was therefore one for young single people. There are some signs that the prospect of getting away from home was attractive for some girls. The writer of the report on the 1881 census thought that 'a not inconsiderable number of girls who are not yet fifteen return themselves as being of that or of more advanced age, probably with the view of getting more readily taken as servants'.⁴⁰ Three hundred and ninety-two of all domestic servants were female and most of them had left before age thirty. The general impression given by the literature of the time is that many of them, or at least the younger ones, were 'skivvies', but some improved their positions to become housekeepers and probably companions to the old ladies who employed them. One, Ann Clark, who was the illiterate daughter of a labourer, married her employer in 1852.⁴¹ He was a veterinary surgeon named William Rowland and she had been his housekeeper on the day of census of the previous year. Other domestic servants in the town were cooks and governesses and therefore held positions which carried some status and a little dignity. While many maids gave up their places in favour of marriage, they could not have expected a

very much easier life, although they may have had a little more to offer their husbands in that they might have acquired a little skill in domestic management. The manservants were usually grooms or footmen. A number of gardeners were also recorded by census enumerators and for some of them words were added to the occupational description which implied that they were in domestic service. The distinction is not always clear, however, so for the purposes of this thesis they are included in the 'Agriculture' occupational group.

An indication of the status of many servants is that 102 of them worked in households with families of only one. To some extent the one-person families are deceptive. The Rector of All Saints Parish, for example, was a single man of forty-eight, and therefore his own family, but he lived with a niece, two maids and a housekeeper. Often, however, servants of one-only families were the only other occupants of the houses in which they worked. Generally, the larger the family, the more likely it was to have domestic help. 11.2 percent of families of two, three or four people had servants, but this percentage rose to 17.5 for families of five to eight and, of the admittedly small sample of twenty-three families of ten people, 26 percent of them had servants living in. Domestic servants did not all, however, work for families. Many of the twenty-four employed by innkeepers must have been trade rather than private servants, and similar considerations may have applied to the twenty-six employed by beershop keepers and publicans.

It will be convenient here to consider the seventy-nine domestic servants who did not live in their employers' houses. Sixty-nine of them were unmarried and eight were widows. This branch of the occupation was, therefore, also predominantly one for single people, although it might be thought that it could have been an outlet for married women. The age structure given in Table 7:21 is similar to that for 'living-in' servants, except that it provided proportionately fewer opportunities for those under age twenty.

TABLE 7:21

AGES OF DOMESTIC SERVANTS LIVING OUT - MALE AND FEMALE

AGE	NUMBER
0- 9	Nil
10-19	29
20-29	23
30-39	11
40-49	8
50-59	6
60-69	2

Their status in the houses where they lived was mainly that of a member of the nuclear or extended family. Only ten were lodgers, but twenty-one were daughters, eleven were sons and nine were themselves heads of households. All, apart from some who were visiting, probably had an economic contribution to make to the family.

This may not have been so where servants 'living in' were concerned. The girl remaining at home extended slightly the flexibility of her mother's purse by her contribution, but this would have applied mainly to town girls, who could find other work. Their financial worth to the home may therefore have been

a family factor in keeping them out of domestic service. Country girls had a low economic value but when employed as maids they were 'off the hands' of their parents, who might perhaps have hoped for a little financial help from them. Burnett suggests that a single maid of all work could probably not help at all, and that she existed 'probably' on 'scraps left over from upstairs, with a great deal of bread'.⁴² There would have been no little delicacies to take home even if she could have found the time. Holidays and evenings out were often specifically forbidden in advertisements of the 1850s so not all maids could go to see their parents. Financial help was also unlikely. Young girls could earn as little as £3 p.a.⁴³ Advertisements in The Times offered an average of £11 p.a. for house and nursemaids and generals between 1848 and 1852. A dress 'reputable enough for a middle-class kitchen' might cost £6 in 1862.⁴⁴ Those maids employed by families which did not take The Times may not have needed such dresses, but they would probably not have been paid at The Times average wages.

g) Although illegitimacy decreased during the nineteenth century, it was still a noticeable factor, ten percent of all births in the Union sub-district were such in 1850. In 1851 an unmarried woman with a child was no longer forced into marriage with the putative father; the Poor Law Commission had decided in 1852 that such marriages were often disastrous and were also more expensive in the long run. This did not necessarily help unmarried mothers. Although from 1834 they could apply to Petty Sessions for maintenance orders, there was a prior requirement

for corroborative evidence of allegations of paternity and the Poor Law Amendment Act actually removed the right of women to name a man without such evidence. Incontrovertible proof of paternity must have been hard to obtain although, of course, innocent men were no longer in danger of being named. Where unmarried women were heads of households at the 1851 census, and had children living with them classed as sons and daughters, the position is clear. Where they were lodgers, it is probable that they were the mothers of any children of the same name entered for the same house, but it is also possible that they were older daughters caring for brothers and sisters. The ages of the children are a guide here. For a woman living at home with her parents, it is perhaps likely that any grandchildren were her children, but they could also have been the legitimate children of a married brother, but not living with him. The information given here is, to a large extent, subjective. It does, however, illustrate the ways in which unmarried mothers dealt with their problems. Rather less than half of them lived with their families, or with relatives. Nearly all in this group had one child only, two had two, one had more than two. A few had no occupation, the others quoted the ancillary hosiery or shoe-making trades and some were housemaids. It seems likely that a number of the girls who became pregnant and did not subsequently marry could expect family support. Some of the children were very young and it may be that their mothers married later, but in the meantime many were able to stay at home and mix with neighbourhood friends who might have been, or might easily be in the future, in the same situation.

A third of unmarried mothers were heads of their own households. Rather more than half of these had one child only; among the others, four was the largest number quoted and they appear to have been less restrained than those living at home. All the mothers except one in this group worked in the ancillary hosiery trades or as dressmakers. The exception was a lady who said she was an annuitant. About half had sisters living with them, who were also ancillary hosiery workers. The others had lodgers, in one instance five, all male, and in another probably an unmarried mother and her child. These women could have preferred their own houses for a variety of reasons. One may have been that they preferred to be independent, another that their parents preferred them to move some distance from home. On the other hand, they may have been living away from home for some time.

The remainder were themselves lodgers, and they may be sub-divided into two categories. In the first section, some had one child, some two, but they all appeared to live alone within the household. They were nearly all dressmakers or in the ancillary hosiery trades, although one was a framework knitter. The other section lived in houses where the head was an unmarried male in the same age group as the woman. Generally, these women had more than one child, some had no occupations, some were called visitors, others were classed as housekeepers and this was probably a broadly accurate description.

The children of all these unmarried mothers were, on the whole, young. Among those of mothers living with their parents, eight out of every nine were at home and the child at school or at work was the exception, although two young framework knitters are entered. Very few of the children whose mothers lived independently went to school, but one child in every five in this group was at work, most as ancillaries in hosiery but some as labourers. Only one in six of the children of the lodger group went to work, and none went to school. The analysis given here was based on forty-four cases which seemed to the writer to be obvious instances of unwed motherhood, or rather cases where the mother did not conceal her condition as a single woman. Those in the workhouse were not included in the survey, but it may be mentioned that out of 105 burials of infant children in Loughborough Parish Church Registers for 1850-52, five of the twenty-eight who were illegitimate had been born in the workhouse. ⁴⁵

h) The position of widows, in a society where public expenditure on the poor was kept to a minimum, deserves separate consideration. There were 418 in Loughborough, 296 of whom were heads of their own households. The age range extended from nineteen to ninety-five, and the average age of those who were heads of their own households was fifty-seven. For those living in other households it was fifty-eight. The youngest and oldest lived with relatives and in this context it may be noted that the services of other members of the nuclear family was for many the only acceptable social insurance available. The age patterns

of the two groups are the same. The greatest numbers were in the sixty to sixty-nine groups and generally, for the 47.5 percent of them who were aged sixty and over, the problem of widowhood was allied to that of advancing age. Both groups were helped through the Poor Laws to almost the same extent. Of the householders 16.6 percent were on out-relief, of the non-householders 7.3 percent were on out-relief, and another 8.9 percent were actually in the workhouse. Some widows were, however, able to remain in their own homes because of income from property or through other financial arrangements such as annuities. There were 17.6 percent of them with this source of income as compared with 5.7 percent of those living in the homes of others. For both groups, the hosiery ancillary occupations were, of course, the greatest source of employment, while nineteen of the 122 who were not heads of households were domestic servants. Among the household heads were six beer-sellers/publicans, five innkeepers, nine shopkeepers and four dealers. These occupations, of course, require premises and were therefore closed to the non-head group, but the impression remains that the widow heads of household were the more willing, or the more able, to work hard.

The average family size of households with a widow as head was 2.5. One hundred and two widow heads had no other family member living with them, seventy-two had only one other. One of the three widows aged twenty-three had a family of three children. At age thirty there was a family of four children, at age thirty-four one of five and at age thirty-five, one of six. No widow in this category had more than six children, but one

aged fifty-three still had all six living with her, and one of sixty-six still had five. Forty-five of the 122 non-heads of household lived with only one other person and this was so for many of the domestic servants living in, who must have been companions as much as employees.

The number of widow heads of household is given in age groups in Table 7:22. The columns refer, in A to the number who had pensions or other private incomes, in B to those who were paupers on out-relief, in C to those who apparently had no employment and were supported by those who lived with them, and in D to those in work.

TABLE 7:22

WIDOW HOUSEHOLD HEADS BY AGE GROUPS

AGES	TOTAL	A	B	C	D
20-29	8	1	1	0	6
30-39	25	0	11	1	13
40-49	59	7	0	4	48
50-59	68	6	4	10	48
60-69	74	21	13	8	32
70-79	50	9	15	13	13
80-89	12	2	5	5	0
	<u>296</u>	<u>46</u>	<u>49</u>	<u>41</u>	<u>160</u>

More than half of these widows worked, the most common employment being in ancillary hosiery work, done by seventy of them. The frequency with which this group of occupations has been quoted in this chapter points to the depths to which hosiery penetrated society, offering a little to very many people. The figure of eleven on out-relief in the age group 30-39 is explained by the size of their families.

Table 7:23 gives details for widow non-heads, on the same basis as that for widow heads, with an additional column (E) for those in the workhouse.

TABLE 7:23

WIDOW NON-HEADS OF HOUSEHOLD BY AGE GROUPS

AGES	TOTAL	A	B	C	D	E
10-19	1	0	0	0	1	0
20-29	3	0	0	1	2	0
30-39	18	0	2	3	11	2
40-49	17	0	0	3	14	0
50-59	17	3	0	2	9	3
60-69	31	1	5	14	10	1
70-79	25	2	1	15	2	5
80-89	8	0	1	7	0	0
90+	2	0	0	2	0	0
	<u>122</u>	<u>6</u>	<u>9</u>	<u>47</u>	<u>49</u>	<u>11</u>

Only 40 percent of widows in the group were therefore working as compared with 54 percent of those with their own households. A greater proportion of them (54 percent) were also over sixty years old, an age which had been reached by only 50 percent of the widow household heads. Far fewer of them had pensions and annuities (5 percent as compared with 17.6 percent), but the proportion of paupers in the two groups is almost the same, as has already been noted. Widows living with relatives also seemed to have rather less of the spirit of independence. Although only a few of them had a little money of their own, there was either not the same need to work or perhaps less ability to do so. Those in the workhouse were presumably defeated women.

There were also 249 widowers living in the town, the youngest being twenty-four. Their condition does not attract the same sympathy as that of widows, but, nevertheless, they had

lost their partners and must have been faced with problems, even if they were more able to avoid acute poverty. The difference in this respect was not, however, as great as might be supposed. 11.6 percent of them were in receipt of relief of some kind, as compared with 16.5 percent of widows. One hundred and thirty-nine of them were heads of their own households and their average age was a great deal lower than that of widow heads, at 38.16 as compared with 57.11. Only one of the householders was on out-relief as compared with forty-nine widows, a clear indication of their earning capacity, since only another thirteen had incomes of their own. This is to be expected, however, because they were a much younger age group.

In the group of widower non-householders the proportion of paupers in the workhouse (twenty-one of them) was far higher than for the women, at 19 percent as compared with 9 percent. This state of affairs is some evidence of the greater inability of men to look after themselves, or is perhaps an indication that they were less welcome in the households of a married son or daughter. Among those aged eighty or over, five of the ten widowers, but none of the widows, were in the workhouse. The percentage of all non-householder widowers in work was 33.6 percent as compared with 40 percent of widows similarly placed. On the whole, therefore, it would appear that the women met the difficulties of their situation rather more actively than the men, some of whom gave up their homes at an earlier age and were less likely to keep on working.

Family sizes of those with their own households varied little between the sexes. If the missing partner were to be added, the figures, 2.3 for men and 2.5 for women, would still be lower than the average for all families. Among the non-householders, eight widows and ten widowers lived with one or both parents. These were obviously younger, the average ages of the women being thirty-six and of the men thirty-five, but even so one widower was fifty-two and one widow was fifty. The ten widower sons all worked, but among the widow-daughters, there was an annuitant, a pauper on out-relief and one with no occupation. Two widows lived with a parent who was a pauper on out-relief but all the heads of households of the widower sons were themselves working. It seems that, in this little group, the widow's portion was the smaller.

j) We may now examine the situation of those men and women who, having passed the average age for marriage, were still single. There were 1,463 unmarried females from the age of puberty (reckoned as fifteen onwards). Four hundred and seven of them were over twenty-five, that is, they had reached an age when they had seen many of their contemporaries married. Sixty-eight of them were heads of their own households, 129 were living with their parents and a further sixty were related in some way to the head of the household in which they lived. A further sixty-five were domestic servants 'living in', fifty-six were classified as lodgers and seventeen as visitors, while

twelve were in the workhouse. Their most common occupation, apart from ancillary hosiery work (104 women) was domestic service, ninety being employed in this way, including the sixty-five quoted above as 'living in'. Other occupations employing ten or more were millinery (fourteen - the work often being described as 'bonnet making'), dressmaking (twenty-eight), teaching (sixteen), washerwomen or manglers (ten). Twenty-six of them had incomes from pensions, investments or property, while fifty-seven had apparently no occupation. There were two paupers on out-relief in addition to those in the workhouse.

Sixty-eight of the women lived in households where the head had a private income, six with clergymen, nine with surgeons and six with teachers. There was a tendency for daughters of men in these occupations to have no paid employment. At the other end of the social scale seven single women were living in beer houses and two in lodging houses. The others lived in households in numbers proportionate to the general size of the head's occupation. For example, twenty-five lived with framework knitters and nineteen with shopkeepers. Table 7:24 shows the progression of single women in the various categories of relationship in three columns, for ages greater than twenty-five, greater than thirty and greater than forty.

TABLE 7:24

SINGLE WOMEN, THEIR RELATIONSHIPS TO HOUSEHOLD HEADS,
AS PERCENTAGES OF THEM ALL

RELATIONSHIP	OVER AGE 25	OVER AGE 30	OVER AGE 40
Daughter	31.70	26.69	18.18
Household Head	16.71	19.51	22.73
Kin	14.74	19.10	19.09
Lodger	13.76	11.94	15.46
Domestic `living in`	15.97	14.80	12.73
Visitor	4.18	4.77	7.27
Workhouse	2.94	3.18	4.54

The proportion of those living at home steadily fell and one reason for this was very probably that parents had died. As a consequence of this the proportion of householders rose, as well as that of co-residing kin, since daughters may have gone to live with relatives on the death of parents, rather than maintain a house of their own. The proportion of domestic servants `living in` fell steadily, but the pattern for lodgers was uneven. It might have been expected to fall, as older women had had the chance to establish relationships more permanent than that implied by the word `lodger`, but here again deaths of relatives may have left them alone and lodging may simply have been living with friends and making some payment. It will be noted that the proportion of visitors was also highest in the over-forty age group and the term need not necessarily have referred to guests staying for a short time.

For the women over thirty, domestic service, not necessarily `living in`, became the most common occupation, fifty-six of them being employed in this way as compared with fifty-three in hosiery ancillary trades, and this state of affairs continued after age forty, when there were twenty-six in

service as against twenty in hosiery. The other principal occupations for those over thirty were dressmaking (twenty), millinery (eleven), teaching (seven), washing and mangling (seven), shopkeeping (five) and general dealing (four). Thirty-seven had no occupation. Among those over forty, only dressmaking (five), washing and mangling (four) and shopkeeping (three) were of importance. There were twenty-one with private incomes of some kind among those over thirty and ten were in the workhouse or on out-relief. Among those over forty the figures are sixteen with private incomes, sixteen with no employment, and seven either in the workhouse or on out-relief. The percentage of those with private incomes rose steadily from 6.39 at age over twenty-five to 14.55 at age over forty. That of those in receipt of public assistance rose a little from 3.44 to 5.45 and that of those not employed remained reasonably constant, all three groups being within 14 to 15 percent.

There were 1,204 single males aged fifteen and over, but only 307 over twenty-five. In theory, at least, they could all have married and there would still have been a surplus of a hundred women. A table of relationships for the same three age groups as those for single women is given in Table 7:25.

TABLE 7:25

SINGLE MEN, THEIR RELATIONSHIPS TO HOUSEHOLD HEADS,
AS PERCENTAGES OF THEM ALL

RELATIONSHIP	OVER AGE 25	OVER AGE 30	OVER AGE 40
Son	22.47	13.98	6.93
Household Head	17.59	20.96	28.72
Kin	10.75	13.44	13.86
Trade Servant	5.54	4.84	2.97
Lodger	30.94	34.41	34.65
Domestic Servant	2.93	2.15	0.99
Visitor	4.56	2.69	0.99
Prisoner	0.99	1.08	Nil
Workhouse	4.23	6.45	10.89

If a comparison is made with the table for unmarried women, it will be seen that, while the largest group of women over twenty-five was that living with parents, and was still so for women over thirty, it was not so for men in any age group. Although the men in the over twenty-five group were not very much more likely to be householders, they did become more so from age thirty onwards, and in all age groups fewer of them lived with kin. The percentage of male lodgers was, however, always more than double that of women. There was the practical consideration that the chances of becoming domestic servants living in were so much more restricted for men that a substantial source of accommodation was not available to them. There was some little compensation in that the unmarried trade servants living in were all male. Proportionately more men were also in the Workhouse. Three of them over twenty-five and two over thirty were also in the Prison on the night of the census. Occupational opportunities for men were much greater. Although no comparison can be made with women in terms of specific employment, it is possible, however, in certain other areas. There were sixteen unmarried men over twenty-five with incomes from investment, pensions or property as compared with twenty-six women, that is, the women were proportionately a little better provided for in this respect and this advantage remained with them in the other age groups. Fewer single women were in the workhouse, but very many more (14 percent) had no recorded occupation. The comparable figure for men is 2.4 percent.

k) We may now consider the influence of place of birth on social structure. In 1851 the distribution was:

TABLE 7:26

PLACES OF BIRTH BY SEX

SEX	LOCALLY BORN (L)	BORN ELSEWHERE IN LEICS.(C)	OTHERS (E)
Males	3,864	521	981
Females	<u>4,191</u>	<u>648</u>	<u>1,006</u>
	8,055	1,169	1,987

The proportions of the sexes born in each area are roughly comparable, although there were proportionately more females than males born elsewhere in the county. As we have seen, country girls were attracted to domestic work in the town. A study made in 1979 of variations of origins within local settlements shows that the percentage of those moving into the area from outside the county was generally the same as in 1851. There was 17 percent more movement into the town from elsewhere in Leicestershire, but generally speaking the 1979 figures suggest that patterns of migration were not unusual in 1851; indeed they had not changed substantially over the 128 years between that census and the 1979 study.⁴⁶ Levine also found in pre-industrial England, when the population was 'highly mobile', especially among unmarried adults lacking stable positions in their community, mobility 'rarely involved long distances'. More than fifteen miles was unusual.⁴⁷ We therefore have a continuing tendency for people in the United Kingdom to move no further than they need.

There was a marked difference in the average ages of the three groups in 1851:

L	C	E
22.9	35.3	33.6

This arises from the very high proportion of young people in the 'L' group, which is reflected in the table of relationships, (Table 7:27) given as percentages of the total in each category:

TABLE 7:27
RELATIONSHIPS BY PLACE OF BIRTH

RELATIONSHIP	L	C	E
Head of Household	16.5	30.3	28.2
Wife	12.0	24.4	20.4
Son	22.9	7.7	8.5
Daughter	33.4	11.5	11.1
Kin	5.0	5.5	6.1
Lodger	4.0	7.3	12.9
Domestic Servant	3.1	6.7	5.7
Trade Servants and Apprentices living in	1.2	3.1	2.6
Visitors	0.9	2.4	3.2
Workhouse	1.0	1.1	1.3

Clearly a higher percentage of those in groups 'C' and 'E' were heads of households or their wives, because they were, generally, older people. Sons and daughters were, however, much more frequent in the 'L' group. Other percentages shown in the table respond more to the nature of the relationship rather than to age.

If we remove from the calculations all the population under the age of twenty-one, because of the heavy bias of the locally-born in that group, the comparative marital conditions of

those in each of the three birthplace groups become:

TABLE 7.28

MARITAL CONDITION BY PLACE OF BIRTH (PERCENTAGES); AGES OVER 20

	L	C	E
Married	65.7	67.8	66.5
Single	23.5	19.8	21.4
Widowed	10.8	12.4	12.1

The balance of single persons born locally has not been removed, but it has been greatly reduced, while the proportion of widows and widowers born in the district is shown to be lower. The figures illustrate the fact that people who had moved into the town, and were aged twenty-one or over on Census Day, were more likely to be married, or to have been married, than those born there. They were also rather older:

	L	C	E
	40.2	43.0	42.6

If we look at the population structure at ten-year intervals, it will be seen that the totals in the birthplace groups steadily move against those born locally:

TABLE 7:29

AGE STRUCTURE BY PLACE OF BIRTH IN TEN YEAR INTERVALS

AGE	L	C	E	P
21	158	21	34	25.8
31	61	13	22	36.5
41	60	13	31	42.3
51	43	15	22	46.3
61	26	7	15	45.8
71	10	3	8	52.4
81	3	0	2	40.0

Column 'P' shows that the proportion of non-locally born people became generally higher as the sample of the population became older. In other words, had there been a '21 Club' in the town and all those eligible had attended, nearly three-quarters of them would have been locally born. At a '51 Club' meeting, however, about half would have been born elsewhere.

Of the 8,055 locally born people in the town, 1,952 had been born, not in Loughborough, but in surrounding villages within a broadly defined five mile radius from the Market Place. The numbers emigrating to the town from the villages around reflect the sizes of those villages in the general sense that the highest five, in order, were:

Shepshed
Hathern
The Woodhouses
Quorndon
Barrow

They were also the largest, with the exception of Hathern, which was smaller than Wymeswold, placed eighth in the list. Hathern is nearer to Loughborough. The relation between the size of settlement and the extent of migration is more remote after the first five, when the proximity to the town of the small Thorpe Acre and Woodthorpe districts intervenes, to place them both above Wymeswold. The Nottinghamshire villages did not turn so much to Loughborough. Hathern, in Leicestershire, smaller than either the two Leakes or Sutton Bonington, sent nearly twice as many emigrants to the town as the three places put together. Hoton, also in Leicestershire, a little larger than Normanton

(420 in 1851 as compared with 393), lost more than twice as many to the town. It could be argued that Hathern was nearer to Loughborough than the three Nottinghamshire villages, but that consideration does not affect the comparison between Hoton and Normanton, since the Nottinghamshire village is a little nearer. The apparent restraining effect of county boundaries on population movement is therefore perhaps worth examination on a larger scale. The administrative district of the Poor Law Union did not appear to be an important feature. The Leakes and Sutton Bonington were within it, Quorndon and Barrow were not. The county of Nottingham as a whole, however, supplied the majority of Loughborough immigrants in the 'E' category, and this may also arise from its proximity as compared with other counties.

1(i) Those members of the population whose poverty can be established without doubt are the paupers, because no relief would have been made to them without careful examination of the circumstances. There were ninety-nine on out-relief.

TABLE 7:30

PAUPERS ON OUT-RELIEF: AGE GROUPS BY SEX

AGE	FEMALE	MALE
20-29	2	1
30-39	14	0
40-49	1	1
50-59	5	3
60-69	22	6
70-79	19	11
80-89	7	7
	<u>70</u>	<u>29</u>

It will be seen that the majority were women, including a fairly young group. Fourteen of the sixteen under age forty were widows, qualifying for relief because of the size of their families. Only eight paupers on out-relief were male and under age sixty-five. All the others were either female or old. When it is borne in mind that eighteen of the men were aged seventy or over and that some out-relief for older people was probably required in 1851 because, from 1842 onwards, aged and infirm couples could occupy a separate 'sleeping apartment' in a workhouse and when no such accommodation was available the couples could be given assistance in the town, it will be seen that the local Board did not move very far from the rule that the able-bodied poor were not to be given relief outside the workhouse.

Fifty-two women and seventeen men among those listed above were heads of households, the youngest head being a widow of twenty-three and the oldest a man of eighty-five. Thirteen of the others were living with relatives, eleven were lodgers, often with other paupers, and five were classed as 'wives'. There was also one visitor. The average age of all paupers outside the workhouse was 65.22, the youngest being a man of twenty-two. Sixteen of them lived in the Alms Houses and most of the others in the more populous streets of the town.

1(ii) There were 119 people in the workhouse, the function of such an institution being defined in 1854 by Sir George Nichols, the former Southwell workhouse master, thus: 'If rightly used,

it so far repels applicants for relief as to afford an assurance that nothing short of necessity will lead them to accept it, that all other available means for obtaining support will first have been tried ... Indeed, it is hardly an exaggeration to say, as a general rule, under ordinary circumstances, that a workhouse may be regarded as more or less useful, according to the small number of its inmates'.⁴⁸ Since the local workhouse had 163 inmates and staff in 1841, it had become, by Nichols' definition, very useful indeed in 1851. He thought that the chief fear of the workhouse depended on the restraints it used, principally the separation of husbands and wives, and restrictions on movement in and out of the building (those who left could not return without going through the procedure for admission, as if they were new entrants) and added: 'In all other respects the workhouse inmate is better off than the ordinary labourer. He is better fed, better clothed, better attended in sickness and far more lightly worked'.⁴⁹ The word 'Bastille' commonly applied to the workhouse certainly carried with it the notion of the deprivation of physical liberty accompanied by fear, no doubt in some instances of work itself but in others of the indignities the place inflicted.

There were fewer females in the workhouse, fifty as compared with sixty-nine males. Table 7:31 gives ages in three main groups.

TABLE 7:31

PAUPERS IN WORKHOUSE: AGE GROUPS BY SEX

AGES	FEMALE	MALE
0-19	17	22
20-64	23	18
65 and over	10	29

The number of young people, particularly males, is very high. Some of them were the children of unmarried women in the 20-64 age group; ten were aged ten to fourteen and seven were fifteen to nineteen. Single people were fairly equally grouped between the sexes, there being thirty females and thirty-seven males. None of the inmates under twenty-five was married. Since the Board interpreted the regulations so strictly, it may be assumed that all except the children had disabilities or were generally unable to deal with the problems of the outside world. Of those aged sixty-five or over, many of the females who might have been in the workhouse qualified quite easily for out-relief, but the problems of old men maintaining themselves independently on the small weekly sums provided were much greater.

m) There were many poor people not in the workhouse, most of whom apparently received no other help. Chapman's Yard, off Baxter Gate, provides an example of how they lived. The households were small, the average number in each being 2.64. For these the houses were adequate. Three houses each held six people, however, and conditions must have been fairly cramped. Lack of space was also probably a restriction on the accommodation of lodgers; only four houses had them. Two could

have been unmarried partners of the head of household and in another an unemployed framework knitter, a single man, had five lodgers, including an unmarried woman with three children. Interesting features of the Yard are that few of the wives had work, and seven of the householders were either widowed or were living apart from their spouses. Occupations of heads were also low. Five of them were labourers and six framework knitters. Only one may have had some trade status, a widower wheelwright of fifty-six who lived with a widower farm labourer of sixty-five; two men getting along as best they could.

New Street was a product, like Chapman's Yard, of the rapid expansion after 1809. In Chapter 9 of this thesis, the streets and yards of the town are placed in five social groups. These two fall into the lower end of Group D, that is, both are regarded as being among the dozen areas of the town which were socially the least acceptable. New Street had a higher occupancy rate, at 4.7, than Chapman's Yard, probably because there had been a little more space to build on the edge of the town than in the areas between the principal streets. Only ten houses were occupied at the time of the census and a brief analysis of each household, given in Table 7:32, will be of interest in indicating indicating certain aspects of poverty generally above pauper level.

TABLE 7:32

POVERTY IN NEW STREET, LOUGHBOROUGH

	Head of Household			Spouse		Chn. at work	Chn. not at work	Lodgers
	Sex	Status	Age	Occupation	Age	Occupation		
A.	F	W	54	None	-	-	3	-
B.	M	M	54	F/w knitter	53	none	2	1
C.	F	W	64	Pauper	-	-	2	-
D.	M	M	32	F/w knitter	33	none	-	3
E.	M	M	38	Ag. Lab.	37	none	1	3
F.	M	M	37	Brickmaker	32	In factory	2	1
G.	M	W	36	Ag. Lab.	-	-	-	4
H.	M	M	32	F/w knitter	31	none	-	2
I.	M	M	74	Cooper	66	none	-	-
J.	M	M	31	Cooper	27	none	-	4

The ingredients of the struggle for survival outside the workhouse are here seen clearly. In houses A and C, widows depended on their children, although one had some out-relief. In house G a widower farm labourer had three children too young to find work and he relied on his daughter, aged eighteen, to keep his home together. In eight houses, the male heads all had some work, although the framework knitters and farm labourers would have experienced intermittent unemployment. Only one of the wives and only five children worked, the ten shown above in the 'Children at Work' column including five teenagers or adults. Seventeen children, nearly all young, were not at work. Here family circumstances would improve as they got older and could do some paid work, provided that no more babies arrived. All the children for whom occupations are quoted were engaged in hosiery ancillary work and this fact illustrates how the minor operations in the knitting cycle were seized upon by poor families to maintain themselves around subsistence level. There were only four lodgers, two at one house occupied by elderly

people. House E held seven people, but sleeping accommodation may have been possible on this basis:

Head and wife and baby;

Lodger; Other three children in any corner, or two boys may have been together and the daughter aged fourteen given a corner of her own.

It is likely that all these families found life a struggle and their bitterness may not have been moderated by exhortations to accept meekly their stations in life. Apathy may have had the same effect, however.

n) Poverty was only one of the faces of Loughborough. Although the substantial detached and semi-detached houses that now line the Ashby and, to a lesser extent, the Forest Roads had not been built in 1851, there were a number of residences in their own parks, which are clearly identifiable as the homes of the local rich. No local lace manufacturers had been able to qualify for this group; those in hosiery had been more fortunate. They had been careful and had survived. At the census, Fairfield (now a school) was occupied by a widow of fifty-four, Mary White, classed as a property owner. She lived with two single daughters, who had no occupation, and two single sons, both in hosiery (the White family was prominent in the industry). The family had three female and one male servants. Southfields (now Council offices) was occupied by a widow of seventy-eight, Mary Paget, of another hosiery manufacturing family, herself an annuitant, who had as visitors a married couple in their sixties. She employed one

male and two female servants. At Burleigh Hall (later demolished by Loughborough University) the Tate family was not in residence, but two female and one male servants were there. At Island House (demolished by the Borough Council) William Palmer, aged fifty-five, a retired grocer and an annuitant, lived with his wife and their five children, none of whom worked or were at school, and two maids. At the Elms, now hidden away among semi-detached villas, Henry Warner, a single farmer aged fifty, lived alone with his one male and two female servants. E. Warner, another hosiery manufacturer, lived on Ashby Road. He was married with two very young children and the family of four employed four female and two male servants. The name of the house, 'The Cottage', may be regarded as whimsical understatement. It was a mansion and in the grounds where it once stood there are now twelve detached and fourteen semi-detached houses, all with front and rear gardens. The two Anglican rectors also lived in some style. The Rector of Loughborough had a house now demolished apart from some of its medieval structure. Reference has already been made to his household. The Rector of Emmanuel lived at 'The Grove' on Ashby Road, (now a University Hall). He and his wife were childless, but they did have two maids. This is not the world of the Commission on Framework Knitters of 1845. The map included as an Appendix outlines in purple those of this group of houses which fall within its area; they were verdant and well-appointed oases within the workaday town. There were others in an intermediate position. The Toon family, who were solicitors, had a male and a female servant. The General Baptist Minister had a shop in the

Market Place, where he lived with his wife, six children, all aged under fifteen, four trade assistants living in, a maid and a housekeeper. Miss Charnock, the Headmistress of the Girls' Grammar School, lived in rather more restrained fashion in Rectory Place with her mother, a niece, two school boarders and two maids.

The presence of domestic servants in a household is a general indicator that the employer was living consistently above subsistence level, and is used as such in the social structure analysis in Chapter 9. Since that analysis is not based on occupation, it will be of interest to note here the groups which employed servants in the greatest numbers and therefore had some social status in the town. Although family size was a factor in the decision to employ servants, people had them in numbers related to their wealth, not to their needs. Houses where servants 'lived in' must also have been larger because they had, in many instances, to be accommodated separately from the family.

TABLE 7:33

AVERAGE NUMBER OF DOMESTIC SERVANTS PER HEAD OF HOUSEHOLD

OCCUPATION	AVERAGE NUMBER OF SERVANTS
Banker	5.00 (all serving one family)
Veterinary Surgeon	2.50 (only two families)
Surgeon	2.00
Solicitor	1.50
Clergyman	1.42
Large employer	1.00 (few of those who made money out of industry acknowledged it on the census form)
Farmer	0.85
Miller	0.78
Teacher	0.67
Property owner	0.55
Shopkeeper	0.49
Annuitant	0.41
Baker	0.40
Dealer	0.32

On the whole most of those employing domestic servants were the professional class but the agricultural interest was represented by the sequence of farmer - miller - baker, and commerce by large shopkeepers and wealthier dealers.

Two other identifiable groups of people with some money were the annuitants and property owners. Sixty-two males and fifty-four females were classified as annuitants, fund holders, pensioners or 'retired', all these descriptions being taken to mean that they could live without paid employment and were in receipt of regular sums of money. Some Army and Navy pensioners worked and are here classified according to their trade, but the fact that worldly-wise ex-soldiers and sailors did sometimes work suggests that their pensions were not large. This fairly small group of people had twenty-three lodgers living with them, presumably to increase their income above the amount already assured to them. The average ages of the sexes were almost the same, at 62.7 for men and 63.2 for women. More than half of them were in the 50-59 age group, mainly because of the pensioners, while the younger ones were all annuitants or fund holders. The women property owners or annuitants were all either single or widowed. As we have already seen, married women were not property or landowners in their own right because of their legal status. Thirty-one of the thirty-nine land and property owners were locally born and this figure is some indication that their income was generally from the neighbourhood. They were probably a little better off than the annuitants, having 0.55 maids per household as compared with 0.41.

This chapter has examined factors of personal stress and personal security in an east Midlands town in the middle of the nineteenth century. Loughborough had recovered stability after demographic decline and life may have become tolerable by the standards of the time. Underneath the stagnant plateau there was industrial change and the first signs of decay in a domestic hosiery industry which had previously dominated family structure. The chapter is intended to be a comprehensive survey of all aspects of the human condition that can be revealed in such an early census. Social life is seen in a variety of relationships, in considerations of age, sex and status within the household, also in connection with work, an important factor in social intercourse. Industrial movement had produced a floating population of lodgers and, to a lesser extent, one of co-resident kin, where the family extended its reach to care for those members who were not able to live at home. The complexity of household structure arose partly from these two factors and partly from direct economic considerations such as the accommodation of apprentices, trade servants and domestic staff.

Marriage could often take place at an earlier age than in villages with strong agricultural bases. Earlier marriage was more frequent, and made good sense, in framework knitting communities, where a man and his wife could work as a team. Nevertheless, there were some remaining features of the older, more rural, economy, for example in the marriage calendar. The position of women in society was also based on concepts of an

earlier period, although their important function in much of mid-nineteenth century industry should have earned them higher status. There were great contrasts between the rich and the poor, as there are today, but the distinction was greater in 1851 because of the strong emphasis on social class, and because official organisations did so little for the unfortunate and the incompetent.

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CHAPTER 8: SOME SOCIAL ASPECTS OF STAGNATION

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CHAPTER 8: SOME SOCIAL ASPECTS OF STAGNATION

This chapter deals mainly with four types of local social response to economic conditions. Two of them were by the workers, Luddism and the political movement of Chartism. The other two reflect the spirit of the age in the approach of the local governing class to education and the provision of a piped water supply. Widely different reactions are therefore to be examined, out of which will emerge a broad sense of the ethos of a community in the east Midland hosiery region during the mid-nineteenth century. Different groups pursued their interests in different ways. The local debate on education was, for example, between the middle class and the tradesman class, which desired to improve itself. Where Chartism was concerned, the magistrates and gentry intended that it should be put down, because (it seems) they feared not so much the short-term unrest that movement might cause, but rather the long-term risk of electoral reform. The Chartists, however, saw themselves as crusaders for equal opportunities. Although the local population was nearly static in numerical terms and the economy lacked vigour throughout the middle years of the century, this chapter will demonstrate that there was still much activity in other areas of the life of the town.

a) There were, for example, many institutions of a broadly educational nature, and most may be regarded as lower-middle or upper-working class societies. The organisation carrying the most intellectual prestige was the Literary and Philosophical

Society, which charged an annual subscription of five shillings. There were also Agricultural, Floral and Horticultural, Choral, Philharmonic and Mutual Instruction Societies in 1842. By 1854 there was a Working Men's Improvement Society, which had a monthly lecture programme, a library of 400 volumes and charged 1s 6d per quarter subscription.¹ This was more than the Literary and Philosophical Society charged and so many working men probably had to forgo the chance of improving themselves. The town also had a permanent library, which had been established in 1826. In 1846 it stocked 3,400 books and had 130 members, twenty-two of whom were women. In 1851, subscriptions were £1 p.a. with a reduction to 15s for shareholders.¹ The subscription must have been one of the reasons for its limited use in a town with a population of 10,170 in 1841. Another reason may be that given in the Chartist Report of 1839. It was 'scanty and is neither well patronised nor attended'. The Library also maintained a News Room, holding all the 'Popular Reviews and Magazines', and, very probably, newspapers, for a further subscription, which was one guinea in 1876.²

There was also a Dorcas Society in 1844, supplying blankets to the very poor and, by the 1850s, a Clothing Club, as well as the Working Men's Club and Institute, which had three women members in 1850.¹ It could have had some links with the Temperance Society, in that W.M.Cs. were originally established to encourage men to drink in an environment free from the undesirable influence of the beershops; so they may have contributed to temperance, if not to total abstinence. The fact

that a Working Men's Institute later used one of the schools may suggest that the Loughborough group was not primarily a recreational one.³ Night schools for the younger members of the working class also existed by the 1850s. They depended, however, on initiatives by individual teachers and never amounted to a consistent programme of supplementary education. There was a Savings Bank, established under the Acts of 1817/18. In 1848 there were 1,219 depositors, the total balances amounting to £31,298 14s 3d.⁴ The average deposit was therefore between £25 and £26, which was near the national average, but the Sanitary Report of 1849 noticed 'several indications of the depressed physical conditions of the depositors, who are, undoubtedly, among the most prudent and moral portion of the working population of the district.'⁵ There was also a Mechanics' Institute and a Temperance Society, which held an annual gala.

The range of these activities suggests that, on the whole, the working class had little capacity to organise educative groups for itself and that the middle class thought mainly in terms of 'civilising' the poor rather than raising their status. The three activities mentioned at the end of the previous paragraph have been quoted as particular examples of 'middle class voluntary effort designed to transform working class behaviour and ideals'.⁶ Allotment Societies were a type of organisation which also required a positive response from the member, who had to find money for rent and seed (usually potatoes) and do the work. A system was certainly used by framework knitters in 1844, although the Loughborough Society,

with twenty acres of land and 160 members, was not as well placed as those in the nearby villages. Barrow, for example, offered allotments twice the size. Rev. E. Stevenson thought that the Loughborough rent was one shilling per annum, but that the pieces were 'exceedingly small' and also 'rather a long way from the town'.⁷ Activities which may also have included a positive working class contribution to their organisation were the thirty-five charitable and three friendly societies, but Deakin implies that they were 'financially poor'.⁸ J. Parsons, an 1845 Commission witness, said that there were many sick clubs in the town, and his own club paid him 8s weekly when he was ill. He received only average wages for his trade and so it may be assumed that many of his colleagues could have belonged to such a club, had they so wished.⁹ The religious groups provided for their own as best they could, concentrating on the poorer sections of the community, although their own ministers were often more comfortably placed than many in their congregations. Churches did, however, cross the class barriers in some ways, for instance in voluntary food kitchens, which may have been prompted by genuinely charitable motives but which would not necessarily have involved a meeting of minds between donor and recipient.

The complex occupation of 'entertaining' could be followed seriously only by the better-off. For them there were, from the beginning of our period, two sets of Assembly Rooms and in the 1850s the 'county families in the neighbourhood' negotiated with the Town Hall Company for the construction of a

larger and more comfortable room. Here the Loughborough Dispensary Ball was attended almost exclusively by the county families and their house parties.¹⁰ The Quorn Hunt was another select body, while the November Hiring Fair emphasised the gap between servant and master. The town also had an Association for the Prosecution of Felons; the social class of its members was indicated by the fact that they possessed property.

b) So far, this chapter has dealt with general social activities in the town. The specific movements of Luddism and Chartism will now be considered. Had Luddism in Loughborough succeeded in its aims in 1816, some industrial stagnation would have occurred, because machine breaking was a violent rejection of the growth that altered the balance of the forces on which stagnation is based. Chartism took the opposite line; it arose out of the frustration of stagnation after the hopes of the lace trade had disappeared. The Chartists succeeded in the sense that most of their aims were eventually regarded as progressive, the Luddites failed because of their innate conservatism. Machinery was seen by them as a means of oppression used by capitalists to destroy an established and approved production system.¹¹ The activities of both movements locally were also significant in the national sense and therefore this chapter has a wider context.

The Luddite attack on Heathcoat's factory in 1816 has already been mentioned in Chapter 1, which dealt with the developing lace trade. His factory in Mill Street was, however,

one of two in the town, the other being managed by his partner, Lacy. A cut in wages was applied to both workforces, who were working long hours while Heathcoat made the most of his theoretical monopoly under his patent, which ran for fourteen years. Heathcoat, pressed to restore wages to their previous level, refused, but Lacy agreed. His men then persuaded some of their colleagues at Mill Street to approach a group of Nottingham warp-lace hands to take action against the recalcitrant Heathcoat. It was they who organised a Luddite attack on the Mill Street premises in June, 1816.¹² The details of the assault have already been narrated elsewhere and are summarised in this chapter.¹³ Fifty-five machines, and all the lace in them, were destroyed. Firearms were used and a guard was wounded. The attackers were quite clear in their aims; afterwards they called the nightshift together and a Nottingham spokesman made a short speech; referring to the information that had prompted the raid: 'If you know of any frames working under price, if they're a hundred or two hundred miles off, tell us and we'll go and break 'em'.¹³ Then the group filed past the wounded man, shaking hands with him, and got away from the town. The evening had been, from their point of view, completely successful. Five of the six guards on duty had turned a Nelsonian eye and had conveniently gone to a public house. No action had been taken to call out the troops stationed in the town, although the seventeen men destroying the machines were supported on the street outside by about a hundred local sympathisers who must have known in advance, and whose presence could hardly have been concealed.¹² One man, supervising the

frame breaking, said jubilantly to a friend: 'It's a Waterloo job, by God!'.¹³

A.T. Patterson describes the 'Loughborough Job' as 'the most startling outrage of the Luddite revival'.¹⁴ M.I. Thomis regards it as 'the greatest of all Midland Luddite coups'.¹⁵ It caused great alarm in the district and the authorities were particularly active in bringing the offenders to trial. Many workers held deeply felt grievances against the society in which they had no defence against thrusting employers.¹⁶ Hobsbawm regards machine breaking as a way of putting pressure on such employers. It was a method of long standing in an age when 'enlightened orderly bureaucratic strikes' were impossible.¹⁷ He implies that it was a weapon of first resort; Thomis, however, regards it as a weapon to be used when all other attempts (for example, negotiation) had failed.¹⁸ He accepts that Luddism was not political in the sense that Chartism was, but like Chartism it was frequent in textile manufacturing areas. Croppers, for example, were persistently hostile towards machinery. Loughborough was a textile town with a strong new industry producing a machine-made article and the Luddites duly struck. Machine breaking was not here a weapon of first resort, there had been unsuccessful negotiations over wages.

There had also been earlier indications of trouble in north Leicestershire, that is, in the area near to Nottingham. On 10 April 1814, twelve warp-lace frames had been broken at Castle Donington and on 11 and 13 May 1816 lace frames had been

damaged at Loughborough.¹⁹ That year potential machine breakers had dispersed after the Rector, a magistrate, first having prudently arranged for troops to be called out, warned the crowd that he would read the Riot Act if they did not go home. Guards were later employed by Heathcoat for this reason because, said Boden, of unpleasant things that came to their knowledge. During this period, there was also much frame breaking in the Nottingham area. The two earlier Loughborough outbreaks had been isolated incidents, but the great attack of 28 June 1816 was a highly organised assault of a kind which was more common in this late stage of the movement. In earlier years many alleged Luddites were common criminals who broke frames but also looted. There were also those who broke machines as deliberately calculated policy and in 1816 such a force was available in Nottingham.

The brief account already given is some guide to the degree of organisation within the group. Some of the men had been on at least one other job, at Radford, Notts., three weeks earlier. They had been paid for their work at Loughborough, Daniel Diggle spoke after his conviction about those who 'may have furnished money as an incentive to crime'.²⁰ The payment per man for the 'Loughborough Job' was £5 and all expenses.²¹ The group was one of hired experts or, as Thomis says, 'professional toughs'.²² Patterson believes that the identity of these groups, or at any rate the way to get in touch with them, 'seems to have been widely known among the stockings and lacehands of south Nottinghamshire and north Leicestershire'.²³

The gang approached for the 'Loughborough Job' was led by the experienced James Towle, who some thought to be General Ludd (or one of the many Generals Ludd). The attack had been rehearsed, each member of the group knew his task, most performed it without emotion, although a few were under stress. The atmosphere seems to have been very like that of any small-scale military raid on a defended coast. The Luddites had the advantages, however, that all the guards except one had left the factory before the attack and that a group of general sympathisers had come along to support them. There was also, therefore, a high degree of security, indicative of the confidence attacking groups could place in local communities to remain tightlipped.

Some of the men on the 'Loughborough Job' carried arms and this was a serious escalation of industrial action; it was more than a means of putting what Hobsbawm calls 'pressure' on employers. This may have been because elements of the West Norfolk Militia were stationed in Loughborough. Thomis suggests, however, that some of the soldiers had already been 'tampered with' (as the Duke of Newcastle once put it) by the civilian population.²⁴ The Rector of Loughborough had no confidence in their ability to suppress determined rioting. Any English Army unit is ill-prepared by training to turn itself on other Englishmen, especially those with whom soldiers had been associating, in their homes or in beer houses. There was no military intervention during the Loughborough attack although some militiamen probably knew that it was to take place.

Luddites in Nottinghamshire were also adept at avoiding military patrols. Perhaps they knew the times and the routes to be taken. Final evidence of prior organisation is to be found in Thomis' suggestion that an informal committee of warp-lace workers (from Nottingham) and bobbin-net workers (from Loughborough) had made the general arrangements for the attack. ²⁴

The writer of this thesis suggests that no satisfactory reason has yet been given for this late and efficient Luddite assault. Thomis accepts that it rose out of wages and Felkin agrees. The known facts support them both. There must, however, be the possibility that it was a battle in a trade war. The source of the funding for the Loughborough Job is not known. James Towle said after his arrest that it was by collection amongst sympathisers, but he was the ideal prisoner-of-war who in a military context, would have given his number, rank and name only. Thompson suggests that the group might have been paid by lodges of an underground Union ²⁵ and Patterson that it could have been a 'Warp Lace Committee'. ²⁶ If this be so, the men were hired for the purposes of the hirers, who were makers of warp-lace. In 1811 Charles Lacy had been accused by Luddite warp-lace hands of making 'fraudulent' lace (that is, not the warp type). They ordered him to forfeit £15,000 to 700 workmen whom he had thereby 'reduced to poverty'. ²⁷ The outcome is not known, although the punishment in case of default was execution, which had clearly not been carried out. The presence of Lacy in Loughborough, combined with the local wages reductions, may have been sufficient cause for the attack. Although Lacy, very

probably under great pressure, agreed not to impose the reductions and for this reason his factory was not attacked, the firm's machines at Mill Street were destroyed.

Payment of wages below the norm was not the only cause of Luddism. The men in Loughborough, for example, were still earning more than the men who raided their factory. Another was the use of partly-trained workers; the firm must have employed many such as handle-turners. An additional cause was the manufacture of a product the workmen wished to ban.²⁸ Heathcoat was competing against warp-frame Mechlin lace, a very light and airy type stiffened before sale but responding badly to washing. To him this must have seemed the 'fraudulent' article but, for warp-frame knitters, bobbin-net lace was unfair competition. Hobsbawm described the Luddite movement as less 'an agitation of workmen' and more 'an aspect of competition between the backward and the progressive shop-owner or manufacturer',²⁹ Mathias says: 'Machine breaking was not a generalised response to new technology, but highly selective, depending upon local circumstances'.³⁰ Were the local circumstances in Loughborough the strong competitive advantages of machine-made lace? Did Luddism in the town arise out of wage grievances or were they the excuse for a trade war?

c) Because of this important Luddite attack, with an obscure source of funding and equally obscure reasons for its execution, north Leicestershire has acquired an unjustified

reputation among historians as an area of violence. This theme will be pursued here to some extent, since local misinterpretation of this nature will, if frequently repeated elsewhere, distort the national view. E.P. Thompson places Loughborough in an area of north Leicestershire which had a tradition of 'physical force', as a centre of Radical conspiracy.³¹ He is quoting from an article by A.T. Patterson in the English Historical Review of 1948 (p.172). Patterson was himself quoting from the Leicester Chronicle of 4 January 1840, which reported the remarks of C. March Phillipps at the County Quarter Sessions, to the effect that both Loughborough and Shepshed had a reputation for turbulence. He, however, was a magistrate and the major local property owner; he was therefore inclined to see violence everywhere because of the events of 1816. Shortly after those events the Loughborough Hampden Club was formed and its membership rose to about 400. C.G. Mundy, the magistrate who was so diligent in pursuing the Luddites who had done the 'Loughborough Job', was told by an informer he had placed within the Club that it had attracted many tradesmen and manufacturers who wanted manhood suffrage and annual parliaments. It could perhaps be assumed that these men would have determined Club policy, but there were also some poorer members who aimed at the total overthrow of the Government.³² Here were two faces of the Hampden movement. Its quick suppression is an indication that the authorities feared the worst. It is on such slender evidence that the town acquired its 'tradition' of physical force. Briggs writes of 'vigorous Chartist activity' locally and this is so, but the east Midlands were not a breeding ground for

revolution.³³ Loughborough was, however, a strongly Chartist town and is worthy of study in this context.

d(i) Great pressure had been placed on the workers in the town by the badly planned building of the twenty years between 1810 and 1830. Loughborough had an absentee landlord, the Earl of Moira, which was in some ways to the town's advantage. Rents were collected but there was no interference. The Earl met financial problems, however, and in 1809 an Act was passed which allowed him to sell all his remaining holdings in Loughborough. Some premises were not in the town itself but, when these are omitted, the Schedule to the Act still quotes about 1,000 acres as being available for sale in 348 Lots, of which 267 were held at will. Existing tenants could therefore be evicted quite quickly, while no doubt many of those with longer leases could have been bought out if their particular parcels of land were required. In addition, 313 of the Lots were described in terms which state or imply that they included land as well as the buildings that stood there.³⁴ Here was rus in urbe. The town was spacious, in its centre the houses had gardens and store-barns. The release of so much land for building destroyed an environment that had been generally unchanged for centuries and put a nineteenth industrial town in its place. There was both infill and expansion. There were, for example, twenty-six Lots in Woodgate, twenty in Pinfold Gate, seventeen in High Gate and eleven in Baxter Gate. The open spaces behind and at the side of the existing buildings were filled by courtyards, offering cramped housing to the poorer classes in a town where there were

still memories of the days when there had been a lucrative knitting-frame in every house and a pig in every garden. There were, for example, twenty-two houses in the quarter acre of Providence Square and twenty-six in a similar area of Buckhorn Square.

There was also expansion into the former open fields, enclosed in 1762. By 1826 new streets had been laid out, but the houses were still of very poor quality. Some of the most depressing evidence in the 1849 Report of the General Board of Health relates to this group of streets. All of them were named by the Inspector of Nuisances or the Medical Officer to the Union. Entire districts of new building were grossly defective in sanitary amenity. The leaders of the local middle class lived, however, in large houses in their own grounds and they were chiefly hosiers, who depressed wages. If there was any middle class concern for the state of the poor, action on it was not commercially viable. Since outwork was common in the town's basic hosiery industry, the relationships of the factory described by P. Joyce in his Work, Society and Politics could not have applied. There could have been no particular loyalty to employers, no outings or parties for the workers, no sense of the 'family' of the factory. ³⁵ Photographs of a later period exist of people at work in Loughborough, but there are none of factories decorated for a celebration. In this sense, the resentments of Chartism could have persisted after the movement collapsed.

The workers compared their conditions with memories of lost rights of a 'golden age', placed by E.P. Thompson as prior to Enclosure, and described by him as 'the myth of the lost paternalist community' which 'became a force in its own right'.³⁶ The Act which most affected the nineteenth century Loughborough worker was that concerning Charnwood Forest, directed from offices in the town from 1815 onwards, which removed common land rights previously available to local people. A county clergyman, Rev. Robert Hall, dwelt eloquently on the topic in 1819: 'The writer well remembers when this country was the abode of health and competence; a temperate and sustained industry diffused plenty throughout its towns and villages ... the distresses of poverty were almost unknown except by the idle and profligate ... But what a contrast is now presented in the languid and emaciated forms and dejected looks of the industrious mechanic, who with difficulty drags his trembling limbs over scenes where his fellows gazed with rapture'. As Feargus O'Connor later put it: 'Here's that we may live to see the restoration of old English times ... when the weaver worked at his own loom, and stretched his limbs in his own field', or 'all those new streets behind Mr. Twist's, and Mr. Grab's and Mr. Screw's ... were all open fields'.³⁶ Here was Loughborough's Wellington Street and Moira Street described from the Chartist point of view.

d(ii) A second feature of the town which it shared with many other Chartist districts was its connection with textiles. O'Connor refers above to weavers and Hall to mechanics, the term used to describe workers on knitting frames. As Thompson puts

it: 'The fullest expression of the values of the weaving communities belongs to the history of the Chartist movement'.³⁷ The hopeless position of weavers was matched by that of lacemakers and framework knitters. The Loughborough Hampden Club of 1816 was founded by the Chapman family, who were employers of labour but of the pedigree of working men who had bettered themselves. John appears in the Dictionary of National Biography as a 'political writer'. The Chapmans themselves suffered badly from the fluctuations of the lace trade. The Report from Loughborough to the Chartist General Convention in 1839 has a comment on the lace workers of Loughborough. The transition from 'ease and comfort' to 'abject poverty' had demoralized them and 'not only destroyed their spirits but destroyed the independence of their minds'.³⁸

There would have been no Chartism had the lace industry remained prosperous. The origins of the Movement can be associated with the decline of the economy which began in the 1830s. There was a return to the status of a single-industry town, that industry being stretched not only to employ its own workforce, but also to fill the gap in the local economy left by lace. The likelihood of mass protest came first, however, from framework knitters. The Leicester Journal of 17 December 1830 printed a letter from 'An Inhabitant of Loughborough', claiming that on the sixth of that month many hundreds of framework knitters, 'stung almost to madness', as they said, 'by the miseries of famine, and the sight of their ragged and emaciated wives and children' assembled in Loughborough, armed with

bludgeons. Briggs puts the actual number there as 400 to 500.³³ The 'main dynamic' of Leicester Chartism was the condition of the framework knitters.³⁹ This view was expressed as far as Loughborough was concerned by independent witnesses to the 1845 Commission. Rev. Moses Furlong, the Roman Catholic curate, said that because of their condition the knitters were willing to 'embrace any enemy' (that is, seek revolutionary solutions) and that they were 'ripe for rebellion'. Rev. E. Stevenson, the Baptist minister, had been 'shocked' to see how they had gathered round O'Connor when he came to Loughborough.⁴⁰

A third feature, already mentioned, was that Loughborough was not a factory town. Lacemaking perhaps involved workshop operations, but most knitting was still domestic and, as Joyce puts it: 'The politics of Chartism ... characterised those areas where handworking traditions were the last to fall'.⁴¹ It was 'a politics whose social critique owed more to the experience of the artisan than to the factory owner'.⁴² Therefore, a high proportion of northern and Midlands local Chartist leaders were outworkers. In contrast, the factory society of the north of England in the second half of the century 'witnessed a degree of social calm perhaps unique in English industrial society'.⁴³ If there were signs of paternalism in the management of northern factories, they were not evident in Loughborough. Unrest in the town became political and social to a degree greater than elsewhere in the county, and this must be a measure, to some extent, of public apathy towards the plight of the working man. In Loughborough the resentment

was directed mainly against the local aristocracy, the middle class of national society. Although some subscriptions had been made by hosiers towards the relief of framework knitters during the strike of 1819, John Thorpe said to the Commission on Artizans and Machinery in 1824 that it was 'The Lord Lieutenant and the gentlemen of the Neighbourhood' who set the example and T. Pares, the banker, added that many had subscribed because the hosiers were generally depressing the rate of wages.⁴⁴ In an editorial in the Midland Counties Illuminator of 10 April 1841, Thomas Cooper wrote of men like Paget or Biggs, both hosiery manufacturers and local middle-class leaders, as talkers only. If matters came to a head 'Finality knew that such men as the Pagets ... would be transformed in a trice into sticklers for "law" and "order" and all that, when touched with the magic wand of honour'.⁴⁵ S.D. Chapman refers to the religious links between knitters and hosiers, many of whom were leaders of local Dissenting groups.⁴⁶ Paget was an example, but apparently any religious links between him and the hands he employed did not affect his commercial judgement or their sense of grievance.

Other complaints of the Chartists arose over the Reform Act of 1832, which offered no political status to the working man, and the Poor Law amendment Act of 1834. As we saw in the previous chapter, the new Loughborough Union prohibited outdoor relief to the able-bodied poor, with certain exceptions, such as urgent need, idiocy or widowhood.⁴⁷ The Act placed great pressure on a community about to lose its lace industry and become dependent on a weak hosiery sector. In fact, the people

of nearby Barrow refused to join Loughborough Union because they thought that they, living in a rural parish, would be placed under a greater burden than necessary because Loughborough was a hosiery town.⁴⁸ At most seasons of the year there were some able-bodied poor. Outdoor relief had previously been regarded as a supplement to wages and in that sense hosiers had used the old system as a general fund.⁴⁹ The town therefore became a centre of protest from all sides. Officials were assaulted by a group of non-paupers in 1837, while shopkeepers and beer sellers objected to the cessation of outdoor relief because it reduced the spending power of the poor.⁵⁰ The Loughborough Telegraph, in a leader of 27 May 1837, attacked the Act as a 'foul stain' on the annals of the country, and opposed the 'supreme power vested in the hands of Government Commissioners'. On 9 December that year the editor pleaded with the local Guardians to exercise some leniency; they should consider 'administering relief to those who need it, bread to the hungry and clothing to the naked'. A temporary solution was found during the trade depression of the late 1850s by providing work such as stone breaking for the robust and oakum picking for the weak, so that the poor could earn their relief and still live at home. All the needy could not have been accommodated in the workhouse and the strict application of the law would have been impossible.⁵¹ There were also irrational fears on the workers' side. A correspondent to the Leicestershire Nottinghamshire & Derbyshire Telegraph on 19 January 1838 described a Chartist meeting he had entered 'by chance', when a document was read alleging that a Poor Law Commissioner advocated the 'destruction of the third

or fourth child of every person, to save the country from being overpopulated'. This Malthusian outburst was made expressly to influence the minds of those present against the workhouse diet .

Other factors to be considered are the extent to which allegations of violence against Chartism were justified, and the connections of the movement with Nonconformity, particularly Primitive Methodism, the church of the poor Wesleyans. Its first chapel in Leicestershire was opened in Loughborough in 1818, and the Primitive Methodist Conference was held in the town in 1821. ⁵² The cause produced a Chartist leader of national standing in John Skevington, whose first reported public statement was in June 1837 when he addressed a meeting in the Market Place, demanding the 'immediate sympathy and assistance of the higher and middle classes of the town and neighbourhood'. The meeting resolved that 'peace and good order' was its 'wish and determined resolution'. ⁵³ Throughout the period, perceptions of the nature of the Local Chartist struggle varied from peaceful protest on the one hand to fears of open insurgence on the other. In 1838 local Radicals formed 'The Loughborough District Branch of the National Union centred at Birmingham'. The chairman was Skevington. ⁵⁴ The following November, a mass meeting was held, attended by a crowd estimated at between 3,000 and 7,000 people, carrying banners and led by bands. ⁵⁵ Just as Loughborough was a market centre, so its Market Place became the obvious forum for the town and its surrounding villages. In February 1839, the magistrates were told that pikes were being made in both Shepshed and Loughborough: 'In this latter place

pikes were seen this morning in Chartist houses. Two blacksmiths are employed'. A Metropolitan Police plain clothes man also reported that the Chartists paid one penny per week subscription for firearms and then drew lots as to who should get them when enough cash was available. He himself had been able to buy a pike, which cost him 2s 3d.⁵⁶ That same year a petition was sent from the town to the Home Office complaining of the 'turbulent spirit of the lower orders'. Framework knitters were 'suffering considerably from depression of wages' and 'at all times open to revolutionary principles', the labourers building the Midland Counties Railway were riotous and there was, therefore, an urgent requirement for troops to be stationed in the town. In early 1840, however, Loughborough appeared to be in a better condition to resist Chartist disruption than Leicester.⁵⁷ An informant of A.J. Pickering of Hinckley, remembered finding in the King Street premises of Cartwright and Warner, when left derelict, some pikes and blunderbusses, and thought that they had been procured 'for defensive purposes during the Chartist troubles'. He also believed that imitation cannon had been placed on the roof, although he had never seen them, and he gives the impression that the town was prepared for a siege.⁵⁸

In February 1840 the Chartists held meetings in private houses, and publicly in a large room in Baxter Gate called the 'Chartist Room' attended by as many as 200 people. The language was reported as 'violent and inflammatory', one man claiming that he was 'ready to sacrifice his life for the cause'.

Skevington was quoted as saying that 'theirs must be the work of

the midnight assassin, the Dagger and the Torch'.⁵⁷ The magistrates were duly alarmed and decided on suppression; on 17 April W.P. Herrick and C. March Phillipps, the two principal property owners in the district, were in correspondence over a report that the Loughborough Chartists had been in touch with Feargus O'Connor.⁵⁷ In August 1842 local men tried to organise agitation amongst Leicestershire miners; framework knitters went on strike and Skevington was arrested and bound over to keep the peace. He could not, however, produce the necessary sureties and was escorted to Leicester Prison by a detachment of Dragoon Guards, an action which perhaps did more to arouse interest in the movement than if he had been released. When he was allowed to go home, on sureties being made, he said: 'Now that I've been to college, you have made me a greater Chartist than ever'.⁵⁹ Later, a party of three to four hundred strikers, on their way to Mountsorrel, were intercepted as they left Loughborough. Seven men were arrested, of whom four were committed to prison. Their journey to Leicester was more prosaic than that of Skevington since they went by train, but even so the police were pelted with stones.⁶⁰

At the height of the campaign in 1848, meetings throughout a week in early April in Loughborough Market Place attracted crowds of up to three thousand. On one occasion, violence was a possibility, when a group of granite quarrymen, carrying their hammers, were confronted by a strong force of police and mounted troops.⁶¹ There is no record that the hammers were used, and these demonstrations were the final outburst. Feargus O'Connor

arrived at Loughborough railway station on 10 April, fully intending to speak in the Market Place. The presence of a large body of Dragoon Guards and the warnings of the magistrates persuaded him otherwise and he contented himself with a statement from the platform, urging his supporters to avoid violence.

Loughborough may well have had, as the magistrates claimed, a reputation for turbulence, and there had been disturbances, but much of the allegedly violent talk may have been coloured by informers wishing to earn their pay. On the whole, local Chartists were noisy and demonstrative but they were restrained by forces of moderation from within as much as by the presence of the cavalry. Perhaps some policeman had been hit by stones, perhaps pikes had been made and firearms acquired, but the town petition of 1839 referred not to revolutionary deeds, but to revolutionary principles, which might be defined as reformist ideas noisily and vigorously expressed. The local Chartists were described in the Report to the Convention of 1839. They had not been so depressed by poverty that they had lost the 'independence of their minds'. They were 'reasonably moral, intelligent and teachable'.⁶² These are not the words of an organisation seeking extreme solutions. They were, however, very interested in their political rights. The local newspaper, the Leicestershire Nottinghamshire and Derbyshire Telegraph (formerly the Loughborough Telegraph), frequently attacked Chartism but never expressed great alarm over local Chartists, during its period of publication in the late 1830s. Some of its correspondents were rather more anxious, one referring to

Chartists 'drinking, cursing and swearing' and advising people to 'resist by physical force the Government'. One writer went so far as to claim that there might be 'second Robespierres or Dantons' in provincial Loughborough. Nevertheless, on 10 November 1838 the newspaper reported a meeting at Nottingham addressed by Skevington as 'peaceable'. An account in the issue of 4 May 1839 of a meeting in Loughborough Market Place referred to bands and a banner bearing the words 'Peace Law and Order'. There were other banners, one reading: 'He that would be free must strike the Blow', but one speaker was 'mild and pathetic' and all of them spoke of the need to maintain good order. The Telegraph still described the crowd as a 'mob'. Large assemblies of this kind may have been regarded as the real instrument of pressure. In fact, the only fights were those started by drunken men. On 6 July 1839 there was a report of a meeting addressed by Feargus O'Connor and the issue of the following week quoted a Birmingham correspondent that, at a meeting there, Loughborough had sent 'one of the most sensible men of the gang'. It appears that this was Skevington. On 20 July 1839 the newspaper complained that the town was 'defenceless' against Chartists, but that their demeanour became 'rather quieter' when the pensioners and special constables were called out. This body could not have exercised much restraint against men seeking violence. On 17 August 1839 there was a report on a service at the Parish Church attended by Chartists and on a meeting at which Skevington had urged his supporters to be peaceable. By this time, Dragoon Guards were patrolling the town, but the magistrates had not ordered meetings to be broken

up. The fear of violence was a reality in Loughborough, rather than violence itself.

d(iii) The strong religious associations of the movement were present in the town. Skevington himself deserves comment because of the part he played in Chartism in the Midlands. He had been involved in Primitive Methodism in the town from its earliest days; he spent three years in the full time Ministry and many more as a lay preacher. He then became the type of Christian who, impatient with the delay in setting up God's kingdom in the world that is to be, decided to set it up in this world first. His father was a lace manufacturer from 1828 to 1835, that is, at a time when the early optimism of the trade was being modified. There is no evidence, however, that the decline of lace helped form his revolutionary opinions or that he ever suffered the privations of his followers, since Directories and the 1841 census show him as a hatter and newsagent. This little lame man was driven along by the evangelical faith of a church which had seceded from post-Wesley Methodism because it sought lay control and rejected higher (clerical) authority. He is quoted as saying to the National Convention in 1839: 'As an advocate of the principles of the People's Charter, I found nothing on inspection to condemn in them, nor in my advocacy of them, but a firm conviction that though a man may be a Chartist and not a Christian, a man cannot be a Christian and not a Chartist, unless through ignorance'. He had all the eloquence and power of a Billy Graham. It was said of him that he 'only had to speak the word and we will tear up every stone in the

Market Place'.⁶³ Had the occasion arisen, he might perhaps have spoken the word, just as he had once spoken the Word. He apparently never did so, and the calls for violent revolution which police informers attributed to him may have had little basis in fact. In 1838 he had said to his followers: 'Do not use harsh words of your opponents. Let a feeling of affection always reign among you, particularly towards those who have treated you ill.'⁵⁹ During the demonstrations of 1848 he reminded C.M. Phillips that he (Phillipps) had used stronger language on behalf of the Reform Bill than was being spoken in defence of Chartism.⁵⁹ Skevington's lieutenant, Thomas Smart, appears to have been a particularly thoughtful man. He had taught himself Latin, French, Italian and Spanish, had attained considerable proficiency in Mathematics and had a talent for verse.⁶⁴

Skevington did not belong to the working class; he had money of his own (which he gave freely to the cause). Feargus O'Connor can in no sense be described as a working man. Neither can Major John Cartwright, who addressed meetings in Loughborough in 1812 and 1813, the former attended by 600 people, and who advocated policies which the Chartists later adopted. Indeed, the aims of the Chartist movement appear to be middle-class in origin in the sense that they advanced the abstract notion that the right to vote was all that was necessary to reform society. Its aims have nearly all been achieved; the golden age has not returned. The authentic voice of the working-class was heard in Luddism, with its direct action and immediate if short-term, results. It was, however, the possibility of an

extension of the franchise that seemed to arouse the greatest alarm in Loughborough. The editor of the Telegraph, who thought that Chartists were a 'miserable minority' of the working class, was less concerned about violence than the Chartist point of universal male suffrage. It meant, he thought, that the footman or the shoe black would have a voice in the election of Members of Parliament, while 'Dowager Lady So-and-So, with her 20 or £30,000 a year' would have no voice at all. It might be assumed that the editor was in favour of extending the franchise to women, if they were noble and wealthy, but this was not so. He became quite hysterical at bills posted by Chartists in favour of Female Political Unions: 'Gracious Heaven! Is it not sufficient that the hand of man be set against his brother? ... Must the very houses of our countrymen be invaded, and woman, tender woman, who ever shines most in the social circle - whose office is to smooth the brow of men ... be lured from the fireside, and her maternal attentions ... to raise her shrill voice in support of demagogues and agitators?'⁶⁵ Clearly he felt that, as compared with this, physical violence was as nothing.

The attitude of the local authorities to fears of violence was ambivalent. For example, they delayed the implementation of the County Police Act of 1839. In 1834 Loughborough had adopted the provisions of the Lighting and Watching Acts and the later Police Act did not interfere with the parish force set up in 1834. Another Rural Police Act of 1840 declared, however, that any force constituted under the

Lighting and Watching Acts should be discontinued if the Chief Constable of the county undertook charge of a district. Loughborough acted at once and sent a Memorial to the County Justices, signed by all the appointed officers of the town and the other principal inhabitants. It argued that the town had a constabulary force of twenty-one 'respectable parishioners' as well as a Serjeant and five watchmen, who went over their beats every half-hour and were under the superintendence of twelve Inspectors, who performed their duties gratuitously. No burglary had been committed in the parish for several years and 'the number of petty thefts and nightly depredations ... which escape detection is exceedingly small'.⁶⁶ The Memorialists added that the alterations proposed by the Act would be expensive and indicated that, while they would accept this if they thought that the substitution of the rural Police would be an improvement, they felt that this would not be so. By that time, they had experienced some years of Chartist demonstrations but the Memorialists wrote only of burglary and theft.

The Police Constables Act of 1842 'legalised almost anything that had been tried before'.⁶⁷ It did, in fact, reaffirm the obligation of each community to police itself and Loughborough no doubt felt justified in keeping its watchmen, but the other four Leicestershire towns quoted in the introduction to this thesis had sworn in some of the new policemen before 1848. Loughborough probably reckoned that it would be cheaper to reinforce when necessary. On 19 August 1842, 300 special constables had to be sworn in, six additional watchmen were

appointed and four Police Constables were seconded temporarily from Leicester Borough. The Inspector in charge came from Syston, which was not in the same Hundred as Loughborough, and there was later an argument about police pay. The local Hundred did have its quota of three rural policemen and a Superintendent, but the men were stationed at Mountsorrel, Shepshed and Castle Donington. Loughborough waited until December 1848; for the whole period of Chartist unrest the parochial system was in operation in the town; the alleged threats of Skevington and others were considered less of a risk than an addition to the rates. Economic growth had, therefore, aroused a very violent reaction, but stagnation did not appear to do so. The working class was not so depressed that it could not react at all, but the reaction did not have the immediacy of Luddism. Political change takes time, and its benefits are slow to appear. The Chartists were apparently prepared to wait; as stagnation persisted it produced a form of stoicism, occasionally spilling over into strong words and boisterous behaviour.

e(i) There were two other censuses in 1851, those on religious attendance and educational provision. While histories of the local Churches have been written, no records remain of those theological stances and pastoral policies which would have thrown light on social attitudes; the only reference to the churches in this thesis is therefore to the evening attendances on Census Day. The figures will be used to establish a general notion of the proportions of each major group within the local church-going community. It will be assumed that each would have

been equally zealous in its desire to provide weekday education for its children and that the extent to which it did so reflected its wealth. The figures from the religious census are for Loughborough Union; attendances settlement by settlement were not published.⁶⁸ Sunday evening congregations are thought more likely to represent the proportions of the committed worshippers, for the reasons that they were willing to turn out at night and that attendances at morning or afternoon services probably included Sunday School children. The evening congregations in the Union were:

	<u>Numbers</u>	<u>Percentage of them All</u>
Church of England	1,461	21%
Protestant Dissenters	4,824	71%
Roman Catholics	380	6%
Latter Day Saints	131	2%

There was permission for average attendances to be quoted if those on Census Day were not typical. The provision by Roman Catholics was the highest in the east Midlands, their mission was one to the poor and the fact that they found so fruitful a field in the Loughborough Union area is a testimony in part to their zeal and in part to local economic conditions.

As far as the education census is concerned, J.M. Goldstrom believes that the original completed returns by individual schools probably do not now exist, and this reduces its value for historians very substantially.⁶⁹ It is possible, however, to reconstruct the local position with reasonable confidence and details are given in Table 8:1. They are for Loughborough town only.

TABLE 8:1

SCHOOLS IN LOUGHBOROUGH IN 1851

SCHOOL	'AVERAGE' NUMBERS
Fearon	200 mixed
National Infant, Ward's End	250 mixed
British (Wesleyan Methodist)	220 mixed
High School, Church Gate	90 boys
Low School, Church Gate	350 mixed
National Boys, Ward's End	100 boys
National School of Industry	90 girls

The above are quoted in Hagar's Directory of 1849. There were also:

Girls' Grammar School	30 girls
Blue Slip School	20 girls
Convent School	No basis for any estimate
R.C. Elementary School	Mixed: est. 47 boys, 13 girls

NB: The Boys' Grammar School was closed in 1851.

The State made its first cautious entry into educational provision in 1832, when it made a grant of £20,000 to the two principal religious providers, the British and National Societies. This grew rapidly and by 1851 the Churches had established schools in Loughborough. The Roman Catholic school had begun its life in converted stables; it was a missionary school for a missionary church and offered an abatement of fees for those who could not afford to pay. The 1851 education census also quotes a Baptist school in the Poor Law Union.⁷⁰ This may not have been in Loughborough, but White's Directory of 1826 lists such a school in Woodgate. There was certainly a later proposal to open a new one, or re-open a closed one. The General Baptist Church Minutes of 8 July 1852 welcomed an initiative to establish a British school, but could not pledge themselves to

any definite amount of pecuniary support.⁷¹ Since the Baptists rejected the State grant and money was short, they had to move with caution. There was certainly a Wesleyan Methodist school, the accounts of which still exist, from October 1843. They were kept in casual fashion in two small notebooks and refer to minor items, such as maps, slates and books, a pair of globes and Bibles, and repairs to broken windows, the latter indisputable evidence of the presence of children. There were two teachers, a man paid £42 13s 9d per annum in 1845 and a woman who was paid £37 15s 1d. In 1846 the girls' attendances varied between thirty-seven and eighty-six, and were most frequently in the seventies or over. Those of the boys varied between forty and ninety-four, were usually in the seventies or eighties and by 1849 a pupil teacher was employed. Fees were probably 2d or 3d weekly.⁷² The impression given by the scanty records of this school is one of struggle on a low income. This was the only school in the town funded by Protestant Dissenters and their failure to do more is an indication of the general lack of economic opportunity in the town.

There were, however, four Anglican day schools. A Fearon Infant School was opened after the arrival of Henry Fearon as Rector in 1848; it was typical of his wide ranging interests in the town. The origins of another infant school in Loughborough, that in Ward's End, are not known, but it was probably connected with Emmanuel Church since the building was

replaced in 1852 by a new one paid for by Miss Tate, of Burleigh Hall, a member of that Church. A boys' school, also in Ward's End, was founded in 1838 by the Rector of Loughborough, Emmanuel then being a curacy, and the 'School of Industry' (Emmanuel Girls' School) was also opened in 1838 and endowed by Miss Tate. The Rector and Miss Tate could offer financial aid based on income with a far greater security than that derived from trade.

The position can also be seen from another point of view. The contributions of the various providers in 1851, in terms of the 'average numbers' quoted by Hagar's Directory, compared with the percentages of evening worshippers where applicable, are shown in Table 8:2.

TABLE 8:2

RELIGIOUS ATTENDANCE AND EDUCATIONAL PROVISION, 1851

	Total Av. Numbers in Schools	Percentage of Av. Numbers in Schools	Percentage of Church Attendance
Church of England	640	45	21
Ancient Endowment	490	35	--
Roman Catholic	60 est.	4	6
Protestant Dissenters	220	16	71

The average numbers will be shown below to be inaccurate, but they were all inaccurate in the same way and so may be used for this comparison. The figures demonstrate the high Anglican commitment based on the generosity of the affluent middle-class section of its congregations. The low Protestant Dissenting contribution suggests that only a few of their members had large sums of money available for this kind of charity. The Roman Catholic effort grew strongly after 1851.

Hagar's figures are unreliable, however, in that they over-estimate the real degree of school attendance, for example, a figure of 220 is quoted for the Wesleyan Methodist School, whose own records suggest that it was about 150.⁷² An attempt will be made here to assess school attendance more accurately, using census data. Goldstrom thinks that 'average' attendances quoted on the school census forms were more likely to represent the number of children actually enrolled, that is to say: Real enrolment = real attendance on Census Day plus false register entries made on that day.⁷³ It seems likely that Hagar's 'average' attendances were based on similarly optimistic figures provided by the schools. The figures quoted for attendances in public schools (that is, as distinct from private) in the Loughborough Union in the 1851 census were:

1,150 boys	884 girls	Total: 2,034
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If they are recalculated by allocating attendances in Loughborough as a fraction of the whole, based on the relative population sizes of the town and the Union, then 508 boys and 391 girls (899) were attending schools in Loughborough. This figure is Goldstrom's 'real' enrolment. To these we must add those of the Wesleyan school, who were not included because the authorities there did not return the census form. The average attendance for each sex was about seventy-five, according to the school's casually maintained records, so the revised figures become 583 boys and 466 girls in public schools, much lower than the 'average' numbers quoted by non-census sources above (747 boys and 663 girls). Hagar's 'average' numbers were therefore

more optimistic than the 'real' enrolments calculated using Goldstrom's equation. The enrolments, quoted for the Union in the census analysis, are given below:

Public Schools	1,474 boys	1,123 girls	Total: 2,597
Private Schools	371 boys	460 girls	Total: 831

If we recalculate them for the town and include the Wesleyan addition, we obtain figures of 761 boys and 606 girls, which now look remarkably like the 'average numbers' quoted by Hagar.

There were also private schools in Loughborough Union and a recalculation for the town suggests that 334 children were at such schools. This would give a total enrolment of 1,701. The number of all children with the entry 'Scholar' in the occupation column of the enumerators' books at the population census was 910 boys and 838 girls, that is, 1,748. The fact that two figures reached by different methods are so near to each other owes something to chance, but it is reasonable to say that the total number of children quoted by parents at the census as enrolled at schools was probably correct. There was also probably heavy absenteeism and this will be discussed later in this section. If it was generally on the scale of that of the Wesleyan School, then average attendance was about 1,200.

Horace Mann, of the Registrar General's office, used the enrolment returns, rather than those of attendances, to assess national performance, which he considered unsatisfactory. The national number of enrolments in day schools had risen from 1 in 17.25 of the total population in 1818 to 1 in 8.36 in 1851. ⁷⁴

Mann argued that a national ratio of 1:8 on Census Day would have been some sign that a reasonable level of education was being achieved because, although the ratio of all children was 1:4, some would have completed, or would not have begun, their education. He reinforced his argument with an impressive series of figures approaching his main theme from other starting points, all of which supported his belief that the education service was inadequate. There were far too many children at work, or helping their parents at their work, or were among those 'to whom thieving is a daily trade'.⁷⁵ The ratio of pupils of all ages in Loughborough to the total population was 1:6.41. This includes those below the modern minimum school age. If they are excluded the figure becomes 1:7.16. It cannot be maintained that Mann's notion of ratio was precise, but on both these calculations, however, the local education service was meeting community needs, but national expectations were low.

Another comparison can also be made. The figures quoted in Table 8:3, as percentages of age-groups, are taken from the census enumerators' returns and applied nationally in the census report. They are compared with the returns for Loughborough and so offer an assessment of the local position within the national context.⁷⁶

TABLE 8:3

STATUS OF CHILDREN AT THE 1851 CENSUS, NATIONALLY AND IN LOUGHBOROUGH

AGE	MALE NATIONAL			MALE LOUGHBOROUGH			FEMALE NATIONAL			FEMALE LOUGHBOROUGH		
	*S	E	U	S	E	U	S	E	U	S	E	U
0-2	-	-	-	7	-	93	-	-	-	7	-	93
3	21	-	79	34	-	66	22	-	78	38	-	62
4	41	-	59	52	-	47	39	-	61	46	-	54
5	51	-	49	71	-	29	41	-	59	70	-	30
6	57	-	43	80	1	19	47	-	53	77	3	20
7	64	1	35	82	1	17	51	1	48	73	6	21
8	61	3	36	87	3	10	50	2	48	73	7	20
9	60	7	33	78	16	6	50	5	45	69	17	14
10	55	14	31	64	20	16	45	7	48	61	21	18
11	46	22	32	54	32	14	39	11	50	52	33	15
12	37	36	27	46	43	11	34	19	47	39	43	18
13	25	46	29	33	58	9	23	28	49	22	66	12
14	16	68	16	23	71	6	15	40	45	16	67	17

* S - Scholars E - Employed U - Unclassified

It will be seen that boys in Loughborough were more often in employment, and that local girls were put to work earlier and more frequently, than in the country as a whole. Both sexes, with the exception of girls aged thirteen, were also more likely to be enrolled at a school, no matter how infrequently they attended.

e(ii) A question now arises. The provision of education in Loughborough in 1851 was apparently more generous than that over the country as a whole, although more children were also at work. Did the town therefore offer a good service, or was it better only in a relative sense? There was evidence nineteen years later that the 1851 statistics concealed a great deal of local incompetence, although some kind of a defence may be

offered in that the national position was probably even worse. In 1870, elementary education in Loughborough was criticised in the Commons during the second reading of the Education Bill. An exchange arose from a disagreement between the member for north Leicestershire, Lord John Manners, and the member for Sheffield, A.J. Mundella, who was later appointed vice-president of the Committee of Council for Education in the Gladstone administration of 1880-85 and whose enquiries into education in Loughborough were deeper than those of its own member. The appropriate section is worth quoting. During the recess Mundella had had a passage of arms with the noble Lord for, on speaking of the wretched state of education in Loughborough, he happened to mention that more than 40 percent of the children who ought to be at school did not attend school. The noble Lord, in referring afterwards to that statement, spoke of it as exaggerated, adding that there were 1,500 children attending school in Loughborough, or 1 in 7 of the population, whereas in Germany the attendance was only 1 in 6. The noble Lord had, however, made his calculation on an entirely wrong basis, because he took every child in that town from 3 to 15 years of age, 300 of whom were at infant schools and 160 at dame schools, besides a large number at the grammar school. The fact was that every child who was placed by its mother in a crib or cradle to be kept out of the way was put down as receiving education. Taking the children over 6 years of age, less than 700 out of a population of 11,000 or 12,000 attended school.' Loughborough would not have been a poorer town in 1870 than in 1851 and so, even allowing for political enmity between the two men, this is

a strong condemnation of Mann's notion of ratio in practice, and the dangers of accepting an entry of 'Scholar' in an enumerator's book as referring to regular attendance.

Mundella also attacked the low standards in Loughborough schools: 'He had an examination made at Loughborough, and he wished he could place before the noble Lord the member for north Leicestershire the specimens of writing and arithmetic of the children at work there, and those of children of the same age at work in Saxony, Switzerland or Prussia. The contrast was something which was enough to make an Englishman blush for his country.'⁷⁷ This seems to have been a skirmish in a Parliamentary battle between the two men. Mundella's evidence cannot be dismissed, however; it has an uncomfortable air of at least partial truth. Presumably he carried out his examination of school leavers on those employed in his own Loughborough factory and perhaps in others owned by his business associates; it must be pointed out that such children quickly forget much that they have been taught. Conditions for such a test would have been poor but Mundella's comments do not seem to have been challenged.

Other evidence is to be found in a census of numbers (Table 8:4) at elementary schools taken by the newly elected School Board on 20 April 1875.⁷⁸

TABLE 8:4

ELEMENTARY SCHOOLS IN LOUGHBOROUGH: 1875

	NUMBER OF PLACES	AVERAGE ATTENDANCE	NUMBERS ON ROLL
Emmanuel Boys	150	135	203
Emmanuel Girls	100	63	94
Emmanuel Infants	275	182	221
Church Gate Boys*	314	250	384
Church Gate Girls*	211	180	277
R.C. Boys	80	36	58
R.C. Girls	196	64	84
R.C. Infants	141	60	87
Warner School	242	290	402
Hickling School*	63	85	126
* (Endowed)	1,772	1,345	1,936

The number of school places was now comfortably higher than Hagar's 'average' attendances (and therefore probably true enrolments) of the middle of the century. There had been, for example, a great Roman Catholic expansion and a new Church of England School (Warner). Nevertheless, average attendance was still very low, 69 percent of the numbers on roll. The number of places available was 92 percent of enrolments; schools evidently allowed for low attendance. Ridiculous over-enrolment of the kind seen at Warner School was likely to bring the education service into serious disrepute.

The Wesleyan school had closed by 1872; the trade revival came too late to save it. Warner School was built by the Anglican hosiery manufacturer of that name. His wealth was based on trade, but he was a large employer, his family had been in business for a long time, he had not taken commercial risks and it was also thought that a State grant would be available. It was, in fact, refused because Anglicans in the town were out-

numbered by Dissenters, who also gained control of the School Board, although they had no schools at all, and although a State grant would have been available had they chosen to build one. Their numerical preponderance in the town bought for them a temporary interest in education which their finances could not provide. The Anglicans were not to be outdone. In January 1876, when the artisan class in the town was increasing, Warner became a middle-class school for girls, taking a place in the system between the cheap elementary schools and the Girls' Grammar School.⁷⁹ The Board therefore decided to build a completely new school, for parents who could not afford the Warner fees of 6d per week. By 1878, however, the Anglicans gained control and built a school smaller than that advocated by the Dissenters; within nine months, average attendance (not enrolment) had risen above the planned maximum. The objective needs of the education service were still subordinate to denominational interests.

e(iii) Another aspect of local education illustrates the inability of a dominant group to meet the wishes of a majority of parents who saw education as a preparation for life in a town that lived by industry and commerce. This dominant group was manipulated by civil servants with a classical education, who had great influence. For the brighter boys, Loughborough had an endowed Grammar School, described by its Trustees in 1837 as 'comparatively useless', because its Headmaster adhered to the Eldon judgement of 1805, that the function of a Grammar School

was to teach the classical languages grammatically.⁸⁰ In 1839 the leading citizens petitioned the Charity Trustees for the provision of a useful and realistic education for their sons, seeking 'an extended system of education in the free schools that may be beneficial to the rising generation of the poor and one which would be available to the sons of the upper classes of society in this town'.⁸¹ They received it in a modified form when the Charity Commissioners applied a new scheme in 1849, which was to have heavy middle-class bias. A new boys' Grammar School was to have two sides, the one classical and the other commercial. Both the curriculum and the early staff appointments suggested that the commercial side, so much needed in Loughborough, was to be taken seriously.

The first Head resigned in 1860, however, to be succeeded by a classicist. He, with the support of the Taunton Commission, steadily reduced the status of the commercial side to a point of insignificance. Although the majority of the governors were 'practical' men, they accepted meekly the honeyed words in defence of 'general cultivation of the intellect' rather than preparation for 'special employments', which were used by the Taunton Commission. This is all very well for those who have no need of 'special employments'. To this day, schools in England make a distinction between 'education' and 'training', as if the latter is somehow unworthy of school time, although the majority of parents have no doubt at all about what they seek for their children. In 1871 Loughborough parents were equally certain. A town meeting of 9 March that year, reported

by the Loughborough Advertiser , strongly attacked the class distinctions at the Grammar School, not only between the two sides, but also between boarders and town boys. The early economic problems of the town and the long period of stagnation had not brought the classes of society nearer to each other, and this was resented as much in 1871 as it had been during the Chartist years.

A resolution was passed deploring the fact that there had been a 'great decrease in the number of scholars for whom the school was especially intended', that is, the town boys wanting a practical type of education. The conflict was resolved in 1875 by a scheme which diverted many town boys from the Grammar School to a new commercial school. It was to be, however, only a 'ninepenny school' (that is, the fees were to be ninepence a week) and not the £2 per annum one sought by parents at the 1871 meeting. The financial difference was small, the social division was great and local opinion was that the education offered would be trivial. The Loughborough Advertiser of 1 May 1873 was bitterly critical of the proposals. Once again, the special wants of youths who were 'destined for a commercial life' had been overlooked. The town charity was to be misused. Central government was 'determined to throw this charity open to the county and ignore the special claims which the town has over it'. The intention was to found a school where a 'little book keeping will be taught as the GRAND PREPARATION for commercial life. Is that all that is necessary for our youth to know about commerce - youth of a country which holds the first rank in

modern times?' A meeting called to discuss the scheme was reported in the Loughborough Monitor of 27 August 1874. The Chairman tried to gloss over the problems and, after what could be called a 'statesmanlike' speech, he called for a vote in favour. There was an uproar but the motion was carried. The point of view of national administrators had been accepted in spite of much resistance to it; the best brains of the artisan-shopkeeper class were to be given only a superior elementary education. The best brains of the wealthier classes were also to be denied access to that range of subjects which would have made them useful leaders of a community that earned its living by its manufactures.

The strongest voice in favour of the new scheme was the Rector, who himself had an interest in science and advocated its teaching as opening up 'a perfect vista of delight in the world created by God'. He saw science teaching as a means of improving the quality of life, as indeed it is; he did not see it as providing a more educated workforce, he did not suggest a practical way of putting more curious or inventive minds to the search for solutions to the problems of the economy.⁸² Crouzet stresses that, as the century wore on, invention 'now depended more and more on the deliberate and systematic application of scientific knowledge to industrial technology'. He quotes Saul, that engineering needed a new type of 'superior workman trained to think, to devise, scheme and accommodate known principles to new ends'.⁸³ In the 1870s the Grammar School did no more than to flirt with science, although private schools claimed to go

further. The contribution made by the new Commercial School will be seen from the extracts from its Log Book for 1877 quoted below. They relate to its curriculum commitment to teach geography and physiology and went no further than the minimum requirements of the Revised Code of 1862. On 2 March, the Capes of England were 'given' to the Upper Class. The following week it was given the Mountains of England and by methodical progression it reached the 'Geography of Hindostan' in June. Parts of the body were taught in the same way, beginning with the arm. The class responded so well in this subject that the teacher could write triumphantly on 20 March that the spine and the ribs had been 'mastered'. This may have been because the boys had some working knowledge of these physical features, whereas they may have had little or no contact with the capes and mountains of their own or other lands.⁸⁴ It was not the teaching of a school producing superior workmen, trained to think.

(f) If the governing bodies of the local schools were blind to the real educational needs of an industrial community, the local Board of Health had no faith in economic growth. The Board was formed in 1850 following the application of the Health of Towns Act of 1848. This was the consequence of an inspection by the General Board, which recommended that urgent steps be taken to reduce environmental pollution, particularly by the provision of deep drainage and a piped supply of pure water. After a period of active exploration of the possibilities, which indicated that the town rate would have to be increased

substantially over the £280 it had raised in 1849, the Board went into administrative hibernation, from which it was awoken on 21 May 1852 by a private letter from Rev. Henry Fearon, the Rector, which was published without the Board's consent in the Leicester Journal. The criticisms in it became a matter of public scandal and the Board was driven into action. In 1855 Loughborough had a sewage disposal system, almost entirely because of the Rector's intervention. Nevertheless, this was quite an early date for such a scheme, which the town later regarded with some pride. The Petition for Incorporation of 1887 claimed that Loughborough was 'one of the first local Boards of the Kingdom' to introduce a complete system of drainage, and that the mortality rate had fallen in consequence from 25.7:1,000 between 1845 and 1850 to 18.8:1,000 from 1882 to 1887. 85

The provision of water supply was a different matter. When the question was raised some years later the Board published a notice in the Loughborough Monitor of 24 January 1867, in which it stated that the ratepayers of 1852 had 'generally manifested ... a strong and determined opposition to the increase of taxation for a water supply'. This action was taken in response to another initiative by the Rector. He was concerned more for the quality of the environment than industrial advance, but it must have seemed to him in 1867 that the underlying economic trend in the town was upward, and that it might be willing to find the money. This time there was some support from ratepayers, but none from the Board. Fearon's

tactics were even more robust than his earlier use of the private letter 'leaked' to the press. He persuaded some of his associates to join him in forming a Limited Liability Company to build a reservoir. Private companies had already built two for the borough of Leicester, in 1853 and 1866, and the Loughborough company called a public meeting, reported by the Loughborough Monitor of 10 January 1867. Comments from the floor of the Hall suggested that, while they were in favour of a piped water supply, they mistrusted the motives of the company sponsors but, in any event, the Board had realised that there was pressure for change and had taken the unusual step of meeting on Boxing Day, 1866, when it decided to seek authority to raise £13,000 on a mortgage of the rates. The company subsequently agreed to withdraw on payment of compensation and the Board opened its own reservoir in 1870.

Stagnation had, however, induced caution, where future planning was concerned. The debate on water supply developed entirely around the question of public health. A lack of supply of water of assured quality and quantity would have become a problem had growth occurred, but the Board thought that this was unlikely. Although the American Civil War had ended and trade was reviving, the Board could not foresee any future heavy industrial consumption. The reservoir capacity was to be 29,000,000 gallons because it was thought that 300,000 gallons per day would be sufficient for all requirements for 'some time to come'.⁸⁶ Two dye masters were on the Waterworks sub-Committee of the Board. Dyeing was a local industry which was

obviously restricted by the use of water raised from wells but there is no record that these two men criticised the provision to be made. No arrangement was made for a connection to Cartwright and Warner's factory and the Board offered the Paget factory a free supply of water for closets and drinking purposes, but a sum of £400 in lieu of any water supply to the Engine and Boiler'.⁸⁷ After the waterworks were opened, there were problems because the Board had used materials inferior in quality to those proposed by the superintending engineers. By 1881, three industrial consumers took one-sixth of all the water.⁸⁸ It was obvious that a drought would affect business as well as private consumers, but at a Board meeting to discuss future plans there was no quorum. The drought duly came in 1884 and in October that year the water supply was cut off from 8 p.m. to 6 a.m. for non-industrial users and temporary filter beds were built on a local brook.⁸⁹

The company promoted by the Rector had planned for a much larger reservoir but, in the event, the local Board made quite inadequate provision. Any reservoir constructed on the assumption of industrial growth would have been resisted in the town; although the features of Cotton's invention were already known it was not thought likely that it would encourage much expansion. Engineering was developing, but again no fundamental economic changes were expected. It was assumed that the population would not exceed 12,000 in the foreseeable future. A year after the reservoir was opened it was already 11,456 and in 1881 it had reached 14,681.

The four organised responses discussed in this chapter were related to the economic conditions of the time and they are considered here in the context of an implied link between the nature of society and economic performance. The two responses by the workers differ in the sense that Luddism arose from economic growth and was violent, while Chartism developed during a period of decline. It was therefore a response to lack of growth but was reasonably peaceful. Neither the Luddites nor the Chartists saw solutions in industrial innovation. Both groups appeared to subscribe, in some way, to the 'golden age' myth, in that the Luddites wished to return to it and the Chartists believed that an extension of the franchise would change the political mood of the country in their favour and that this would lead to greater social and economic opportunities for the working class. All four responses reflect national trends. The two 'official' ones had more limited aims but their nature embodied a permanency lacking in Luddism or Chartism, in the sense that the challenges of education and public health are always present within society. This was appreciated in the nineteenth century but the connection of these services with the economy was perceived less clearly. In the context of this thesis, they reflect contemporary attitudes to economic expansion, which proceeded in spite of an inadequate education service and an erratic water supply. The water difficulty could be solved, that of poor technical education remained a local and national problem.

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CHAPTER 9: SOCIAL AND GEOGRAPHICAL DEVELOPMENT IN LOUGHBOROUGH

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CHAPTER 9: SOCIAL AND GEOGRAPHICAL DEVELOPMENT IN LOUGHBOROUGH

Both Chapter 3 and Chapter 7 included sections on poverty and relative affluence, but it is not possible to reckon in detail the way in which the local economic product was shared among richer and poorer individuals in society. This can be done, however, in a more general sense, in that each social class tended to occupy its own streets in the town. This chapter should therefore be read as an examination of social structure in terms of urban geography; the streets and yards of the town are placed in five social groups, the status of each being related as objectively as possible to lifestyle, which was an indication of the share of the local economic product received by the people in each group. There is an attempt here to determine the reciprocal links between home address and social standing. People generally live where they do because of what they are and how they wish to be regarded. They therefore establish characteristic features in their streets, but the reverse process is also at work. Neighbours modify the attitudes of each other; all react to their social and physical environment. The merits of some classifications of social standing by occupation are first considered here and rejected as unsuitable. A system of evaluation of street status by the use of more objective indicators is then explored, developed and finally compared with a purely occupational assessment, based on the work of W.A. Armstrong and the Registrar-General's scheme of 1951. Factors related to the town's economic history are also considered: the chronology of public building and variation in

the housing stock show this very well. The social mix shown here is for 1851, but it probably altered little during the period of stagnation. It was a mix in the sense that there were poor court-yards behind rich streets, but the new developments as the economy improved were parts of estates built for one class only and the geographical, as well as social, isolation of class from class was sharpened.

a) The determination of urban social structure has obviously attracted the attention of a great many historians and geographers. They have tended to concentrate on occupation as the principal indicator of status and the Registrar-General's scheme of 1951 attempted to define the main socio-economic groups thus:

- I Professional
- II Intermediate
- III Skilled
- IV Partly Skilled
- V Unskilled

This is obviously a broadly based scheme and should therefore be able to accommodate a structure based on occupations alone. In practice, it can do so only where a full range of information is available about the work of each of the persons living in the area to be studied. This was no doubt possible in 1951, but was certainly not so one hundred years earlier. J. Hall and D. Jones, discussing the problem in 1950, also felt that, in any contemporary analysis of structure, occupational status was not the only factor that contributes to the determination of social

class'.¹ They had first considered two possible schemes. One was a Social Survey Code (Social Survey was an official research body set up by the Government), and their final classification bears certain similarities to it, while the other had been prepared by the Population Investigation Committee. This was quite unsuitable for use in a study of mid-nineteenth century urban life since it distinguished between monthly and weekly wage earners. There is no local information on these matters. Hall and Jones offered their own classification, which is:

- I Professional and High Administrative - highly specialised, calling for a degree or comparable professional qualification
- II Managerial and Executive - those responsible for implementing or initiating policy
- III Inspectorial and Supervisory, higher grade - those without the responsibility of Group II, but having some degree of authority over others.
- IV Inspectorial and Supervisory, lower grade - e.g. insurance agent, costing clerk, relieving officer
- V Skilled manual and routine grades of IV - carpenter, compositor, routine clerk, shop assistant (drapery)
- VI Semi-skilled manual - shop assistant (butchery), assembler, sheet metal worker
- VII Unskilled manual - builder's labourer, porter, canteen assistant

This is rather more refined than the Registrar-General's scheme, but the bias in favour of supervisory and higher employment means that its use in terms of the occupations of 1851 would

produce a structure with a pronounced bulge in Groups V, VI and VII.

P.M. Tillott, writing in 1968, tried to get as near as he could to the notion of 'esteem within the contemporary community' and he devised twelve occupational and six social groupings to help him achieve what was a worthwhile objective. He subsequently felt that his occupational groupings were too fine and added: 'all such classification systems are at best approximations to the reality they seek to discuss'.² R.S. Neale, writing also in 1968, suggested a five-class model to replace a three-class one and its categories (that is, the Aristocracy, the Middle Class, the Working Class) which, he thought, had outlived its usefulness. He suggested that the complexities of society could be better reflected by the classification given below:

Upper Class: aristocratic, landholding

Middle Class: industrial and commercial property owners

Middling Class: petit-bourgeois, aspiring professional men,
artisans

Working Class A: workers in domestic industries, factory
proletariat

Working Class B: farm labourers, low paid factory urban workers.³

He felt that such a scheme took into account four principal concepts, those of social stratification, social class, class-consciousness and political class (for example, a radical middle class). He suggested that determinants of social stratification could be source and size of income, occupation, years of

education, size of assets (all of which are objective) and values, social custom, language (all of which are subjective). He saw three factors in social class as being authority, rank and pedigree. This is very interesting and Neale's model is a useful perceptual apparatus with which to study forms of class consciousness in the nineteenth century. It is, unfortunately, not a practical basis for an analysis of a community. Even those determinants which are objective could be traced only with great difficulty, if at all. It would often be possible to trace urban upper and middle classes using Neale's broad definitions, although size of middle class property ownership would have to be defined. The middling class might be traced through any pretensions to grandeur such as the keeping of servants, but beyond that we are again in the sphere of occupation. There appears to be no set of objective factors which could be brought into play across the whole range of social classes as defined by Neale in such a way as to identify each class as a section of the community, although it might well be possible to allocate to some individuals their class role in Victorian society.

R. Smith, studying in 1970 early Victorian household structure, returned to the basic Registrar-General's scheme, with modifications, and defended his decision thus: 'It may be objected that one should not use a mid-twentieth century classification on mid-nineteenth century occupations. The answer to this justifiable criticism is that circumstances force it upon us.' After washing his hands of the offence he knew that he was about to commit, he limited himself to two broad categories:

- a) The Upper Classes (I and II of the Registrar-General's scheme)
- b) The Working Classes (III to V)

and commented: 'narrower divisions, especially if we take into account their wider ranges of error, become much more complex to handle and interpret'. He then defined his upper classes as professional persons, entrepreneurs, managers, farmers and those living on investments. The others were in his working classes.⁴ He clearly avoided many mis-allocations in this way (although some small farmers may have been wrongly placed) but the categories are so general that their value must be limited.

W.A. Armstrong rejected the Hall-Jones scale in 1972. He also appreciated that any grouping involved some 'loss of detail', that it could become too rigid, that there were problems in deciding criteria of social class and that the nineteenth century census returns offered insufficient information on the relevant variables. For these reasons he adopted the 1951 scheme. It was not too refined for the data and there were published lists of nineteenth century occupations 'for easy allocation and comparability of classification'.⁵ Armstrong's expertise in his cross-reference system of occupations and his painstaking analysis of Booth's work can guide the student towards the desired goal of a classification of nineteenth century occupations in a twentieth century framework, but only if the student can suppress his growing fears that the occupations as stated in the enumerators' books in (say) 1851 are unreliable. From 1861, Census Office staff had an occupational dictionary available to them, but it was not

until 1911 that the census form had a space for 'Nature of Employer's Business'. Had either the extra space or the occupational dictionary been available in 1851, more accurate analysis of data might have been possible.

Teachers, for example, were usually described in Loughborough as 'school mistress' or 'school master'. Some names can be recognised by the local historian; the Headmistress of the Girls' Grammar School, for example, or the teachers at the Lancasterian schools, can be placed neatly into the appropriate social classes. A dame school mistress can also be so placed but there are others who may have been at high or low class private schools, or denominational ones, and they cannot all be pushed together into the same socio-economic group. There were also sixty-three heads of household classified by the one word 'Tailor'. It is not reasonable to assume that they all had exactly equal skills and worked for exactly the same class of customer. There were 131 heads of households making boots and shoes, a number of whom were entered as cordwainers. Are we to conclude that the use of this word was meant to describe a man with a range of skills covering every operation in the manufacture of all types of footwear, and that the word 'Shoemaker' referred only to a semi-skilled man, or are we to suspect that some enumerators preferred the one term and some the other? Again, which grocers were high-class provision merchants and which kept a small general store? If we answer here that we can be guided in our judgement by the streets in

which they lived, we are making assumptions about our social structure analysis before we have discovered what it is.

Other attempts to devise new approaches to the problem were made by S.A. Royle in 1977 and K.A. Cowlard in 1979. Royle's scheme was based on new definitions of the five socio-economic groups of the 1951 scheme. They were:

- I Heads who employed more than twenty-five people and whose households contained at least one servant per household member, or heads with professional occupations whose households contained at least one servant per three household members.
- II Heads who employed between one and twenty-four people and whose households contained at least one servant per three household members, or heads of professional occupations
- III Heads whose households contained servants or heads with non-manual occupations, including those engaged in commerce
- IV Heads of skilled manual occupations
- V Heads of unskilled manual occupations

The method has the merit of recognising the significance of servants in social structure and also the status of employers, but in Classes IV and V Royle still depends entirely on an assessment of occupation. The scheme is therefore likely to be more reliable over the higher social ranges than the lower ones, and Royle himself felt that he still had to deal with unresolved problems. ⁶

Cowlard's approach in 1979 was quite new.⁷ He used an eighteen-class scheme for the identification of different areas of social class in Wakefield, but felt that the census could provide only six indicators, which were:

- i) occupation of householder
- ii) the employment of servants
- iii) the presence of lodgers
- iv) children at work or at school
- v) wives in employment outside the home
- vi) shared dwellings

Shared dwellings were not a prominent factor in the east Midlands, although they obviously were in Wakefield, while Cowlard used the occupations of children as an index 'only in the absence of more creditable information'. He was satisfied, however, that a wife gainfully employed outside the family was evidence of reduced status. We here return to the vexed question of incomplete returns. The employment of wives is not a safe indicator. The data already given in this thesis on selected large families also suggests that employment of wives was less important to poor families than the employment of older children. Since almost all older children were employed in Loughborough, this was not considered here as an indicator. Cowlard does, however, describe the social status of lodgers quite precisely. Their existence, he says, 'is perhaps the antithesis of the keeping of servants'.⁸

In 1976 R.J. Morris quoted the growing variety of information about individuals in the nineteenth century

directories, poll books, lists of shareholders, members of committees and societies, signatories to petitions, wills, insurance policies and, by the 1840s, marriage and census data, as material for social structure analysis.⁹ Apart from the marriage and census data these sources provide information only about the better-off; they do not spread across all classes. Like Neale's criteria, they can inform us about individuals but not directly about society as a whole. In Urban History Year Book of 1979, G. Gordon discussed rateable assessment as a data source for census analysis. He felt that rating statistics were an 'under-utilized historical source offering considerable potential for a variety of analyses'.¹⁰ This is so,⁵ but they are not always available; none can be traced for the whole of Loughborough in the mid-nineteenth century. In the same volume, H. Carter suggested the use of a housing density factor, that is, the percentage of heads of household in a given area.¹¹ The size of households would surely have to be taken into consideration, but even so the problem of area definition arises. For example, in Loughborough the Market Place, a social area of very high class, would show a much higher housing density than that among the very poor streets surrounding the Rectory, simply because that area would include the large Rectory grounds. If linear measurement were used, street by street, space behind houses (in any event, difficult to measure), would presumably have to be ignored. R. Dennis and S. Daniels concerned themselves with the concept of community,

not social status, and suggested as criteria:

- i) residential persistence, an indicator of community consciousness of a geographical community, but they thought it 'an ambiguous and imperfect' indicator of community structure,
- ii) residence and workplace patterns,
- iii) kinship and residential propinquity; they thought, however, that more positive evidence of patterns of reaction was needed. In other words, they would want to ask: 'How well do kin get on with each other?'
- iv) Marriage patterns, the more marriages taking place between local couples the more integrated that community,
- v) Special interest groups. ¹²

The concept of community is nebulous, dependent on a complex web of respect and friendship between people, a sense of common goals and common acceptance of methods by which such goals can be achieved. It is not quantifiable and criteria will be subjective and ambiguous. It is, nevertheless, an extension of social geography into the real world of personal relationships, but is this world too subtle to be measured?

- b) Faced with this variety of attempted solutions to the problem, the present writer decided, at first, to produce a series of 'street profiles' based on occupations of heads of households as given by the enumerators. Social status was not to be mentioned, although it was hoped that some inferences could be drawn from the profiles, when completed. He noticed, however,

that Armstrong had tested his results in York against the number of domestic servants in households and found good correlation, with some of their employers in Groups I to IV inclusive and none in his Group V.⁵ It seemed, therefore, that if occupation was largely ignored and other indicators devised of equal merit to that of the employment of domestic servants, a physical pattern of streets based on social status would emerge. The number of occupied houses in each street could be used as a moderator, to give exact comparison of one street with another by refining a raw score of indicators to a percentage of occupied houses.

The first obvious indicator was servants. They were indispensable to nineteenth century Society, since wives were freed from household problems to acquire and maintain status for their families, especially their husbands. Only those accepted in Society could achieve positions of influence. There was also the duty imposed on the better-off to provide work for the poorer classes, directly by the employment of servants and indirectly through payment for a wide range of consumer services. Perhaps none in Loughborough would have qualified for admission to this Society, (doctors, clergymen and factory owners were generally outside it in 1851) but no doubt many local families adopted some of its etiquette.¹³ J. Burnett quotes from Walsh's 'Manual of Domestic Economy' of 1857 the subtle status values which then applied. An income of £500 p.a. was needed to provide three servants, one of whom could be a man. One thousand pounds per annum was needed for six to be

employed, two of whom could be males, who were 'almost invariably associated with ownership of a coach and horses'. The steps by which a householder led his family up this desirable social scale are also described. The ambitious man began by providing for his wife a daily help or 'chairwoman' (unfortunately a 'daily' would not be allocated to the employing family in a census, unless she lived in). Next, a living-in servant was employed, almost always a young girl, aged thirteen or fourteen. Some householders in Loughborough in apparently quite humble occupations could afford one, but could not climb further up the staircase, which led to a house- or nurse-maid, then to a cook. This group was regarded as one 'which could minimally minister to all the requirements of gentility'. The minimal needs having been met, subsequent appointments would be that of a manservant, then another female, perhaps a lady's maid, followed almost certainly by another man.¹⁴ There were many householders with one girl and variations on Walsh's theme occur at all stages between these extremes. There can be no doubt, therefore, that the employment of domestic servants was a wide-ranging social factor and that men carried with them visions of grandeur which it was beyond the powers of women and girls to inspire. They were therefore given a separate heading, although had they been included with female servants the totals would have been the same. At this stage, weighting of all factors was to be uniform. Nevertheless, the separate headings themselves enabled the two indicators to be used in subsequent predictor evaluation on their own and in conjunction with

others. It will be observed later in this chapter that an enhanced weighting was also tried with male servants.

A third positive indicator was the number of resident electors in each street for the last complete year prior to the census, that is, the period from 30 November 1849 to 1 December 1850. This was an obvious sign of status. It was realised that there would be repetition in that many electors would also have had servants, but it was felt that a series of part-repeating indicators would produce a wide spread, not only across the streets of the town but also of total scores, so that some distinctions of prosperity and poverty could be made. Another positive indicator was that of householders who were self-supporting, the annuitants, the fund-holders, who may not all have been wealthy and may not have had the vote, but who lived with relative freedom from financial pressure. Employers were also an obvious choice, but this indicator was adopted with some reluctance because the census information may be incomplete.

It has already been stated that the intention was to create a wide spread of positive indicators and their extent is shown below over the seventy-three streets of the town. It should here be pointed out that yards were shown separately, partly because it was considered that they might have different social structures from the streets behind which they were situated, and also that people perceived their social unit to be the courtyard rather than the street itself. On the other hand, houses outside the urban area were excluded. Emparked houses,

within the general urban area or just on the edge of it, were included. The barracks, the prison, the workhouse, the infirmary and the convent were not used because, although these institutions were geographically part of the streets, they were not so socially.

TABLE 9:1

SPREAD OF POSITIVE INDICATORS IN SOCIAL ANALYSIS

Male servants	24 streets
Female servants	55 streets
Electors	33 streets
Self-supporting householders	34 streets
Employers of trade labour	32 streets

Yards, as suggested above, were not included in this spread analysis because many of them were very small. Only ten streets had to be given a 'Nil' return over all the indicators and they were also fairly small, the largest being Buckhorn Square with thirty-one householders and the second largest the Almshouses, with twenty-six, but the latter could not have been expected to have any positive social features. It may be pointed out, however, that eight of the twenty yards did have at least one.

So that the spread could be broadened still more, five negative indicators were introduced. The first was the number of widow householders per street who were not self-supporting, as defined in the positive indicator group. In an age when wives were so dependent upon their husbands and enjoyed virtually no legal rights of their own, widowhood must have been a severe problem, whether or not the departed mate had been loved, tolerated or detested. Other data suggests that many of them lived hard lives, those in their own homes turning to almost any

kind of work which would provide some sort of a living. The same considerations also applied to unmarried women who were heads of households. It was true that they could own property, but those who did so, or had money, were excluded from the negative calculations. Those with children were probably in particular difficulty and again the impression given by other data is that they were poor. A third group was that of householders in low-grade occupations. This is, of course, a denial of the 'non-occupational' principle on which this analysis is based, but there was a certain group of workers, such as casual labourers, road men, tinkers and hawkers whose low status is beyond all reasonable doubt. Another obvious factor was that of householders on out-relief. It should be pointed out that they are included here as paupers, without reference to their occupations, which were sometimes entered in the enumerators' books in a form such as 'Farm labourer (pauper)'. The last of the five negative factors was the presence of lodgers. It can be argued that lodgers with money in their pockets would have preferred to avoid the poorest class of accommodation. Some may well have done so, although only thirty-seven lived in the accepted inns of the town. They occupied the official lodging houses in considerable numbers, as well as some unofficial ones, and there is evidence of mini-lodging establishments in some court yards, for example, Wheatsheaf Yard. Lodgers can be regarded, as a whole, as a shifting population. Some were refugees from difficult home circumstances, those at the Alms Houses may well have been placed there by the Board of Guardians. Some were looking for work and might have sought the tenancy of

a house had employment been available, others were passing through. If the number of lodgers varied from night to night, the presence of householders willing to take them in would have remained more constant. Two other negative factors were considered, those of working wives, and children aged from five to eleven not being educated. Employment of wives and actual school attendance are, however, difficult to assess.

TABLE 9:2

SPREAD OF NEGATIVE INDICATORS IN SOCIAL ANALYSIS

Widow householders	57 streets
Unmarried women householders	37 streets
Low occupation householders	36 streets
Pauper householders	30 streets
Lodgers	58 streets

Only nine streets were recorded as 'Nil' and of these only one had more than seven houses, the exception being Barlow's Row with seventeen. Only one courtyard produced a 'Nil' return for negative factors and this was Palmer's Yard, off Baxter Gate, with only three houses. The complete analysis is shown as an Appendix.

The map used to display the information is also given as an Appendix. It is based on the 1883 Ordnance Survey, on the scale 25":one mile. There were obvious difficulties in amending such a map to the geography of the town in 1851. Streets not named in the 1851 census could be cut out, as well as later factories and descriptions of some buildings based on their 1883 use, but it was impossible to be certain that this had been done completely. Some street names also occur in the Census which do not appear on any map of the town and it was thought best not to

try to place these. Many courtyards were not named on the map, but some could be identified by the number of the houses. It may here be noted that whereas, in general, streets only, and not the houses along them, were coloured on the map, it was felt that the area thus shown would have been so small if this method had been applied to yards that both houses and the yard spaces were coloured. The great advantage of the O.S. map was that it shows housing in very great detail and in this sense captures the spatial ethos of the Victorian town. The minor inaccuracies were therefore justified and the general social structure was not affected.

c) The accepted model for the social structure of the mid-Victorian town is that the better classes lived above their businesses in the central business district, and that there were succeeding circles, as it were, of streets housing the lower socio-economic groups around the C.B.D., with the poorest people having to walk the greatest distance to their work. Within the C.B.D. in Loughborough the pattern held as true as any general pattern does. The principal streets, crossing in the centre, were all either in Group A or Group B of the social structure:

West-East: Devonshire Square - Cattle Market (formerly Fishpool Head) - Market Place - Biggin Street - Baxter Gate

South-North: High Street - Swan Street

Around them were some Group C streets, mainly the outer arms of the old town, Church Gate, Pinfold Gate and Wood Gate, the only intrusions of the lower social groupings in this area being in

the courts and the yards, although beyond Church Gate to the north-west there was an area of poorer housing penetrated by the higher-class Fennel Street. There had also been a significant movement by the wealthy to the edges of the town, where substantial houses had been built in their own parks. The house called 'The Elms', for example, could have been accommodated in the Market Place only with difficulty. These parks, including those of the two Rectories, had open countryside on one, and generally two, sides. A variant of this tendency was the way in which some select 'outer fringe' streets were developing. Although in most instances the number of houses was small, the people living there were of some social standing. There had been a flight of employers from the large cities to the 'remote countryside'. Loughborough was, however, a smaller town where 'urban residential enclaves and easily accessible rural residences were developed that allowed of considerable access'.¹⁵ Forest Road, Beacon Road and Park Road form together an example of the formation of a better class urban residential enclave. There was also Leicester Road, not now a street of much distinction at its town end, but housing in 1851 many retired people on assured incomes. Similar factors were at work along Derby road, today a depressing thoroughfare from the town to industrial estates on the outskirts. In these instances, the twentieth century town has expanded to engulf some better residential areas, although Leicester Road still has some good houses remaining from its better days. Meadow Lane has also lost its 1851 status under later nineteenth-century terraced housing.

The social structure in other additions to the medieval town does, however, conform in some way to a standard Victorian pattern. The householders in the Moira Street, Nottingham Road and Regent Street areas, then on the edge of the town, were, as groups, in no more than the middle range of the structure or one group below it. The Rushes and Bridge street, just beyond the medieval area to the north-west, and also on the edge of the Victorian town, were in the lowest social class (Group E). Most towns have people who have taken the recollections of a succession of oldest inhabitants about such districts, written them up and called them 'history'. In Loughborough the street of ill-fame was The Rushes. J. Deakin, founder of a local newspaper, described it as an 'insalubrious quarter', about which 'police records tell of constant rows, of the unwisdom of a single policeman patrolling there on Saturday nights, of the occasional use of the truncheon with the consequent broken heads, and of drunken men and virago women being taken to the police station in a wheelbarrow'.¹⁶ This he regarded as 'bestiality' but police in many towns today might believe that the lot of their predecessors was a relatively happy one. Indeed, we know that in 1851 a single policeman did live in The Rushes, although the Census cannot comment on Saturday night reinforcements. Bridge Street is never mentioned as a problem area although it had a high negative score in the social structure calculations and adjoins The Rushes. In 1851 many perfectly normal families lived in both streets, as well as a household of thirteen next to The Rushes, in Derby road. Here were the better-off living alongside the very poor, a family of five with

three maids and accommodating five kin, none of whom were employed. The head of the household was a dealer. Others had lodgers, just as householders in other streets had lodgers, but they did take them in larger numbers and there were private and public lodging establishments in both The Rushes and Bridge Street. This was also the Irish quarter. One in eight of the inhabitants of The Rushes was Irish and one in five in Bridge Street. There were 114 in the two streets.

The facts of life in lodging houses are known beyond any reasonable doubt. Lee referred to them as 'generally the most crowded and filthy places in any town,' where 'money was spent on sensual gratification' and 'males and females crowd into the night rooms, where they sleep indiscriminately'. The atmosphere was 'pestilential' and typhus was usually present. ¹⁷ Best describes them neatly as 'catch-alls on the penultimate rung of the social ladder'. ¹⁸ In Loughborough Lee excepted only one lodging house, that of Thomas Wiley in The Rushes, which was properly conducted, clean and well ventilated and the lodgers 'superior in intelligence'. ¹⁹ Mr. Wiley was still in charge of his recommended establishment in 1851, when he was fifty-four and his wife fifty. They were looking after a grandchild of two and twelve lodgers. There were three married men, a woolcomber, a glassblower and a labourer, a married woman who was not working, and six single men - an Army pensioner, two tailors and three hawkers. There was also a single woman, a dressmaker, with a small child. It was a mixed group of residents, but on the whole Mr. and Mrs. Wiley were attracting a slightly better class

of guest than some of their competitors. Their premises were one of four large lodging houses, three in The Rushes and one in Bridge Street. In the second house in The Rushes, a family of eight had eleven lodgers and one person rather oddly classified as a 'visitor', who may have been a non-paying lodger. The lodgers in this house included three married couples.

Unmarried mothers do appear in lodging houses and this may be a reflection of the low moral status of such establishments. On the other hand, the census information reveals them more clearly because the illegitimacy of their children could not be concealed in the ways that were possible if the mother lived with her family or other relatives. In the third lodging house in The Rushes, an Irish widow, aged forty-one and with five children, accommodated two families of lodgers, totalling nine, all Irish. The house in Bridge Street was managed by a Corsican-born man with an Irish wife, who had seven lodgers in two families. The fact that so many of these lodgers were in family groups is worthy of note. They were not necessarily bases for prostitutes otherwise living alone, but the possibility of maintaining the privacies of family life was remote. Lee, in his Sanitary Report of 1849, apparently making no distinction between householders calling themselves lodging house keepers and others, found one house with two lodging rooms, with fifteen males and nine females. Up to five persons in one bed could be found in several houses and many occupants were beggars, including children.

Those householders classified as lodging house keepers did, in fact, meet vigorous competition. In The Rushes, an Irish labourer with a family of five also accommodated five 'visitors', themselves Irish; a rag and bone man and his wife kept nine lodgers and a female domestic servant, while an unmarried framework knitter aged thirty-three shared his house with an unmarried female servant aged thirty-six, four lodgers and an unmarried mother aged twenty-one, with three children. In Bridge Street a married couple in their twenties kept four unmarried men and a widow as lodgers; an unmarried man of thirty had two single women lodgers aged twenty-seven and eighteen and a married woman aged twenty-two. We are not concerned about vice in this thesis, but it must be remarked that casual lodging in private houses was not necessarily free of all offence. An analysis of stated occupations of lodgers suggests that, if all low-level adult workers had been taken as a negative indicator and not householders only, these two streets would have scored even more badly. Of eighty-seven adult lodgers in work, forty-four were in the casual labourer-street trader category. Another eight were engaged in hosiery ancillary work; six were dressmakers and six factory hands. The only man whose trade could be regarded as skilled was a framesmith, and in a wide skilled/semi-skilled range there were three tailors, a shoemaker and three 'boatbuilders'.

It was quite common for Irish householders to take in other Irish people as lodgers, and it seems to be a widely held

belief that the presence of an Irish enclave in a mid-Victorian town was some evidence that the area was 'insalubrious'. This may be an English comment on the Irish, but it should be pointed out that there were far fewer opportunities for the Irishman to acquire the skills of a trade in his own country. Low life in Loughborough was no Irish monopoly; other areas regarded locally as 'hotbeds of vice' but occupied by the English in 1851 were Steeple Row and New Street, both in our Group D. Wheatsheaf Yard was 'a favourite resort of poachers who could sidle home in the darkness across the meadows, and over the brook, without any approach from the streets. It was in this slum that a wretched hovel ... was, at the auction sale, described as "a riparian residence on the banks of the river"'.²⁰ The analysis given here places Wheatsheaf Yard in our Group E without reference either to poachers or the tautologies of auctioneers. It is particularly gratifying to find that the judgement of the series of social indicators is confirmed by the local oral tradition. In certain parts of the town two-roomed houses were in use into the nineteen-twenties. An old man of eighty-six remembers his visits to them as a political canvasser and has described their miserable toilet facilities and the general atmosphere of decay that extended to the people living in them. His abiding memory was 'one of cockroaches - large cockroaches in great numbers'.²¹ He saw the houses and their tenants from the point of view of one who lived on a new and rather distinguished council housing estate, and with a reformer's zeal. The families living there in 1851 may have regarded themselves as fortunate not to be in even poorer property but, as it so happens, all the streets he

mentioned were placed in either Groups C or D in the analysis given here.

We may also look more closely at the Alms Houses, in Wards End. They were placed in Group E because of their widows, paupers and lodgers but the modern notion of the almshouse, or even the Victorian concept in Trollope's 'The Warden', does not apply. They were not solely for the occupation of elderly people, as Table 9:3 shows:

TABLE 9:3

ALMSHOUSES: OCCUPANTS BY AGE GROUPS

AGE	NUMBER OF OCCUPANTS
0- 9	7
10-19	7
20-29	4
30-39	4
40-49	3
50-59	3
60-69	11
70-79	11
80-89	2

Of the fifty-two, only thirteen were over seventy, and even if we lower the age of qualification for residence to sixty, there was still a majority of occupants below it. This situation arises because few of the old people lived alone. The average size of the co-resident groups was 2.08. The relationships were:

TABLE 9:4

ALMSHOUSES: OCCUPANTS BY RELATIONSHIPS

Head of Household	25
Wife	6
Son	6
Daughter	3
Lodger	11
Visitor	1

The presence of a lodger in almost every other house suggests that the almspeople themselves needed company and also a little more money. The facts that twenty-one out of the total of fifty-two residents were single, as compared with thirteen who were married and eighteen widowed, and that fourteen of them were aged below twenty, create the impression that here there had, by chance, developed an advanced notion of care for the elderly, in that they were not condemned to grow older more quickly by contact only with people of their own age group. Very young lodgers could, however, have suffered from this arrangement. There were, in fact, six almshouse children stated to be at school. Of other residents, nine worked in ancillary hosiery and six were farm labourers. Four had no stated occupation, but only sixteen were paupers on out-relief, less than one third of the people living there. The almshouses performed very badly, however, in the analysis, and could have had little to commend them.

d) The Social Structure having been completed and the map drawn, the next obvious step was to compare it with an occupational analysis. Those of heads of household only were taken for three principal reasons:

i) where an occupational heading such as 'boatman' could cover a wide range of duties, the spread was likely to be reduced by the fact that the workmen involved in the analysis were probably adult and married, possibly having to support families and working at a higher level of expertise than younger single men;

- ii) the occupation of a householder tends to determine the ethos of the whole family group and, to some extent, the occupation of other family members;
- iii) any extension beyond household heads would also have involved the problem of women's work, especially that of wives.

An examination of householders in streets in different social groups, as shown on the map, demonstrates that they shared common occupations. The textile and clothing industry was so heavily dominated by workers in the domestic trades that they could be found in most streets of any size in the town. The same consideration applied to other people who worked from their homes, such as dealers, shoemakers and shopkeepers, but there were also farm labourers living in every type of street. It cannot, therefore, be claimed with very much confidence that the presence of certain types of worker in a street was a clear guide to the social standing of its inhabitants, as a set. The lack of detail in the early census material and the difficulty of relating the subtle nuances of occupation to the social prejudices of the early Victorian era mean that occupation itself is an unsure foundation on which to build social structures. People are, however, often what their occupations have made them; their attitudes are determined by the work they do and this is too important a fact to be ignored. It was therefore thought necessary to take the classification tables quoted for 1851 occupations by Armstrong, to calculate rankings over the streets of the town, and to see in what ways the order

differed from that based on the Multi-Indicator analysis.⁵ The total number of heads in each socio-economic class was given a score, that is, five heads in Group IV occupations would have received twenty and three in Group I occupations would have received only three. The lower the score the higher was the status. The totals thus reached were divided by the number of householders in the street, so to arrive at a figure by which streets could be compared with each other. Some Loughborough occupations did not occur in York so there was no guidance from Armstrong, and this was a matter of importance since those missing were mainly in the hosiery industry. Assessments were therefore made for these occupations, and it may here be noted that framework knitters and lace makers were placed in Class IV. Knitting was semi-skilled work; the highest wages were earned by the younger and stronger men whereas age, which should have brought greater experience, was a handicap. Lacemaking had become, as we have seen, a matter of turning a handle and watching carefully for faults in the product. In addition, Armstrong deals only with those in gainful employment and so annuitants and other people of independent means were omitted from the calculations. His assessments were taken at their face value; for example, all tailors, cordwainers and shoemakers were classed as III, in spite of the doubts already expressed in this thesis.

A full comparison of the two analyses is given in Table 9:5. The numbers in each group have been kept the same, but the order of the streets is that of the appropriate analysis, that

TABLE 9:5

COMPARISON OF GROUPINGS ON M.I. AND OCCUPATIONAL BASES

M.I. BASE

OCCUPATIONAL BASE

GROUP A (6 streets)

Market Place
Biggin Street
High Street
Leicester Road
Ashby Road
Park Lane

Biggin Street
Market Place
Fishpool Head
High Street
Far Park Lane
Swan Street

GROUP B (14 streets)

Baxter Gate Yard
Baxter Gate
Forest Lane
Far Park Lane
Middle Park Lane
Derby Road
Fishpool Head
London Road
Moor Lane
Meadow Lane
Fennel Street
Holborn Hill
Devonshire Square
Swan Street

Baxter Gate
Leicester Road
Devonshire Square
Barrow Street
John Street
Canal Bank
Middle Park Lane
Gregory Street
Kirks Lane
Park Lane
Ashby Road
Church Gate
Meadow Lane
Rose and Crown Yard

GROUP C (41 streets)

Rectory Place
Spring Gardens
Gregory Street
Sydney Terrace
North Street
Southfields Lane
Church Gate
Barlows's Row
Ave Maria Lane
Palmer's Yard
Chapel Row
Kirks Lane
Dog and Gun Yard
Ashby Square
Regent Street
Market Street
Sparrow Hill
Warwick Row
Barrow Street
Bass's Yard
Ashby Place
Canal Row

Cock Pit
London Road
Sparrow Hill
Canal Row
William Street
Rushes
Connery Passage
North Street
Garden Row
Mill Street
Ashby Square
Forest Lane
'Yard', Baxter Gate
Southfields Lane
Palmer's Yard
Rectory Place
Holborn Hill
South Street
Wards End
Welsh Hill
Salmon Street
Spring Gardens

Aslett's Yard
Angel Yard
Pinfold Gate
Queen Street
King Street
Pinfold Row
Pleasant Row
Mason's Yard
Wards End
Canal Bank
Wood Gate
North's Yard
Garden Row
Factory Street
Welsh Hill
Mill Yard (Mill Street)
Buck Horn Square
Mill Street
Union Street

Chapel Row
Dog and Gun Yard
Warwick Row
Fennel Street
Derby Road
Ashby Place
Wood Gate
Moira Street
Nottingham Road
Aslett's Yard
Moor Lane
Regent Street
Buck Horn Square
Pinfold Terrace
Pinfold Row
Pinfold Gate
Mills' Yard (off Devonshire Sq.)
Mason's Yard
Pleasant Row

GROUP D (26 streets)

Steeple Row
London Square
Wraggs Yard
Moira Court
Connery Passage
Salmon Street
Dudley's Yard
Beehive Lane
Nottingham Road
Mills' Yard (Devonshire Square)
Green Close Lane
South Street
William Street
Pinfold Terrace
Wellington Street
Cradock Street
Moira Street
Old Factory Yard
Cock Pit
John Street
New Street
Holland Street
Rose and Crown Yard
Dead Lane
Chapman's Yard
'Yard' Nottingham Road

Wellington Street
Factory Street
Steeple Row
Green Close Lane
Mill Yard (Mill Street)
Dudley's Yard
Hunter's Yard
Angel Yard
Cradock Street
Sydney Terrace
Dead Lane
Queen Street
New Street
Holland Street
Beehive Lane
Wheatsheaf Yard
Ave Maria Lane
Alms Houses
Moira Court
Bridge Street
London Square
Bass's Yard
King Street
Chapman's Yard
Market Street
Union Street

GROUP E (6 streets)

Attenborough's Yard
Rushes
Bridge Street
Alms Houses
Hunter's Yard
Wheatsheaf Yard

Wragg's Yard
Old Factory Road
North's Yard
'Yard' (Nottingham Road)
Attenborough's Yard
Barlow's Row

is, Market Place was the most socially acceptable street on the M.I. analysis, but Biggin Street held this honour on the occupational approach. The streets in bold type are those which appear in the same group in both analyses. The analysis having been completed, the data were fed into a computer in the form of adjusted scores of columns, including the total scores in both the M.I. table and that based on occupation only (abbreviated below to 'O'). A linear regression technique was then used to measure the merits of each of the M.I. indicators as predictors of the M.I. totals. The results were:

TABLE 9:6

PREDICTOR ACCURACIES OF M.I. INDICATORS

1	Female servants : predictor accuracy of 71.5 percent. In other words, had this been the only indicator used, it would still have been 71.5 percent accurate
2	Employers of labour : 50.3 percent
3	Electors : 48.1 percent
4	Male servants : 44.6 percent
5	Lodgers : 29.6 percent
6	Paupers : 14.9 percent
7	Widows : 14.5 percent
8	Self-supporting Heads of Household : 11.5 percent
9	Low Occupations : 10.2 percent
10	Unmarried Female Heads of Household : zero

The order of streets in the O analysis was also entered; its predictor accuracy was only 39.1 percent, that is, if the basis of the M.I. analysis, which is obviously more refined than that

of the O system, is also more reliable, than simple calculations of numbers per household (expressed as a percentage) of male servants, female servants, electors or employers are better single predictors of street social status than occupation.

Some weighting was then introduced, to discover if some factors could be amended to achieve a greater degree of precision in the final points totals. It was felt, for example, that lodgers had been over-assessed as a factor and therefore their weighting was reduced from one raw score point per lodger to 0.5. The correlation of its original predictor accuracy and that of its revised weighting was as high as 93.8 percent and so clearly such an amendment would have made little difference. Male servants, on the other hand, were given a double weighting, in view of the obvious status they gave to employing families. Here the correlation between the original and the revised predictor accuracy was higher still, at 95.4 percent. It was therefore felt that uniform weighting across all ten indicators was justified because a discriminatory system would not have seriously affected the results. Another calculation was then made, using multiple regression techniques. Groups of M.I. indicators were analysed as predictors of the final M.I. order of streets. The best pair were female servants and lodgers (weighted at their original one raw score point), with an accuracy of 87.1 percent. The figure rose to 93.1 percent when pauper heads of household were introduced and it might be felt that, given the obvious inaccuracies of any method of estimating the social status of streets in the nineteenth century, with

little or no contemporary information other than that found in the Census, these three indicators will give a reasonable guide to urban physical structure. Accuracy rose, in fact, to 95.3 percent when five indicators were taken: female servants, lodgers, paupers, electors and male servants. The others entered the equation at:

- sixth: low occupation heads
- seventh: self-supporting heads
- eighth: employers
- ninth: single female heads of households
- tenth: widow heads of households

Multiple regression techniques were also used to determine the accuracy of the M.I. factors as predictors of the O classification. Here the best single predictor was that of female servants, at 45.9 percent accuracy. The best pair, however, were male servants and employers, with an accuracy of 56.9 percent, and the best three, male servants, employers and self-supporting heads (61.4 percent). When low occupation heads were added, accuracy rose to 64.1 percent. Most of this is entirely reasonable. The group of heads of household who employed servants covered a wide range of occupations, varying from those who could employ men to those who could manage to pay only a little 'skivvy', employers of trade labour received fairly high ratings in the five-point scale used by Armstrong and low occupation heads offered an extension of the analysis to the lower end of the scale. The exception is the self-supporting heads, who were not used at all in the O calculations.

A conclusion that may be drawn is that occupation analysis is of value, in that the obvious influence of work on lifestyle cannot be ignored. It is, however, subjective in the sense that the census enumerators themselves seem to have accepted entries on the householders' forms without much enquiry and that, even if they were accurate, their transference to the 1951 scheme can be done only in general terms, that is, as we have already observed, all men in the one occupation have to go into the same 1951 class, despite the wide range covered by some occupational descriptions. The M.I. analysis largely ignores occupation for these reasons, but does introduce real objective evidence of wealth or poverty. It could be argued, therefore, that this is the more reliable. There is probably room for research into an incorporation of the two analyses. The occupational score for a street was based on the average class ranking, that is the total of all rankings divided by the number of householders. For example, High Street scored 2.32, so the average householder (if one could ever be found) was not quite of Class II but much above Class III. Wards End scored 3.38 and Union Street 3.96. The lowest numerical score is therefore the highest socially, and so the data itself could be used as a negative factor in the M.I. Scheme; the higher the status of a street the fewer the points deducted. A difficulty is, however, the weighting to be attached to occupation as one of many other factors. A basis could perhaps be established if a number of towns could be found with good histories of the period relating to any census up to 1881, the adjustments of factor values being based on judgements of social status made in the relevant history.

e) This section deals with public building as an aspect of affluence and poverty in ways not shown in the street-by-street analysis. Its extent suggests that early prosperity reached its peak in about 1828. A theatre had been opened in 1823, a time when it must have seemed that a regular audience would be available.²² In 1828 a new school was built by the Town Charity; the fact that money could be spent in this way is an indication that calls for poor relief had been low. In the same year three new Nonconformist Chapels were opened; Wesleyan, Independent and General Baptist, while the Particular Baptist Chapel was extended. Lace makers preferred Nonconformity; the three new buildings were just as much lace chapels as Long Melford has a wool church and Loughborough Parish Church has a wool tower. They surely reveal the presence of a strong lower middle class, the small employers of the town, leading campaigns to raise money to build places of worship which they felt to have dignity. They were supported by the upper working class, who regarded their splendid chapels as speaking of the work of God in the same way as their crowded streets spoke of the work of man. All were no doubt confident that remaining debts could be cleared quite quickly. This was not to be so. Improvements and pious embellishments would no doubt have followed had lace continued to prosper, but money became tight. Chapels and chapelgoers met financial problems, sometimes eased by discounts given to the chapels by tradesmen members. Burgess quotes pony and trap hire for ministers, printing, furniture and plumbing as cheap services offered to the Wesleyans.²³ No building work took place until 1846, when the General Baptists repaired their

chapel, although their financial position was from satisfactory. The stipend they were able to pay their minister was so low that the reverend gentleman opened a draper's shop to augment his income. He was apparently unwilling to share the financial difficulties of his congregation and he had said in his evidence to the Commission on the Framework Knitters that he did not consider that it 'fell to his lot' to visit the very poor.²⁴ Neither did he wish to add himself to their number. The subsequent crisis split his congregation, some of whom moved to an old and disused chapel because, it must be assumed, there was no prospect of raising money for a new building.

If the Nonconformist chapels bore testimony to early working class affluence, the later buildings of the Roman Catholic and Anglican churches were examples of middle class concern to preach the gospel to the poor. The Roman Catholics began to build a church in 1833. The curate in 1844 said to the Framework Knitters' Commission that he made a habit of 'visiting the very humblest' in their homes.²⁵ The R.C. record of free education and Salvation Army type soup kitchens suggests that the poor, perhaps particularly attracted by the visual appeal of the ritual, were a special concern of its clergy. The Roman Catholic missionaries in the area saw local poverty as the judgement of God on the entire nation, whose freedom was freedom to starve. They ministered to the ill-clad working class who would not have attended Anglican services, but the pennies of the poor could not build a church. The principal donor to the building fund was Bishop Walsh of Nottingham, who gave £5,000.

Since the church was quite small, this may have covered all the costs. The Anglican Emmanuel Church, built in 1837 as part of the policy to develop urban parishes, was paid for almost entirely by donations from the Incorporated Society, the Rector of Loughborough and the Misses Tate, minor landed gentlewomen of Burleigh Hall. It may have been a partial reply to Roman Catholic missionary work, in that Emmanuel Church was nearer in 1837 to areas of urban poverty than its present congregation would suggest. That year was a poor one nationally in hosiery and one of sharp depression in lace. Burgess thinks that well-fed Non-conformist clergymen and their families were 'objects of envy and animosity' in the 1830s and 1840s and that this led to differences within their congregations, split by poverty as much as they had earlier been united by prosperity.²⁶

There was a great deal of environmental poverty in Loughborough up to the middle of the century. The houses which had been built very quickly during the lace boom were still, in 1851, heavily occupied. The housing stock for the census years of 1841 and 1851 is shown in Table 9:7.

TABLE 9:7

HOUSING STOCK 1841 AND 1851

Census Year	Number of Inhabited Houses	Empty Houses	Total Stock
1841	2,100	307	2,407
1851	2,386	35	2,421

Although there had been population recovery after 1841, few new houses had been built, existing ones being re-occupied. In 1861,

however, the position had changed:

TABLE 9:8
HOUSING STOCK 1861 AND 1871

Census Year	Number of Inhabited Houses	Empty Houses	Total Stock
1861	2,437	180	2,617
1871	2,618	201	2,819

By 1861, older houses were being replaced and left empty, although there had been a slight fall in population, the total stock rising by 196, that is, at the rate of about twenty per year. Building continued at the same average rate until 1871, although a depression in the late 1850s was followed by the difficulties caused by the American Civil War. The Freehold Land Society was, however, operating in the town, its activities being directed to putting additional voters on the electoral roll. The records of the Society were lost during the 1939-45 war and little is known about its work, but H.J. Dyos, in his Victorian Suburb, points out that it was the means of providing cheap freehold building plots. It acquired whole estates, whose subsequent division into forty shilling lots was an economical procedure. In 1850, the Westminster Freehold Land Society was paying just over £18 for each voter added to the electoral roll. By the mid-1850s the Societies began the practice of inviting tenders from builders, so securing economy of scale in construction.²⁷ This system was of great advantage to a town which could not have found the money for rehousing by small-scale building on separately purchased small plots of land. The Loughborough Board of Health had, in fact, authorised the layout of two new areas in 1852, that discussed above and another by a private developer, where houses were built at a

much slower rate. As late as the 1870s the Board still felt the need to take initiatives to encourage the building of working-class houses. Individual members bought some land privately and sold it for building at 4s 6d per square yard. An inference that can be drawn from this procedure is that no contractor was willing or able to find the money to buy land on the scale that was involved. ²⁶

After 1850, some money could be found for religious purposes. The Independent Chapel, the Particular Baptist Chapel and the Primitive Methodist Chapel were extended in 1853, 1856 and 1867 respectively. The Unitarian Chapel was built in 1864 and in 1868 the Wesleyan Methodists built a new Sunday School and restored their chapel of 1828. Two more chapels were repaired, two enlarged and one more built between 1871 and 1877. Recessions could still create difficulties, however. The theatre of 1823 closed in 1856 and in 1864 the Rector of All Saints wrote that the 'great shock' suffered by the trade of the town around 1859 had made it difficult to raise money for the major works of restoration of the Parish Church which had begun. ²⁹ The need was pressing because the town's ratepayers, with Nonconformists in the majority, had refused to pay a rate for its maintenance. At this difficult period for the local economy even the major employers in textiles had to limit their contributions, which fell £1,000 short of the target, the remainder being given by a substantial local landowner. There may have been another factor. The same sources had been tapped as recently as 1855, when they had contributed to the £2,000

needed to build the Town Hall.³⁰ There were here some neat distinctions. In the Corn Exchange within the Town Hall God could be praised for the abundance of his harvest in practical ways. Money put into Church buildings was, however, a longer term investment, the contract including a great deal of small print. There was an additional social consideration. The Rector's declared reason for restoration was 'the want of space occasioned by the appropriation of pews'.³¹ The local middle class was being asked to subscribe to the loss of a prized privilege.

The public buildings of nineteenth-century Loughborough reveal the shifts in the balances of wealth and incomes prior to the period of stagnation and also within it. The working class could do little between 1828 and the 1850s and built no new chapels until the economy was showing signs of moving forward. The middle class must also have been affected by the difficulties of the stagnant years, but not to the same degree and not if they were landowners. Even the wealthier employers felt the pressure of the American Civil War and it was only the intervention of the owner of a very large country estate which prevented All Saints church tower from falling down. Intervention of a different kind, by the Freehold Land Society, was the chief reason for the increase in housing between 1851 and 1871; many of the poorest houses were left empty, but not demolished.

This is the third of those chapters drawing material largely from the census of 1851. Its main object has been to explore the possibilities of a method of identifying social class without much use of occupational data. In this sense, it stands apart from the flow of a thesis in which much emphasis has been placed on occupation. Its place within the theme is in its precise indication of class distribution in the mid-nineteenth century town. The wealthy were in their parks, the middle class was living above, or near to, its places of business. The workers were in their courtyards or in the streets which were built during the geographical expansion of the town caused by the growth of the lace trade. The decline of the 1830s left many of these houses empty, but most had been reoccupied by 1851. Modest economic recovery had not encouraged much new building. Although the housing stock rose thereafter and some workers could move into relatively comfortable homes, the task of rehousing all those who lived in the courtyards and meaner streets was not to be completed until after the second world war. The importance of the town's marketing function is shown by the social status of the principal shopping streets. The pattern of public building was greatly influenced by the state of the local economy. None of the nineteenth century building, except perhaps the Town Hall, has any merit and this is perhaps a fair reflection on the difficulties experienced by a town in demographic stagnation, with no real economic drive.

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CHAPTER 10: SOME CONCLUSIONS

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CHAPTER 10: SOME CONCLUSIONS

a) This chapter begins with an examination on stagnation in practice, as compared with the theoretical discussion in the introduction. It then proceeds section by section, bringing together and extending the conclusions already drawn in individual chapters. It ends with a general comment on the value of this kind of work in terms of historiography. Stagnation in parts of the British economy has received little attention beyond the debates about the 'Great Depression' of 1873-1894. Even then the argument about the 'Myth' has had considerable sway in the writing of textbooks. Nevertheless, within Great Britain parts of the economy failed to grow as national income increased. Some objective evidence of stagnation in a community can be found in the general absence of public buildings and the lack of provision of other civic amenities dating from the particular period. The demographic evidence has also been quoted as a useful indicator. It is not always reliable, however. The census figures for Loughborough do not reveal a probable rise and fall between 1831 and 1841, or the possibility that a reverse process took place between the late 1850s and the middle 1860s. If demographic stagnation persists for a long period, it is unlikely to be absolute, it will describe not a straight line but an undulating one, although the underlying trend remains. The condition implies a balance, and it will be unusual for that of the kind which applied in Loughborough to be maintained over a long period in an industrial society:

i) there is a market incapable of expansion but with a

- regular, if uneven, demand;
- ii) productive capacity is equal to, or is generally in excess of, demand;
 - iii) there is a conservative workforce resistant to new methods of production or other re-organisation;
 - iv) there is therefore no incentive for capitalists to invest.

Stagnation is not a time of inactivity and within it there may be a modification of the main factors, but it will not be sufficient to disturb the trend. For example, in addition to some demographic movement in Loughborough, there was some movement in terms of capital injection and greater productivity. It concerned only part of the manufacturing process, however, in that the new machinery made material rather than garments. Attitudes towards the stagnant state also changed. The early reaction in Loughborough, as it became obvious that industrial growth had ceased, was one of unrest, used and developed by the Chartists. Had that movement continued after 1848, there is no certainty that it would still have flourished in Loughborough. As hosiery settled, so did the population. There was a reasonable certainty of some work, matters could have been worse, and had been so in living memory. This sense of resigned or relieved acceptance was succeeded by what amounted to complacency, so that, even after the end of the American Civil War in 1865, when economic prospects began to improve, the indefinite prospect of no real growth seems to have been accepted, certainly by the Board of Health in its forecast of

water requirements. These variations in perceptions were related to movements within stagnation by which it was seen to be more or less acceptable. They also suggest that the longer it continues the weaker becomes the will to climb out of it. This is indicated by the apparent indifference shown to the appearance of the automatic-fashioning hosiery machine. If it was to bring growth to the industry then the very idea was unacceptable to those with vested interests in the traditional machine, Henry Warner being an example of such a man (see Chapter 4). Many others may have feared the reckless kind of growth associated earlier with lace, but control of the Cotton patent, the limited capacity to build machines and the need to drive them by steam all ensured that this would not be so.

If stagnation in Loughborough brought a kind of security, it did not bring greater social coherence, in that all classes felt a need to meet and drink at the same well. The organisation of the hosiery trade ensured that, although all could make some kind of a living, it was on a much higher level for the masters, who could transfer some of the hazards of the trade to the workers. Nevertheless, even if there was often not enough work for all, the use of members of a family to augment the wages of the head ensured survival at a low level. There were no particular bonds of loyalty between employers and workers, although most of them on both sides had a common interest in the maintenance of the domestic system. There were some, however, among related families, willing to help each other in difficult times. It was not only the structure of the

industry but also the structure of society that ensured survival within stagnation.

Fortunately for Loughborough, there were those within the community who were dissatisfied with the hosiery industry and its traditional methods of production. They owed nothing, however, to the education service of the day. The work of bringing stagnation to an end was still done by craftsman-inventor businessmen like Messenger or Cotton, supported by others with similar apprentice backgrounds. Throughout the period education was in the grip of a classicist Civil Service which saw it either as a means of refinement or as a process of mass instruction which discouraged initiative. Change occurred because of the logic of events and the actions of a few restless men, supported by those they themselves trained. The initiative having been taken, the demographic growth occurred quite quickly afterwards.

b) Lace has been examined here as the antithesis of stagnation; its achievements and its failures became the measure against which the economy was later judged. A criticism of it at the time was that it disrupted the social and industrial pattern which encouraged stagnation. Varley writes that to Heathcoat, his machine meant technical progress, 'but to his neighbours it spelled trouble, a further disturbance of established social, industrial and economic relationships and consequently readjustments, unemployment, redundancy and increased uncertainty about the future'. The Luddites sought to redress such

grievances by the destruction of the instruments of all this change, the machines, which brought about 'the decay of the remnants of the hosiery guild system of relationships between master, journeyman and apprentice'.¹ Those who took the Luddite point of view were probably satisfied when the local lace trade disappeared, the established social, industrial and economic relationships were restored, and stagnation occurred.

Perhaps lace came too early and to the wrong town, although Loughborough and its district offered Heathcoat specialist textile services such as dyeing, bleaching and machine building. Textile production based on the knitting frame had, as we have seen, a production system which was not that of the factory. While Heathcoat left to seek water power, he may also have welcomed the chance to get away from an area where the domestic system was defended so violently. After the Luddites were executed or transported, would his workforce still have regarded high wages as a form of compensation for the loss of a cottage economy in which they might otherwise have been engaged? Tiverton possessed a large factory some twenty years old and the community were accustomed to it and to the ways of working it implied.² Heathcoat may have been paying rent for the building at the time of the 'Loughborough Job', after which its purchase must have seemed a sensible step.³

Those who maintained the local lace trade after 1816 had little capital or inventive energy. Its later period was one of fragmentation at a time when only consolidation, expertise and

investment could have kept the industry in Loughborough. The small businesses did not generate enough capital for their owners either to develop the machine itself or to see them through the waves of innovation following that on which the industry was established. They were the pioneers in the east Midlands after Heathcoat left, but success does not always go to the first man in the field. It depends less on the brilliance of the invention and more on its shrewd use. The subsequent strength of lace in the region was to be in the hands of men with capital, who waited and moved in at the right time.

c(i) The middle years of the century were dominated by hosiery, which gave the town its appearance of dour survival, its importance lying not only in the size of its workforce but also in that of the smaller trades dependent on it. It was not subject to the abrupt rises and falls of an industry based on new technology. The means of production appeared to be safe from the innovator; it still held an advantage in quality over the earlier types of new machines and this ensured its continued use for certain kinds of garment. No other country had modified the knitting frame in any significant way, there was therefore no pressure from this source on British manufacturers. Little capital was needed to maintain the technical and administrative base of hosiery. Erickson refers to it: 'The persistence of the independent firm and continual proliferation of new from old ones has usually been linked with the low capital requirements for entry into the industry'.⁴ Chapter 4 quotes the work of Erickson, that few of the leaders of the industry had wide

commercial experience, and therefore the confidence to seek change.

McCloskey links total growth to the availability of resources and productivity gains.⁵ Resources of manpower were ample in hosiery in Loughborough. Pollard comments that 'low wages often form a component of growth on industrialisation models'.⁶ Wages were lower in Loughborough than in some other hosiery centres. Why then did the town remain stagnant? One factor was that the market was limited by the price of the product. Although clothing is a necessity for all, the framework knitter manufactured a middle-class product. He ignored his own class, which might have provided a growing market for goods within its price range. Another factor may well have been that local masters took higher profits. Sections in the Report of 1845 imply that this was so. A third factor was the subsistence type of economy favoured by all framework knitters. Like African farmers, they did enough work for themselves. The chance of buying more consumer goods was waived in favour of a restricted working week. It is true that stinting spread the available work over a longer period and gave some work to the greatest number of men, but a surplus available at reasonable prices might well have been used to recapture old or create new markets. Herein is a basic attitude within the stagnant economy, the belief that the bird in the hand is always preferable. There are certain similarities in the claims put forward in the Frameworkers' Petition that preceded the 1845 Report with mineworkers' demands in 1984/5. They were that communities and places of work should

be protected although sales of the product could not pay for the high costs involved. The Medieval guilds also tried to prohibit the use of new commodities which competed with their products. Has any generation, itself the product of technical innovation, the right to say 'Progress stops here'? Had the various petitions of the framework knitters produced a positive response from Parliament, the hosiery industry might well have been submerged in a sea of well-meaning protectionism.

In this context, a further comment may be made on the domestic hosiery system. Although it provided some income for hosiers and the workers, its organisation and the attitudes of those dependent on it made innovation difficult. The lace industry which persisted after 1816 in Loughborough remained small scale. Eventually, as no new sources of employment arose, the manufacture of textiles ceased to be able to support further population growth. The domestic hosiery system rested on the production of articles on cheap machines requiring a little skill in their operation. The family was seen in paternalist terms. The knitting frame was operated by the man because of his greater physical strength and his accepted dominance in family life, both economic and social. This sexual division is reflected in attitudes to female employment which are evident in the census returns. Once the system could not compete on price terms (in the short term in the West Riding of Yorkshire, as Gregory shows, and over a longer period in the East Midlands) then problems of under-employment arose. The change in Loughborough occurred when opportunities for work in textiles

were created outside the traditional family structure; steampowered machines could be 'minded' by young women and male dominance was exercised mainly at various management levels.

The purpose of this section is to analyse the domestic system in hosiery manufacture in the light of the intention of E.P. Thompson, 'to rescue the poor stockinger [and other workers in the domestic system] ... from the enormous condescension of posterity'. Their aspirations were valid in terms of their own experience, and our 'only criterion of judgement should not be whether or not a man's actions are justified in the light of subsequent evolution'.⁷ Obviously the actions of men can be evaluated only in terms of the age in which they lived. Gregory takes the notion of the domestic system further. He writes of a debate between the 'moral economy' of the domestic producer and the 'nascent political economy' which brought it to an end, and he sees quite basic arguments over the 'moral rules which served to legitimate social practices', the sense of 'community and mutuality', the intersections of obligations and responsibilities' of the moral economy. For him, the change to the factory system 'involved a local transition of human experience and social structure which was tied in to much wider congeries of changes in economics, politics and ideology'. This kind of analysis is certainly not valid in terms of the framework knitter's experience, which Thompson asks us to bear in mind. The domestic system was a logical development of the historical domestic economy of early man and his successors. It was part of the world we have lost. Gregory writes of the

consequences of this loss to the Yorkshire woollen industry. It brought about the 'reduction of independent artisans to semi-skilled or even casual wage labourers ... the changed circumstances of family labour; the de-skilling and routinisation of work through continuous technical change; the emergence of new sexual divisions and the chronic unemployment of whole sections of the traditional work-force; and the erosion of patriarchal authority and the imposition of an unyielding work-discipline on men, women and children alike'.⁸

This may be true, but the framework knitter had no real freedom. The payment of rent for his machine implied a labour-capital relationship. 'It was clear from the writing of Spence and Paine that they regarded rent or taxation as the major means by which wealth was concentrated in the hands of the middle and upper ranks of society.'⁹ In hosiery the middle ranks had certainly taken control of the machine and therefore of the operator. By the nineteenth century the moral economy held few of the arcadian delights Gregory attributed to it. It could not adapt to change, it was the offspring of a class-conscious society. The workforce had traditional views on social status which inhibited any drives for innovation. The framework knitter rarely sought to better himself, simply to achieve security at his appropriate level in the hierarchy of the knitting production process. For instance, he rejected cost-cutting techniques which had brought some workers higher wages. This kind of class immobility can be seen to be a factor in stagnation. If there is no goal of self-improvement, there is no

desire for change. If the structure of society is to remain intact in all its strata, then the economy which supports it has to continue unaltered. Chapter 2 has shown that the knitter paid quite dearly for this stubborn defence of his social system. It reached the point where, according to a contemporary, the products of Cartwright and Warner were 'too good for the market', even for the class of market at which they were aimed. At this time the firm was planning to change production to the Cotton patent machine. There was no practical alternative.¹⁰

Economies of production were possible only within strict limits within the domestic system; wage reductions were one of the effective methods, although warehouse work could also produce some savings. Stagnation could not have been eased in any substantial way by improvements within the existing manufacturing process. Although, by mid-century, it had been observed that the early hosiery factories had produced 'a marked amelioration of the workers' conditions', independence was still not to be sold for economic improvement.¹¹ The dominant position of the hosier and his knitting frames was not challenged by a revolution from workers anxious to share the amelioration which the factory could offer. The price of improvement, believed the framework knitters, was exploitation in an alien environment, although it may be doubted that it was worse than the exploitation of workmen by hosiers or of children by parents in their homes, beyond the reach of the law.

A.L. Levine, dealing with industrial retardation, regards entrepreneurial drives and responses as 'the prime movers of an industrial machine'.¹² The hosier saw no need for these intellectual exertions and financial risks. His occupation had not required any particular education beyond that of an apprenticeship in, or practical experience of, framework knitting. As we have seen in Chapter 8, science in general was not taught at the kind of school which he had attended and to which he would send his sons. He saw no place in his trade for men with a knowledge of theory as well as practice and in this context it is easy to see how a man like Cotton, with an enquiring and unorthodox (if untrained) mind, should be regarded as an oddity. The class immobility of the time was such that any ideas Cotton may have had on mechanical development, when he was employed by Cartwright and Warner, were very probably rejected on the grounds that he, like the British soldier, was not paid to think. Cotton's subsequent career also suggests that the local establishment never forgave him for being a successful thinker.

It should be noted that even the masters who had taken earlier industrial initiatives were also opposed to change. The only local family amongst the established hosiers who sought it was the Pagets. Its inventive member was, however, commercially naive. Loughborough was enslaved to the hosiery trade and showed no signs of breaking free. The system had virtues as well as vices, however. It appealed to the conservatism of both employees and employed, it had an attraction for men wishing to

avoid the regimen of the nineteenth century factory. The very industry which impoverished them also offered enough to keep them out of the workhouse. As lace declined in Loughborough, it left no useful economic legacy to the town. Fortunately, hosiery maintained a certain level of activity and, when innovation came, there was a base on which expansion could take place.

c(ii) Change did take place, because the machine was stronger than the system. It destroyed the old structure, the hierarchy of skills, the web of interdependence within the community. Earlier machines had not done so, and they had been accommodated. The men who had destroyed Heathcoat's lace machines were themselves the operators of a modified frame, capable of accepting a second (warp) thread. They therefore competed against hand-lace makers, but this was acceptable in the hosiery trade; it did not disturb the structure. With the invention of the powered fully-fashioning hosiery machine, the emphasis in the industry switched from domination by labour to domination by capital. The trade could now be pursued only in the factory. The transition occurred later than in wool and factory life had by the mid-1860s acquired some advantages. The fact that earlier powered machines had been operating in factories also offered some familiarity; they were not alien buildings, industrial workhouses. They employed the young, for example, who were not committed to the domestic economy and were probably quite willing to break away from a family-dominated life. The long stagnant years in Loughborough had produced undercurrents which were merging to produce a flow of change. Few, perhaps, saw the

Cotton machine as the decisive force it actually was. His original backers saw it as no more than another improvement. The machine, like the man, did the unexpected and the domestic system was, as it were, overcome by stealth.

More employment for adults became available, not only because of the expansion of the industry but also because of the introduction of compulsory education in 1870. The steam engine ensured that power was available to operate the new machines, there was no need (as there had been in lace) to seek water elsewhere. There was also capital for expansion, provided mainly by men committed to the region. The factories provided the industry with a better structure than the complications and mutual suspicions of the old domestic system. Cotton also led hosiery machine manufacture into a new phase; his workers and those with experience on his machines acquired some status within the industry. In Loughborough, there was a rise in business confidence, indicated by an increase in the numbers employed in the building trades.

d(i) The flow over the years during which stagnation was dominant is shown in the commentary on the period 1841-1871, based on the analyses of occupations of heads of households, in Chapter 5. Many of the figures for 1881 differ so greatly that they emphasise the degree of the stagnation which had, by that time, ended. Textiles lost 4.45 percentage points of all head of household occupations between 1841 and 1871, mainly because of the decline of lace. The other figures emphasise the stamina of

the hosiery industry. It provided both the platform below which the economy could not fall and the ceiling above which it could not rise. The number of framework knitter heads of household actually increased over the period, illustrating the capacity of the system to absorb labour by worksharing. The 1881 figures conceal the true rise in the numbers employed because of the factory system, where many workers were not heads of households.

The number of householders in the Other Manufactures group, the great source of growth after 1871, had risen by only 1.71 percentage points over the thirty years of stagnation. New jobs had been created between 1841 and 1871 (there were fifty-three in the engine fitter, engine driver and machinist categories) but not enough to revive the economy. From 1871 to 1881 there was a leap of 4.89 percentage points; the group was stimulated by general engineering and hosiery machine manufacture. The censuses may have missed some phases of building growth, although they reflect gradual improvement, with an expansion after 1871. This sector then offers the same contrast as in Other Manufactures; the number of bricklayers increased by twenty-one in the succeeding decade. The Agriculture group held a pool of under-used labour, which emptied as industry expanded. The Shops and Services group had a tendency to perform the same function, as Chapter 6 describes. The railway arrived during the early years of the stagnant period. It may have helped to arrest decline but it did not induce growth, because at that time the town's economic structure was incapable of it and because the line itself was

conceived as a weapon in the battle for Leicestershire coal markets. The railway did nothing directly for local employment until a siding was built for use in steam-locomotive construction. As local trade improved, a communications revival, led by rail but followed by road, occurred. It is difficult to decide if the railway would have provided earlier stimulus had it been conceived as part of a national network. As it was, the Midland Counties line was the product of one of the many examples of the failure of both Central Government and industry to see the railways in more than regional terms.

d(ii) In 1851, the textiles sector employed 45 percent of the population aged over eleven, many of whom were probably part-time. Shops and Services employed 15.5 percent. This is a high figure compared with that for the principal manufacturing industry and, even so, it ignores those who offered professional and other services not included in the Shops and Services group. Just as manufacturing brought in money, so did the services sector, in the sense that many of its customers came from outside Loughborough. The market not only brought money in, it kept locally earned money circulating in the town. It was a factor which helped to make stagnation endurable. This contribution to the economy cannot be accurately assessed. The table of those heads of households involved, included in Chapter 6, does not include those in part-time employments which were missed by the census enumerators. Certain personal services, such as prostitution, or illegal ones, for example, poaching game for sale, attract no entries, nor do some legal ones, such

as the provision of funeral services. Multiple employments are sometimes quoted, but many would have been missed, for example, the farmer who on market days became a salesman of his own produce. In addition, there were the itinerant stallholders not recorded unless they happened to sleep in Loughborough on census night. Although they took some money out of the town, they probably spent some of it there and the additional retail service they provided brought some people in.

The population of Loughborough's natural catchment area was at least as large as that of the town itself and it had only the basic services, so there was scope for a wide range of permanent and semi-permanent suppliers. The group was at its peak in the middle of the stagnant period and then fell as the period ended and industry absorbed more manpower. There were two elements in service trades:

- i) the core, which continued right through the period, offering a range of specialised professional and commercial services;
- ii) those who found some work within the group when there was none elsewhere.

Since the economies of the surrounding villages tended to stagnate at the same time as those in Loughborough, the occupation group was therefore overmanned when overall purchasing power was at its lowest.

Some idea of the value of services within the economy will be seen if we take the 492 heads of households in this occupational group in 1851, and assume that one-third of them owed enough work to custom from the surrounding villages for it to be a critical factor in their employment. This might well have been attracted elsewhere had Loughborough not been a market town, and 164 heads would have been lost, more than after 1841 in the collapse of lace. Service trades and industry complimented each other in that the services offered extra income as an increment to industrial effort. They were not a replacement for such effort, there would have been no base for their services had not hosiery kept the town in being. Services did for Loughborough what tourism is now doing for Yugoslavia, supporting an unprogressive economy.

d(iii) Although this thesis deals mainly with the interplay of industrial and social influences, some space is given to the political pressures of Chartism. It is very probable that this section of Chapter 8 brings together the facts about Loughborough for the first time. Local Chartism undoubtedly owed much of its strength to the personality of one man, John Skevington. The local situation also offered a good breeding ground for the Movement. Chartism was more likely to flourish in centres of collapsing industry or in new single industry towns. D. Fraser comments that 'It is indeed a reasonable hypothesis to suggest that class consciousness and class conflict would be more marked in places where employment prospects were limited by lack of variety in local

industry'.¹³ In other words, had lace survived in any strength in Loughborough, there might well have been no local Chartism, although there was resentment against the Poor Law Amendment Act of 1834 and against the local middle class. There was also, in the early years of stagnation, anger at the poverty of the framework knitters. Chartism is treated here as a response to stagnation, particularly strident while the loss of wages from lace was felt acutely. The disappearance of the local newspaper in 1839, for lack of subscribers, makes later analysis of the movement more difficult, but the evidence that is available suggests that its leaders subsequently considered their words more carefully and that, as stagnation settled at a more acceptable level, Chartists became less prominent. It has been stressed earlier that their aims were of a long-term nature, more appropriate to the middle than to the working-class. It was a movement for reform, rather than revolution. Chartist leadership in Leicestershire seems to have come from the more earnest and thoughtful of the working class, although those who followed them may well have regarded intimidation as a useful weapon. All activists may have felt obliged to show no deference to the local ruling class. The authorities, concerned about damage to property, probably over reacted. The town has its place in the literature of the Chartist movement, but not as one on the verge of revolution.

Education in Loughborough has been dealt with in this thesis only in relation to the specific theme. From a wider point of view, it displays all the anti-feminism and the rigid

class separatism of the age. Here data has been used to support the general argument that stagnation had a particular effect on Nonconformists, the small employer and artisan class, rather than on the Anglicans, the larger employers and the landed gentry. The Roman Catholic position was anomalous because of early missionary zeal and also because money was available for the cause from outside the area. Aspects of the quantity and quality of educational provision have also been discussed. A comparison of local and national figures suggests that Loughborough met the need as defined in 1851, but the real comparison should be against towns of similar size, not against the whole country, which included two disadvantaged areas, isolated rural districts and the great conurbations. A general line taken through the evidence available on quality suggests that the providers had little notion of education as an indirect means of producing wealth through an educated workforce. There was a parallel in the attitude adopted by the planners of the reservoir, designed in the late 1860s. If those in education did not see themselves as providers of an essential service to industry, neither did the local Board of Health.

It is fair to add that national pressure for change was not quickly successful in Victorian England because the State was often unwilling to find the money; it therefore had to cooperate with local bodies answerable to ratepayers. They could not be expected to adopt new ideas involving considerable expense until the evidence was virtually overwhelming, and was

not based mainly on ideas brought in by London people. This was unfortunate, but it should be borne in mind that the disasters of the 1960s, high rise flats and revolutionary ideas in education, might have been avoided had they been submitted to some kind of genuine local examination. Nevertheless, Loughborough had a pure water supply by 1870. In 1879, over one-quarter of all local authorities in Great Britain still had no piped water supplies.¹⁴ It may be added that the financial reasons for the Board's earlier reluctance to provide deep drainage may have been reinforced by some other valid objections. The theory in the 1850s was faulty and led to quite reasonable fears. A defective system might be worse than none at all, because sewer gases might be released directly into dwelling houses. In addition, no system could be effective without a supply of running water. The people of the town decided that the local economy could not support both at the same time, and this would have seemed to many people to have been a good argument for doing neither until both were possible.

d(iv) The chapters based on the Census of 1851 have some national significance in 1986 in that they examine a no-growth economy. Other sources in the period indicate however, that there were undercurrents which suggested that, if they became stronger, growth would return. It was to be a slow process, and there were to be setbacks along the way. It is claimed that the three chapters contain the most detailed demographic analysis ever made of a town of the size of Loughborough and that the

date chosen places them in a position central to the theme of the thesis. Chapter 9, on the social geography of the town, uses another new approach in that the widely accepted use of occupation as a criterion of social class, used in many theses on demographic themes, has been rejected, since it is based on the subjective perception of status by members of a household. A new method using more objective criteria has been proposed. The method can be refined for towns where more indicators of nineteenth century status have survived. Ultimately the only true test of accuracy is comparison with competent studies by contemporary authorities, and these will be rare indeed. In the meantime, a system using objective criteria will be the best available. Its use here suggests that the social shape of the average nineteenth century English town may not be as neat as is sometimes suggested. Loughborough was not a Northern type of industrial town, in that much work in 1851 was still undertaken at home; factories did not impose their influence on the geographical pattern of housing. Nearly all the roads leading out of town were of high social class and the slums were mainly in areas of newer housing, either on the edges of the medieval town or as yards within it. The property owners had exercised their power to dictate the cheaper housing patterns, either by buying town centre land sold by the lord of the manor, or by building on a small area of the former open fields, where there was some attempt at planning. Because of stagnation, there had been no further growth and conditions in some areas, particularly the courtyards, were squalid. Much was made in the Sanitary Report of 1849 of the 'emaciated' condition of the

workers. The wealthier families, chiefly some clergy and the large hosiery manufacturers, were not so affected by the state of the economy because the scale on which they operated included a substantial safety margin. Had the economy continued to grow, working-class housing would have been of high-density, but it could not have been in-fill into the urban area and, in that sense, would have been an improvement.

Chapter 3 shows that Loughborough was still a town with rural industries. Agricultural labourers were the second largest occupational group and the largest, the framework knitters, were still clinging to an economy based on a cottage industry which was just as viable in a hamlet as in an urban area. The worst of the recession produced by the fall of lace appeared to be over in 1851 and the work-people were stoical, if not content. A recurring theme of this thesis is the durability of the domestic system of hosiery manufacture. This corresponded with the persistence of the family as the indispensable unit of society. That is not to say that family life was always peaceful, but that it was coherent in the sense that each member depended on the others, not simply in wealth provision, but in making the article on which all depended. The census information is tantalising over the employment of wives; the information required on occupation was determined by class values foreign to the hosiery workers. The collection and interpretation of data was based on a view of the 'breadwinner'

as the male head of household, which ignores the co-operative nature of the family. Employment as defined by the Registrar General on the census itself was 'Rank, Profession or Occupation'. There was no interest in whether people were employed on census day itself, but in what they would have done had they been in work. Therefore unpaid work done by women in association with their husbands may have gone unnoticed. The truth cannot now be discovered; the precise degree to which the domestic system still operated in its earlier purity is not known.

It can be said, however, that although hosiery factories, workshops and spinning mills were bringing labour flexibility, despite resistance, the influence of the factory was still tentative. Only 15 percent of all females aged over eleven were employed in factories and mills. Although this represents a retreat from the entrenched position of the cottage economy, work of this kind had not reached the level of that in the cotton industry. As compared with Preston, for example, opportunities in factories for local girls were not so high as to produce a general fall in the number of housemaids. The family as a working co-operative was also more active than in Preston, where the 'domestic handloom sector still survived, but it was of ever-shrinking size'¹⁵ or in Yorkshire where, despite appeals for legal protection of the kind made by the east Midlands framework knitters, domestic clothworkers had been effectively defeated by the factory system by the middle of the century. In Loughborough the policy, rather than the practice, was beginning to appear.

Children were still employed in hosiery manufacture but there were signs that workshops and warehouses were limiting this occupation for the very young; nevertheless there was still a great deal of occupational determination among families as sons followed fathers. The degree of primary poverty, that is, poverty produced by the nature of employment and the size of the family, is impossible to assess without accurate data on prices and wages, and secondary poverty cannot be assessed at all at this distance in time. The method suggested in this thesis does, however, permit a broad judgement that, where work was regular, few families were living in permanent poverty, if they could put their older children to work. Children were therefore of great importance to the family economy although they may not have worked at home. The poorer families tended to be those whose children were young and born close together.

Chapter 7 deals with a very wide range of those aspects of social life that can be examined by the use of numerical data. It therefore presents a very detailed view of the social mix in a provincial town at this period. Evidence is provided here of the national patterns of change affecting Loughborough, but at a much slower rate, since economic expansion had been delayed. A rural way of life persisted in the marriage calendar, although only a few of the grooms and brides were connected with the land. Marriage horizons were limited, weddings between local couples being 50.97 percent of them all. The general marital condition of the population was still similar to that quoted by P. Laslett for the period 1574-1821,

and the great majority of the population was locally born. On the other hand, family life was less stable than in the village economy. There were, for example, more occupations which allowed men to marry earlier than in a rural community, where accommodation depended on the occupational status of the groom. Of the 2,408 householders in the town, 1,075 accommodated persons who were not of the nuclear family. Here again, however, the position had not changed as markedly as in the more advanced industrial town of Preston, where the percentage of lodgers was 11.2 as compared with 6.1 in Loughborough and that of co-resident kin 7.4 as against 5.7.

e) In every chapter of this thesis certain names have occurred, those of men who might be called the fathers of the modern town. The individualism of the Victorian age was not so easily modified as it is today, where large companies offer some anonymity to senior staff, where there is concensus administration by committees and innumerable working parties. The outstanding man of the time in Loughborough was the Rector, Archdeacon Henry Fearon. He has received little attention here because his work in education and for the Anglican Church do not fall within the scope of the thesis, but other towns and cities are graced by the statues of lesser men. Two of his congregation were Cartwright and Warner, the heads of major hosiery families, a third being the Pagets. Cartwright chaired both the Board of Guardians and the Board of Health; Warner and Fearon promoted the Water Company which so neatly achieved most of its aims. Warner also provided an Anglican school in an

effort to avoid the operation of the 1870 Education Act in the town. The Misses Tate had provided schools earlier, with worthier motives; they had the modesty appropriate to their sex but Cartwright, Warner and Fearon strode like giants across Loughborough during its stagnant period, rarely always going the same way, an interaction of progress and caution.

The other great names of the time were Heathcoat, Paget, Cotton and Hughes; to the latter three Loughborough owed its climb off the economic plateau it had occupied for so long.

Technology is of value in two ways;

- i) in the manufacture of quite new products;
- ii in the development of new ways of making existing products.

Innovation in nineteenth century Loughborough was generally of the second kind; textile machines were built to make more quickly articles that could already be made by hand.

Engineering was based on established principles or developments of them. This was the work of men whose background was technical and not scientific, in that science incorporates a coherent body of theory. All the local worthies in industry were of this craftsman-inventor type, but Cotton's patent design is still used and Heathcoat's business still survives at Tiverton. Paget has been forgotten by all but the historians of the hosiery industry, yet his achievement was only a little short of that of Cotton. Hughes may be remembered in New Zealand, to where he emigrated and became successful; his memorial in Loughborough is the large factory on the site of the Falcon Works.

Nevertheless, fortune played its usual part in attracting or keeping these men in Loughborough. Heathcoat married a local girl. Hughes married Emma Heafford, a member of a well known local dyeing family. Cotton was driven to Loughborough by family financial failures and had an informal but fruitful arrangement with his housekeeper, which no doubt increased his local reputation for eccentricity. The influence of women in the community was greater than it appears. The particular attractions of the ladies mentioned above, and the movement of so many others into hosiery factories, so to release men for other employment, did more for the town than has ever been acknowledged. Chapter 5, for example, gives some idea of the way in which younger female labour dominated hosiery by the end of our period. It is worthwhile to add to this list the little lame Chartist, John Skevington. He lived for his cause, he preached a moderate political gospel with great fervour. Loughborough has Fearon, Heathcoat, Cartwright and Warner streets; Cotton was not an establishment man but until 1985 a factory still bore his name. For long Skevington was forgotten, but recently a Skevington Drive has appeared in the town. It is not absolutely true that only the winners write history.

Much of this thesis has been based on a source which appeared to the writer to have been exploited only tentatively, that is, the data of the mid-nineteenth century censuses. They offer a deep insight into the life of the town, revealing much about human relationships, economic conditions and physical

structure as determined by social status. Indeed, the censuses are the only source in which reasonably objective data of this kind can be found. The work here is a first step into this new field; there is room for exploration by those with expertise in appropriate specialisms, for example, sociology. The next step might well be an analysis in depth of specific factors, for example, in family or household structure, so to discover trends over the period 1851 to 1881. Such data would refer to the locality. 'Local' history has had a poor reputation for far too long, the word often being taken mean 'inferior' or 'anecdotal'. This attitude is, unfortunately, often justified. The locality is, however, the geographical unit of human intercourse and material prepared on a national scale, such as a census, offers direct and fairly accurate comparison of unit with unit. Postan has written: 'Economic welfare, its existence as a quality capable of being objectively assessed, is subject to philosophical doubt. And in the absence of objective standards of economic welfare, the student of the economy must make do with superficial measurements which veil the fundamental issues to the point of obscuring them altogether. All he is able to record and to measure is the flow of material goods and services, not the satisfactions they are supposed to produce.' The writer of this thesis has used parallel information, his sense of locality, changes of emphasis in the local press, local records and even reminiscences, unreliable though they are. He claims that this is a great advantage for the historian working in his own geographical area, and that many mistakes occur when provincial issues are studied by those

of different regional outlook. Local history can relate national and regional developments to people within a particular community, so that the interaction of people and processes can be seen. There may well be philosophical doubt about economic welfare, its existence as a quality capable of being objectively assessed, but there is no practical doubt about the way in which it affected life in Loughborough.

This thesis is the first to explore in depth the history of the machine-made net lace industry in the town where it began. It is a model of the inexpert application of a new concept, a lesson in the dangers of inexperienced enthusiasm as a feature of industrial growth. Its function here has been to develop the background for, and a contrast to, the main theme. Hosiery has not been studied elsewhere in the particular context of stagnation, no doubt partly because in other towns other economic factors have obscured the issue or because the contrasts with growth were not as sharp. In Loughborough the domestic system is seen as the near-perfect organisation for a basic industry whose workers were not willing to trade 'independence' for higher earnings, and who did not want to step into unknown economic territory.

It was pointed out in the introduction that few scholarly local histories exist for the average English town and it is hoped that this thesis, along with others, may help to develop an academic base for this area of urban history. Loughborough is one of the few University towns which is not a

regional or county centre, or is not of long historical significance. It is appropriate, therefore, that it should study what is on its own doorstep, that is, an 'average' town. It is a service to its host-community and a recognition that historical research is concerned with the frequent and the commonplace as well as with the unusual and esoteric.

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APPENDIX 1

LOUGHBOROUGH: SOME HISTORICAL BACKGROUND

Loughborough, which had an estimated population of 51,211 in 1984, is in north Leicestershire. The river Soar, a tributary of the Trent, flows to the east of the town and national communication routes run north and south along the Soar Valley. To the west there is the hilly region of Charnwood Forest (actually it was never more than a chase). This land lay waste until its enclosure in the nineteenth century and was a barrier to communications with the west Midlands, from which the town is still quite separate in dialect and industrial background. A causeway and a bridge had been maintained over the Soar, however, since the thirteenth century, for the access it provided not only to Nottingham but to the whole of Lincolnshire and east Anglia. Loughborough is also roughly equi-distant from the three east Midlands cities and this was a factor in its later industrial growth.

The name of the town is Anglo-Saxon, but little can be written with any confidence about its early history, although Hoskins believes that it attracted settlers at an early stage in the Anglo-Saxon immigration and became a centre for subsequent expansion in the district.¹ It was also a Danelaw settlement and during this period it became prominent as a military staging post between Leicester and Derby. By the end of the Danish occupation there was probably the beginnings of a simple grid system of streets on a north-east : south-west axis, the

south-western end of the grid being closed off, as it were, by the Leicester-Derby track. These streets and the Market Place, which was added later, became the central business district of the nineteenth century town.

The Domesday Book entry suggests that Loughborough escaped the devastation which affected other local settlements in the immediate post-Conquest period and the Leicestershire Survey of 1129/30 records that it was the centre of a Hundred. The local dominance established during the Danelaw remained and the local manor expanded to embrace a number of surrounding vills. In the early thirteenth century Loughborough became a market town, and the Manor Court Rolls and Ministers' Accounts of the fifteenth century show clearly how its influence had spread. Hoskins quotes evidence from the tax assessment of 1446 that Loughborough had, by that date, 'emerged as an economic centre'.² The local heavy soils were more suited to grassland than to cereals, and the population grew as farmers grazed sheep for their fleeces. The nearby Cistercian Abbey of Garendon and local merchants exported wool: the arms of the Staple of Calais are carved on the Parish Church tower. There were later movements away from dependency on wool. In the seventeenth century Loughborough became an important malting centre, 'mault of Loughborough measure' being recognised as a mark of quality.³ This market moved, however, to Burton-on-Trent. In the eighteenth century the stockbreeder, Robert Bakewell, improved the sheep, but in its meat at the expense of the fleece. Nevertheless, the town was well placed to become a

hosiery centre. There was no close seignorial control to discourage cottage industry, the area was uncommitted to any other form of industrial specialisation.⁴ The local wool had a long staple and high quality.⁵ The first reference to a knitting frame in north Leicestershire is in the probate inventory of George Hogsson, of Dishley Mill (now part of Loughborough) in 1660.⁶ Richard Arkwright brought spinning machinery to the east Midlands at the end of the 1780s.⁷ It was installed in Loughborough in the 1790s and the industrial future of the town was decided for most of the succeeding century.

In 1809 Loughborough was still the acknowledged centre of north Leicestershire and in terms of population it was third in size in the county. Its river navigation from the Trent brought in cheap coal from Derbyshire, its turnpikes connected with the three east Midlands county capitals and with Ashby; it was on the mail route between London and Manchester. It was locally dominant as the base of the principal hosiers for the area, on whom framework knitters in the villages relied for work, and it was about to become the birthplace of the first successful lace making machine. The local invention of a powered automatically fashioning hosiery machine led to the growth of factories in the later nineteenth century. This was accompanied by developments in engineering which gave Loughborough a second industry and laid the foundation for future growth.

REFERENCES FOR APPENDIX 1

1. W.G. HOSKINS, 'The Anglian and Scandinavian Settlement of Leicestershire', p.125
2. W.G. HOSKINS, The Midland Peasant, p.84
3. H.W. COOK, Bygone Loughborough, p.43
4. D.M. SMITH, 'The British Hosiery Industry at the Middle of the Nineteenth Century: An Historical Study in Economic Geography', p.130
5. F.A. WELLS, The British Hosiery Trade, p.27
6. LCRO PR/I/52/266
7. SMITH, p.19

APPENDIX 2

THE USE OF CENSUS MATERIAL IN CHAPTERS 3, 7 AND 9

The presence of the first reasonably comprehensive census right in the middle of the nineteenth century provides a splendid opportunity for the researcher to explore a central theme arising from a wider study. Those of 1841 and 1851 were used by W.A. Armstrong in his study of York, working with standard 80-column Hollerith cards, each with up to twelve punching positions. As he wrote (in 1966) it was possible to produce from these cards tables relating to the several variables quickly and efficiently, but the work of transferring information was so time-consuming that he was obliged to select only one sample out of ten, drawn on a household basis from enumerators' books. This was random selection in the sense that, although the numerical intervals were constant, the information that arose each time was beyond the researcher's control. The objectivity of the method was, however, modified in that an entry which did not appear to be typical was rejected in favour of one either side of it. Nevertheless, Armstrong's work, and that of Anderson at Preston, whose method and equipment were the same, are essential reading for all those interested in population study.¹

The policy adopted here has been to include all households and every member of them. Subsequently, however, a ten percent sample of data relating to heads of household was taken, in order to determine if this method offered results reasonably near to those achieved by a full analysis. It was

found that it was inadequate except where each sample contained data related to the appropriate section of the analysis, that is, if an estimate of the average number of lodgers per household was required, a reasonable figure would emerge if the sample was one of households with lodgers, but would not do so if the selection was random in the sense that it could alight also on households which had no lodgers. This is demonstrated in the sample taken here of family size; the average was 3.88 against a true figure taken from all households of 3.69; there was a good approximation because family size occurred in each entry. Size of households with co-resident groups (members of the household who were not directly related to the head) was quoted only in ninety-eight of the 241 entries which constituted the sample, that is, none of the other households had co-resident groups. Here approximation fell, the figures being a sampled 5.42 against a real 4.55. The pattern generally repeated itself in other data. It should also be noted that the sample figure has to be multiplied by ten. This in itself produces generalities, for example:

	SAMPLE	REAL
Married Women Household Heads	70	49
Single Women Household Heads	70	79
Widow Household Heads	260	296
Widower Household Heads	150	139

The other comparison made was that of an occupational structure of heads of households. First, certain occupations known to be of varying numerical importance were taken, the

results (with the true figures in brackets) being:

Framework Knitters	360	(365)
Shoemakers	160	(131)
Farm Labourers	140	(165)
Tailors	100	(63)
Boatmen	30	(42)
Needlemakers	20	(15)
Doctors	10	(9)

Where only a broad notion of occupational structure is required, these results might be acceptable, but there is a risk that a trade occupying only one person might occur in the sample, be recorded as ten and thus assume more importance than it merits. Forty-seven percent of all occupations were also missed completely in the sample taken here, although each of the 241 lines had a completed column for this piece of data. None of these occupations employed more than twelve heads of households, but some of them were nevertheless of significance in the industrial life of the town. The conclusion to be drawn, therefore, is that sampling may have its uses if the researcher is aware of its limitations and is prepared to accept the results with caution. If the material is important in the development of a point of view, however, the safer procedure is a full analysis. The method used here was first to search the enumerators' books to produce a full list of occupations, and at the same time take off information about employers of labour, shown, for example, in the form: 'Farmer of 100 acres employing three labourers'. It soon became apparent that other useful information would also be omitted from any coding system acceptable to the computer, such as names of interesting families, but it was decided that the time in transcription and punching was probably not worth the relative benefit to be

gained, and that the margin on the coding sheet could be used for this purpose. It is of interest to note here that the National Sample of the 1851 Census of Great Britain did not use codes; the material was entered into the computer as a more or less literal translation of the original enumeration entries. The computer did any standardization that was required. The data was a two percent sample.

The general classification devised in this thesis, one of eleven occupational groups, is not one that was used in the nineteenth century. In 1851 the Census used seventeen classes:

- i) Imperial or local government
- ii) Defence of the country
- iii) Religion, law, medicine
- iv) Art, Literature, science and education
- v) Household duties
- vi) Boarding, lodging, domestic service, dress
- vii) Commerce
- viii) Conveyance
- ix) Agriculture
- x) Breeding, animal tending, fishing
- xi) Manufacture
- xii) Work with animal substances
- xiii) Work with vegetable substances
- xiv) Mineral workers
- xv) Unskilled or unspecified labour
- xvi) People of rank, property or independent means
- xvii) Others

There were sub-classes, for instance Class XIII included not only those who produced vegetable food, but those also making wood furniture, cotton or paper. This basic classification was retained, with modifications, for later censuses. Charles Booth said of the system in 1886 that 'The seeker after information is left to grope his way in the dark'.² Whatever relevance the classification had in the minds of those who devised it, there is even less for us today than there was for Booth, whose own

groupings were:

- i) Agriculture
- ii) Fishing
- iii) Mining
- iv) Building
- v) Manufacture
- vi) Transport
- vii) Dealing
- viii) Industrial service
- ix) Public service and professional
- x) Domestic service
- xi) Others³

A modern grouping was suggested by Carr-Saunders in 1958:

- i) Agriculture, forestry, fishing
- ii) Mining and Quarrying
- iii) Manufacturing of all kinds
- iv) Building and Contracting
- v) Gas, Electricity and Water
- vi) Transport and Communications
- vii) Distributive trades
- viii) Insurance, Banking and Finance
- ix) Public administration and Defence
- x) Professional services
- xi) Miscellaneous services⁴

Leonard used seven occupational groups for his work on Middlesbrough in 1975:

Not Stated: includes all blank spaces and those where the occupation given was too general to denote a actual industry, for example, clerk, labourer

Professional: Solicitors, doctors

Administrative: both government employees and managers of private concerns

Manufactures

Distribution: covering personal service, transport, building
Agriculture and Fishing

Residual: retired, the armed forces, the church⁵

Leonard's 'Not Stated' category resolved the problem of poor occupational data, although the armed forces and the clergy

might prefer not to be regarded as 'residual', even for academic purposes. This system, as a whole, is rather general.

Loughborough had no fishing or extractive industries. It was, however, so strong in textiles that they could not possibly have been hidden under Booth's 'Manufacture' or even Carr-Saunders' 'Manufacturing of all Kinds'. There was also a variety of occupations which could be classified under the general heading of 'Other Manufactures', although by 1881 a separate 'Engineering' group was beginning to emerge. The census classification of 1851 does include 'Household Duties', a group not recognised by either Booth or Carr-Saunders, unless those performing them were included in 'Others' or 'Miscellaneous Services', but it was felt here that the use of the term was so erratic in 1851 that it was of no value. Wives for whom no occupation was shown were therefore placed in the same general group as that for people of property or of independent means, the group heading to be 'Not Employed'. Carr-Saunders includes all the other groups used here except Personal (or Domestic) Service, which was scarcely applicable to conditions in 1958. In this thesis the worker is considered only from the point of view of his function in the local economy. This ignores the fact that many framework knitters in the villages worked to Loughborough hosiery and that people must have travelled in for work as the factory system grew. We are here concerned with the occupations of the people who lived in Loughborough, their relation to the industrial pattern of the town and its development.

The occupation groups finally selected were:

Textiles and Clothing, the largest group in the town,
Other Manufactures, comprising a very wide range of occupations,
but none of them employing large numbers of people. Some
of these, such as needlemakers or framesmiths, made or
maintained textile machinery or essential parts of it.
They were not themselves, however, producing textiles
and so were not included in that occupational group.

Shops and Service Trades

Building and Allied Trades

Agriculture

Commerce and Finance, which overlaps to a certain extent with
Shops and Service Trades. It is realised that certain
occupations could be transferred between the two but, in
general, those in service trades were regarded as
serving local people from local premises, while those
engaged in commerce either took their goods to the
customer, for example, coal dealers, or dealt over a
wider geographical range.

Professions

Transport and Communications

Public Administration

Personal (domestic) Service and

Not Employed. This group included annuitants, pensioners,
including Chelsea (Army) and Greenwich (Navy), and others
who appeared to have financial means. There were also
land or property owners, paupers on 'in' and 'out'
relief, children at school and all others against whose
names no paid employment had been entered by the
enumerators.

Before coding for other information could be arranged, it was necessary to decide how much could be taken off the enumeration sheets. The data finally accepted for processing was: Page number in the enumeration book, each page having a separate data sheet, the sheets being filed by enumeration district, Street, using a number code of two digits, Relation to Head of Household. A distinction was made here between the nuclear family (the head, wife and children only) and the other people living in the house, all forming the co-resident group. Those not of the head's nuclear family were defined in their relationship to him. Code letters were therefore allowed for the head of the whole household, his wife, daughters and sons, and other kin (parents, grandchildren, 'in-laws', nieces, nephews) Researchers particularly interested in the nature of the nineteenth-century extended family might wish to allow a separate code letter for each degree of kinship. In practice, other details, such as age and sex, give a great deal of information. A problem arose, however, about co-residence of more than one nuclear family. There is the possibility that enumerators in Loughborough generally ignored the Census instruction to use a shortened horizontal line to indicate that the next entry was for a second family in the same house, the accommodation being divided between the families so that they were living in what today would be called flats. If this was a common omission in the east Midlands, it may be the explanation for the claim in the census report: 'It is a remarkable fact

that, in the counties of Leicester, Rutland, Lincoln, Nottingham and Derby nearly all the families dwell in separate houses'.⁶

When there appeared to be two families in the same house, it was assumed for the purposes of this thesis that they were not living separately, for example, they were sharing the same food and table. Consequently, second nuclear families were entered thus:

- (a) the parent directly related to head coded as 'Son' or 'Daughter',
- (b) the other members of the secondary nuclear family coded as 'Co-Resident Kin'.

In practice this excluded these families from analysis as such by the computer. A defence of the decision is that there were not two families in the same household if they lived within one domestic framework, except for separate sleeping accommodation.

- In some instances, even this degree of independent living may not have been possible. A student who rejects this argument could include a further column, perhaps headed 'SF' (Separate Family), and insert an appropriate figure to indicate the primary and other nuclear families, although in practice it was not difficult to search through the coding sheets to trace such families. Other co-residents who were allowed separate codes were Lodgers (who occasionally appear as whole families), Visitors (perhaps sometimes a genteel term for a Lodger), apprentices or trade servants living in, and domestic servants also living in.

There were also columns for marital condition, sex, age and personal occupation of each inhabitant of the town, as well as for size of family and size of co-resident group, that is, the total of all those in the house on Census Day. A row of data was prepared for each person but, because the program used cannot accept a more complex structure than the row, that is, it cannot read down columns, the occupation of the head of household, family size and size of co-resident group were included in each row relating to those within the same household. These data were basic facts affecting all those who lived in that house and, had this decision not been made at the outset, the research would have been seriously impeded.

Finally, three codes were allowed for place of birth, L (Local), C (rest of County) and E (elsewhere in U.K. or overseas). The distinction between C and E was based on Lawton's assertion that migration within a county usually exceeded migration across its boundaries.⁷ At first the area of the Loughborough Poor Law Union was considered for 'L', but it did in fact contain villages in Nottinghamshire which today turn rather to the city of Nottingham itself and probably did so in 1851. A further disadvantage of the Poor Law Union area was that it excluded settlements on the southern side of Loughborough that were near to the town and were influenced by it. A modern definition was therefore created by drawing a circle with its centre in Loughborough Market Place. Six miles was usually considered to be the limit of distance for 'putting-out' in the hosiery trade, that is, the maximum distance framework knitters

would walk to take in finished work and collect new materials. It was felt unlikely that Loughborough's area extended that far, since the circle would have included settlements actually nearer to Leicester, and five miles was therefore thought to be a reasonable estimate of the town's influence over the villages around it. Information about other birthplace areas, for instance of those in the Irish enclave of Loughborough, was extracted and noted in the margin of the data sheet. A researcher particularly interested in population mobility could, of course, introduce a much more refined birthplace code.

It is obvious that in an exercise involving 11,211 rows of ten codes each there were risks of error of two kinds:

- a) those of the enumerator. If untidiness of the presentation of the books is any guide, the 1851 enumerators were less efficient than those in subsequent censuses, and
- b) in transcription, by the researcher. This was reduced by first 'setting-out' each sheet with basic information for each member of a household: Street: Head's occupation: Family Size: Co-resident Group Size.

It then became impossible to omit a row because an empty line would have been left at the end of the entries for that particular household. Each sheet was also checked for the numbers of each sex and every third page was checked for ages. It was felt that these arrangements offered a reasonable guarantee of overall accuracy.

Computers are now, of course, commonly used in demographic analysis. Dyos used one in his work on Camberwell, for the distribution of occupational groups, but he took a sample only.⁸ M.F. Hopkinson, in an unpublished thesis dealing with mid-nineteenth century Bedford, adopted the same program as that used here and produced a very refined system of data collection, but then took every fifth household, with provision to ignore it in favour of the next if it was not typical (e.g. a school or other institution).⁹ J.W. Leonard, in his unpublished thesis on Middlesbrough over the same period, took 10 percent samples of households for the censuses of 1841, 1851 and 1861 and for 1871, only 5 percent. He used a coding sheet of fifty-seven columns, so that details of all members of a family could be recorded across one row. If he included all the available census information for each person, he could not have dealt with households of more than nine people. His method has the advantage that each member of the household can be related to any other, whereas the coding used for this thesis relates each member only to the head, and to family or co-resident group sizes.⁵ His and Hopkinson's disadvantage was that they were limited to samples, but it has to be borne in mind that they were dealing with a number of censuses, not simply one. It seems to the writer that a simple coding system, row by row, person by person, not only makes sampling unnecessary but allows for a great deal of analysis through the program used.

The first national census, introduced in 1801, was very limited and, although the scope had broadened considerably by

1841, it was still too narrow. Birthplaces were given only as in the county of residence or another not specified (or in Scotland, Ireland or Foreign Parts); ages for those over fourteen were required only to 'the lowest of the term of the five years within which the age is' (Census directions), and occupation data has to be treated with caution. It was not until 1851 that precise information was required about age, birthplace, marital status and the relationship of members of a household to the head. Occupations were also recorded in more detail. The subject matter remained essentially the same until 1881, the last year for which census returns in enumerators' books have been published, because of the Hundred Years rule.

Armstrong has pointed out that, over the country as a whole, there were omissions in recording the 0-4 year age group, and quotes D.V. Glass as putting the figure as high as 4.5 percent.¹⁰ It is difficult to know how true this is of Loughborough. Some very young children are recorded, their age being stated in terms of days. It seems possible that the presence of these children could have dominated the life of a family at that time to such an extent that another child might be relegated to the back of the head's mind. Another national problem was the mis-statement of ages of children. Such facts are often remarkably difficult for fathers to remember. Wrigley and Schofield calculated that about 4 percent of children aged up to four years may not have been entered at all. They found another source of error at the other end of life; old people exaggerated their ages in nineteenth century censuses. They base

these conclusions on their examination of Parish Registers.¹¹ Birthplace data was also a little incomplete because some people did not know where they had been born and the actual number for Loughborough cannot be quoted with any accuracy because, although some enumerators entered 'N.K.' (Not Known) others apparently accepted the name of the county and entered that, without giving the name of the parish.

Occupational data is also mentioned by Armstrong as a source of error. It does not appear that local enumerators were instructed to impose an accepted system, many probably accepted the householder's return without a request for details. They also did not appear to distinguish between the skilled and the semi-skilled. Few householders were asked to follow the instruction that 'where a trade is much sub-divided, both trade and branch are to be returned thus: "Watchmaker-Finisher", "Printer-Compositor"'. Although they were warned that 'vague and general' terms were 'objectionable', some enumerators still used them.¹² There must also be a real possibility that some did their work casually. One, in particular, left many 'Rank, Profession or Occupation' spaces blank, whereas others faithfully made an entry on each line. Occasionally such spaces were left blank for a whole family, apart from the head of household. This could, of course, be true of a family with the mother at home all day and the children too young to be at school ('Scholar' was listed as an occupation), but the habit of putting 'do' (ditto) in the occupation column, below heads of household, led to some quite small children being credited with

an economic maturity beyond the most gifted of them.

Incidence of employment is difficult to assess. Some enumerators entered 'Out of Place' or 'Not in Work', but others made no entries of this kind. None indicated if the employment was full or part-time, apart from the entry 'Job Labourer', which seems to imply casual work. The extent of part-time working by married women is impossible to determine. It might be assumed that many helped their husbands when they could, and D.M. Smith thinks that work of this kind was not recorded.¹³ The prudent course is therefore to accept the returns as they are. Where a different occupation from that of the husband is quoted (for example, charwoman) the position is, of course, quite clear, otherwise we have to accept that the enumerators, for all their apparent faults, were in the best position to assess the situation. It may be added that the repetition by an enumerator of the head of household's occupation with an apostrophe 's' followed by the word 'wife' or 'daughter' (for example, farmer's wife) has been accepted here as evidence that the women were thus employed.

This recital of grievances must be modified by some consideration of the conditions under which the enumerators had to work. They were paid eighteen shillings for the first three hundred inhabitants, with an additional shilling for each sixty people thereafter. The most that an enumerator would have earned was therefore thirty shillings but there was also a modest mileage allowance, excluding the home to duty

distance.¹⁴ A fine of five shillings was payable, however, if the Schedule was not handed over to the Local Registrar before 8 April. This could explain the hurried completion of some of the books. An enumerator had to:

- (a) deliver householders' schedules, one per occupier if a house was in multiple occupation on census night (30 March);
- (b) explain the 'nature and importance of the document';
- (c) leave schedules relating to the census of schools and churches, again with appropriate explanations, and immediately send a list of all these establishments to the Registrar;
- (d) collect the completed schedules on Monday, 31 March, after having read them through and examined them. The instructions stress the need to check on occupations. If a schedule had not been completed, the enumerator had to do it himself at the house, read it to the occupier and get him/her to make a mark;
- (e) to trace and enter travelling people staying overnight.¹⁵

He then had until 7 April to hand in his work, and it is perhaps not surprising that some books contain entries written in different hands, one of them often having feminine characteristics.

The three pages which follow contain copies of

- i) General Instructions for Occupier of House
- ii) Householder's Schedule

- iii) A page from an enumerator's book (this is of the average standard for Loughborough)

CENSUS OF THE POPULATION.

No. 1851.

HOUSEHOLDER'S SCHEDULE.

(Prepared under the direction of one of Her Majesty's Principal Secretaries of State.)

Parish or Township	
Town, Tything, Village, or Hamlet.	
Street, Square, &c., or Road.....	
Name or No. of House.....	

To the Householder.

You are requested to insert the particulars specified on the other page, respecting all the persons who slept or abode in your house on the night of March 30th, in compliance with an Act which passed the House of Commons, and the House of Lords, in the last Session of Parliament, and received the assent of Her Majesty, the Queen, on the 5th of August, 1850.

This Paper will be called for on Monday, March 31st, by the appointed Officers,

and it will save trouble if, as the Act requires, you have the answers written in the proper columns by that time. It is his duty to verify the facts, and if you have omitted to comply with the above Instructions, to record them at your residence on that day.

Persons who refuse to give correct information, incur a Penalty of Five Pounds; besides the inconvenience and annoyance of appearing before two Justices of the Peace, and being convicted of having made a wilful mis-statement of age, or of any of the other particulars.

The Return is required to enable the Secretary of State to complete the Census; which is to show the number of the population—their arrangement by ages and families in different ranks, professions, employments, and trades—their distribution over the country in villages, towns, and cities—their increase and progress in the last ten years.

GEORGE GRAHAM,
Registrar General.

Approved,
G. GREY.

EXAMPLES OF THE MODE OF FILLING UP THE RETURN.

Name and Surname.	Relation to Head of Family.	Condition.	Sex.	Age last Birth-day.	Rank, Profession, or Occupation.	Where Born.	Deaf and Dumb or Blind.
George Wood.	Head of Family	Married	M.	48	Farmer (of 111 acres employing 4 labourers)	Kent, Dartford	
Maria Wood.	Wife	Married	F.	44	Farmer's Wife	Middlesex, Chelsea	
Emily Wood.	Daughter	Unmarried	F.	22	Farmer's Daughter	Kent, Chislehurst	
Alan Wood.	Son	Unmarried	M.	20	Farmer's Son	Kent, Chislehurst	
Florence Wood.	Daughter	Unmarried	F.	14	Scholar	Kent, Chislehurst	
Jane Holmes.	Visitor.	Widow	F.	33	Annuitant	Chesham, Bucks	
Eliza Edwards.	Servant	Unmarried	F.	24	House Servant	Kent, Gravesend	
Thomas Young.	Servant	Unmarried	M.	19	Farm Labourer	Surrey, Croydon	
Janet Cox.	Head of Family	Widow	F.	49	Clover	Scotland	
Sophia Cox.	Daughter	Unmarried	F.	24	Dye-maker	Middlesex, Poplar	
Alexander Cox.	Son	Unmarried	M.	22	Hand Loom Weaver (Silk)	Middlesex, Shore-ditch	
William Cox.	Son	Unmarried	M.	14	Erased boy	Surrey, Lambeth	
Margaret Cox.	Mother-in-law	Widow	F.	33	Formerly Launder	Middlesex, Bethnal Green	
John Butler.	Nephew	Unmarried	M.	22	Printer—Pressman	Wales (British Subject).	

GENERAL INSTRUCTION.

This Schedule is to be filled up by the OCCUPIER or Person in charge of the house; if the house is let or sub-let to different persons or families, in separate stories or apartments, the OCCUPIER or Person in charge of each such story or apartment must make a separate return for his portion of the house upon a separate Householder's Schedule.

INSTRUCTIONS for filling up the Column headed "RANK, PROFESSION, or OCCUPATION."

The Superior Titles of PEERS and other PERSONS OF RANK to be inserted, as well as any high office which they may hold. Magistrates, Aldermen, and other important public officers to state their profession after their official title.

ARMY, NAVY, AND CIVIL SERVICE.—Add after the rank, "Army," "Artillery," "Royal Navy," "Marines," "East India Company's Service," as the case may be—distinguishing those on half-pay. Persons in the CIVIL SERVICE to state the Department to which they are attached, after their title or rank; those on the Superannuation List to be so distinguished. Chelsea, Greenwich, and other Pensioners, to be clearly designated.

CLERGYMEN of the Church of England to return themselves as "Rector of _____," "Vicar of _____," "Curate of _____," &c., or as not having cure of souls. They are requested not to employ the indefinite term "Clerk." Presbyterian Ministers and Roman Catholic Priests to return themselves as such, and to state the name of the church or chapel in which they officiate. Dissenting Ministers to return themselves as "Independent Minister of _____ Chapel," "Baptist Minister of _____ Chapel," &c. Local or occasional preachers must return their ordinary occupations.

LEGAL PROFESSION.—Barristers to state whether or not in actual practice; Officers of any Court, &c., to state the description of office and name of Court. The designation "Attorney" or "Solicitor" to be confined to those whose names are actually upon the Roll. Persons in Solicitors' offices should distinguish whether "Solicitor, Managing, Articled, Writing, or General Clerk."

Members of the **MEDICAL PROFESSION** to state the University, College, or Hall, of which they are Graduates, Fellows, or Licentiates—also whether they practise as Physician, Surgeon, or General Practitioner, or are "not practising."

PROFESSORS, TEACHERS, PUBLIC WRITERS, Authors, and Scientific Men—to state the particular branch of Science or Literature which they teach or pursue; Artists, the art which they cultivate. Graduates should enter their degrees in this column.

PERSONS ENGAGED IN COMMERCE, as Merchants, Brokers, Agents, Clerks, Commercial Travellers, to state the particular kind of business in which they are engaged, or the staple in which they deal.

The term **FARMER** to be applied only to the occupier of land, who is to be returned—"Farmer of [317] acres, employing [12] labourers;" the number of acres, and of in and out-door labourers, on March 31st, being in all cases inserted. Sons or daughters employed at home or on the farm, may be returned—"Farmer's Son," "Farmer's Daughter."

IN TRADES the Master is to be distinguished from the Journeyman and Apprentice, thus—(Carpenter—Master employing [6] men); inserting always the number of persons of the trade in his employ on March 31st.

In the case of **WORKERS IN MINES OR MANUFACTURES**, and generally in the constructive ARTS, the particular branch of work, and the material, are always to be distinctly expressed if they are not implied in the names, as in Coal-miner, Brass-founder, Wool-carder, Silk-thrower. Where the trade is much sub-divided, both trade and branch are to be returned thus—"Watchmaker—Finisher;" "Printer—Compositor."

A person following **MORE THAN ONE DISTINCT TRADE** may insert his occupations in the order of their importance.

MESSENGERS, PORTERS, LABOURERS, and SERVANTS, to be described according to the place and nature of their employment.

Persons following no Profession, Trade, or calling, and holding no public office, but deriving their incomes chiefly from land, houses, mines, or other real property, from dividends, interest of money, annuities, &c., may designate themselves "Landed Proprietor," "Proprietor of Iron Mines," "Proprietor of Houses," "Fund-holder," "Annuitant," &c., as the case may be. Persons of advanced age who have **RETIRED FROM BUSINESS** to be entered thus—"Retired Silk Merchant," "Retired Watchmaker," &c.

ALMSPEOPLE, and persons in the receipt of parish relief should, after being described as such, have their previous occupations inserted.

WOMEN AND CHILDREN.—The titles or occupations of ladies who are householders to be entered according to the above Instructions. The occupations of women who are regularly employed from home, or at home, in any but domestic duties, to be distinctly recorded. So also of children and young persons. Against the names of children above five years of age, if daily attending school, or receiving regular tuition under a master or governess at home, write "Scholar," and in the latter case add "at home."

WOMEN AND CHILDREN: See words underlined by the present writer. They could be read to mean that regular part-time work should have been recorded, or it could have been held that part-time work was not regular.

LIST of the MEMBERS of this FAMILY, of VISITORS, and of SERVANTS who SLEPT or ABODE in this House on the NIGHT of SUNDAY, MARCH 30th.

NAME and SURNAME. <i>No Person absent on the Night of March 30th to be entered.</i> Write after the Name of the Head of the Family, the Names of his Wife, Children, and others of the same Surname; then Visitors, Servants, &c.	RELATION to Head of Family. State whether Wife, Son, Daughter or other Relative, Visitor, or Servant.	CONDITION. Write "Married," "Widower," "Widow," or "Unmarried," against the Names of all Persons except Young Children.	SEX. Write "M" against Males, and "F" against Females.	AGE [Last Birthday]. For Infants under One Year, state the Age in Months, writing "Under 1 Month," "2 Months," &c.	RANK, PROFESSION, or OCCUPATION. <i>(Before filling in this Column, you are requested to read the Instructions on the other side.)</i>	WHERE BORN. Opposite the Names of those born in England, write the County, and Town or Parish. If born in Scotland, Ireland, the British Colonies, the East Indies, or in Foreign Parts, state the Country; in the last case, if a British Subject, add, "British Subject."	If Deaf-and-Dumb, or Blind. Write "Deaf-and-Dumb," or "Blind," opposite the Name of the Person.
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

The foregoing is a true Return concerning all the Members of this Family. Witness my Hand,

SCHEDULE TO BE COMPLETED BY HOUSEHOLDER: It would be of interest to know how many of these had actually to be filled in by enumerators.

Parish or Township of Parish of Loughborough		Ecclesiastical District of		City or Borough of		Town of		Village of	
Name of Street, Place, or Road, and Name or No. of House	Name and Surname of each Person who abode in the house, on the Night of the 30th March, 1851	Relation to Head of Family	Condition	Age of		Rank, Profession, or Occupation	Where Born	Whether Blind, or Deaf, and Dumb	
				Males	Females				
1 Sparrow Hill	William J. Worley	Head	M	30		Attorney	Northampton, South Collingham.		
	Sarah Single	Serv.	M.	24		House Servant.	Northampton, Kettering.		
	Mar Smith	Serv.	M.	24		do.	do. Burton Latimer		
2 Sparrow Hill	Mary Ann Poynter	Head	M	34		Steamer (Anglo-Bury)	Worcestershire, Stourbridge		
	Judith M. do	Daughter	M	12			Leicestershire, Ashby de la Zouch		
	William H. do	Son		10			do. Whitwick		
	Edmund do	Son		8		School	do. Whitwick		
	Ann. Cook	Lodger	M.	20		agent housewife Washhouse girl	do. Loughborough		
3 Sparrow Hill	John Poynter	Head	M	26		Railway Inspector.	Worcestershire, Sothwell		
	Elija do	Wife	M	25			Worcestershire, Eastington		
	Judith do	Daughter	M	9mo			Leicestershire, Loughborough		
4 Sparrow Hill	William J. Worley	Lodger	M	28		Attorney	do. Moinaley		
	Francis & Edward	Head	M	31		Lawyer	N.H.		
	Lucey do	Wife	M	33			Worcestershire, Leicestershire		
	John do	Son	M	4		Police man	do. do		
5 Sparrow Hill	Edward Poynter	Head	M	24		Painter and Eng. work	do. Woodhouse		
	Francis Heape	Wife	M	24			do. Thurgstone		
6 Sparrow Hill	Elizabeth Heape	Head	M	59		Cochman	do. Great Borden		
	William Gilbert	Son	M	22		Warehouseman (Cotton Boley)	do. Church Langton		
				Total of Persons...		1179			

REFERENCES FOR APPENDIX 2

1. See W.A. ARMSTRONG, Stability and Change in an English County Town and M. ANDERSON, Family Structure in Nineteenth Century Lancashire
2. C. BOOTH, 'Occupations of People in the United Kingdom', p.318
3. BOOTH, p.324
4. A. CARR-SAUNDERS, D. JONES and C. MOSER, A Survey of Social Conditions in England and Wales, p.92
5. J. LEONARD, 'Urban Development and Population Growth in Middlesbrough, 1831-1871'.
6. PP (Population), Vol.IX, p.xxxix
7. R. LAWTON, The Census and Social Structure, p.162
8. H.J. DYOS, Victorian Suburb
9. M.F. Hopkinson, 'Socio-Economic and Demographic Patterns in Bedford, 1837-1871'
10. W.A. ARMSTRONG, 'The Use of Information about Occupation', p.34
11. E.A. WRIGLEY and R.S. SCHOFIELD, A Population History of England, 1541-1871, p.590
12. PP (Population), Vol.VI. p.38
13. D.M. SMITH, 'The British Hosiery Industry at the Middle of the Nineteenth Century: An Historical Study in Economic Geography', p.127
14. PP Vol.VI, p.4
15. PP Vol.VI, p.33

APPENDIX 3

DETAILS OF THE WORKFORCES OF EMPLOYERS OF LABOUR, 1851 CENSUS

The Census of 1851 gives details of the workforces of employers of labour, although the information tends to differ with the enumerator and the totals do not tally with the occupational structure given in Chapter 3. For example, only seventy-nine farm labourers are quoted although there were 242 in the town. On the other hand, dyers claimed to be employing fifty-one people, but the number of those entering the occupation 'dyer' on the householders' returns was only sixteen. The difference could be explained if ancillary occupations were recorded as such by householders in ways that cannot now be associated with dyeing. The figures relating to E. Warner, of Cartwright and Warner, are omitted completely, while some of the hosiers, the merchant-entrepreneurs, are credited with the employment of many workers (300 in the entry for L. Gimson), although they had no factories. Where enumerators gave details of trade employees, it was usually by sex, and some made a note of apprentices. It will therefore be of some value to analyse the entries to discover the general structure of trade and industry in the town, in terms of those who gave employment to others. The list below is by occupation and in alphabetical order. The addresses are those of the employers, whose names are also given where they may be of particular interest. The list of farmers is noticeable because of those who did not appear to have houses on their own land, but still followed the pre-Enclosure (1762 for Loughborough) practice of living in the town.

BAKER

1M Swan Street

BELLFOUNDER

Details not clear: the firm at this time was simply a family concern

Southfields Lane

BLACKSMITH

2M Baxter Gate

BLEACHER

12M 7F Wards End

BUTCHER

i) 3M High Street
ii) 3M Market Place
iii) 1M Swan Street

BRICKLAYER/BUILDER

i) 8M Wood Gate
ii) 6M Pinfold Gate
iii) 1M Church Gate

BRICKMAKER

9M Leicester Road

BRUSHMAKER

i) 7M Fishpool Head
ii) 3M High Street
iii) 2M Swan Street

CHEMIST

i) 1M Market Place
ii) 1M Market Place
iii) 1M High Street

CHIMNEY SWEEP

i) 3 boys Baxter Gate
ii) 5 boys Mill Street

CLOTHIER

i) 1M High Street
ii) 1M Market Place (and pawnbroker)

CURRIER

i) 2M The Ruses
ii) 2M Market Place

DRAPER

i) 6M Market Place
ii) 3M High Street
iii) 1M High Street
iv) 1M Market Place
v) 4M Market Place
vi) 2M Market Place
vii) 2M Market Place
viii) 3M Baxter Gate
ix) 2M Baxter Gate

DYER

i) 24M 20F Devonshire Square (T. Clark)
ii) 4M Church Gate
iii) 3M Salmon Street

FARMER

i)	1M	Wood Gate	12 acres
ii)	1M	Park Lane	22 acres
iii)	1M	Holborn Hill	55 acres
iv)	2M	Forest Lane	104 acres
v)	8M	Burleigh Farm	330 acres
vi)	6M	Forest Lane	152 acres
vii)	3M	Forest Lane	95 acres
viii)	2M	Loughborough Parks	105 acres
ix)	5M	Forest Lane	160 acres
x)	1M	Middle Park Lane	30 acres
xi)	7M	Loughborough Parks	150 acres
xii)	5M	Loughborough Parks	200 acres
xiii)	4M	Leicester Road	230 acres
xiv)	2M	Shelthorpe Lodge	42 acres
xv)	4M	Pinfold Gate	120 acres
xvi)	6M	Pinfold Gate	137 acres
xvii)	1M	Moor Lane	35 acres
xviii)	4M	Canal Bank	150 acres
xix)	2M	Dead Lane	59 acres
xx)	2M	Fennel Street	51 acres
xxi)	3M	Baxter Gate	63 acres
xxii)	4M	Baxter Gate	60 acres
xxiii)	2M	Swan Street	84 acres
xxiv)	2M	Ashby Road	56 acres
xxv)	1M	Swan Street	75 acres

N.B. The land on Burleigh Farm and Loughborough Parks had been enclosed privately prior to the Act of 1762.

GROCER

- i) 1M Market Place
- ii) 1M Market Place
- iii) 2M Market Place
- iv) 3M Market Place
- v) 1M 2 apps. Market Place
- vi) 2M Baxter Gate
- vii) 1M Baxter Gate
- viii) 1M High Street
- ix) 2M High Street
- x) 1M Swan Street
- xi) 1M Rushes
- xii) 3M Mill Street

GUN MAKER

1M High Street

HOSIERY

The names quoted in connection with the hosiery trade were:

- E. Warner, Ashby Road
- W.E. White, Park Lane: as a spinner employing 13 hands
- M. Banister, Wood Gate: 36 hands
- L. Gimson, Pinfold Gate: 300 hands
- W. Perkins, Market Street: 26 hands
- F. Peberdy, Pinfold Gate: no figure quoted
- R. Ratcliff, Ashby Place: 75 hands
- J. Slee, Wood Gate: 120 hands

It may be assumed that the last six were hosiers rather than manufacturers.

There was also a glove maker on Welsh Hill employing seven hands.

INNKEEPER

- i) 1M 5F High Street
- ii) 1M 2F High Street
- iii) 1M 2F High Street
- iv) 1M 2F Market Place
- v) 1F Market Place
- vi) 1F Ashby Road

JEWELLER

1M Market Place

JOINER/CARPENTER

- i) 6M Mill Street
- ii) 3M & 2 apps. Devonshire Square
- iii) 6M Baxter Gate
- iv) 3M Sparrow Hill

LACE MANUFACTURER

- i) 14M 25F Wood Gate/Barrow Street (J. Bird/J/ Hood)
- ii) 4M Spring Gardens (T. Pallett)
- iii) 6M Meadow Lane (W. Smith)

MILLINER

2F High Street

NEEDLEMAKER

12M Wood Gate (Miss S. Wallis)

NURSERYMAN/SEEDSMAN

8M High Street/Barrow Street

PAINTER (HOUSE)

- i) 3M Leicester Road
- ii) 2M Church Gate
- iii) 1M Wood Gate

PATTERN MAKER

2M Mill Street

PLUMBER

- i) 1M Church Gate
- ii) 2M High Street

PRINTER

1M & 3 apps. Market Place

SHOEMAKER

- i) 1M High Street
- ii) 1M Swan Street
- iii) 15M Swan Street
- iv) 2M Church Gate
- v) 2M Swan Street
- vi) 12M Baxter Gate
- vii) 6M Baxter Gate
- viii) 15M Market Place
- ix) 1M South Street

SINKER MAKER

1 app. Leicester Road

STONE MASON

3M Leicester Road

SURGEON/G.P.

- i) 1M High Street
- ii) 1M Market Place

TAILOR

- i) 2M Baxter Gate
- ii) 7M Market Place
- iii) 4M Church Gate

WHEELWRIGHT

- 2M Baxter Gate

WINE MERCHANT

- 1M Market Place

APPENDIX 4

INDICATIONS OF OCCUPATIONAL POVERTY IN 1851

Families of more than five in Framework Knitting and Unskilled Occupations

Column Headings:

FAM Family Size
 GP Additional Group Size
 H Head
 W Wife (column ticked if working, if not, crossed)
 CNW Children not working
 CW Children working
 YW Youth working
 AW Adult working
 KW Kin working
 KNW Kin not working
 L Lodger

												POINTS		
FAM	GP	H	W	CNW	CW	YW	AW	KW	KNW	L	FAM	GP	TOTAL	
ANCILLARY HOSIERY WORKERS														
6	-	/	/	3	1						+2		+2	
8	1	/	x	5	1					1	-2	+1	-1	
6	-	/	x	3	1						=		=	
6	1	/	/	4				1			+1	=	+1	
8	-	/	x	3	1	2					=		=	
9	1	/	/	3		2	2		1		+2	-1	+1	
10	-	/	x	7			1				-4		-4	
9	-	/	x	6		1					-3		-3	
7	-	/	/	2	2	1					+3		+3	
7	-	/	/	3	2						+2		+2	
10	-	/	x	5	1	2					-2		-2	
6	-	/	x	2		1	1				+1		+1	
6	-	/	x	1	3						+2		+2	
6	-	/	/	2	2						+3		+3	
7	-	/	x	5							-2		-2	
6	-	/	/	1	1	2					+4		+4	
8	-	/	x	5		1					-2		-2	
6	-	/	x	4							-1		-1	
8	-	/	x	4		2					-1		-1	
6	-	/	x	3	1						=		=	
6	-	/	x	4							-1		-1	
7	-	/	x	4		1					-1		-1	
FRAMEWORK KNITTERS														
6	-	/	/	3	1						+2		+2	
8	-	/	x	3	3						=		=	
6	-	/	x	1		2	1				+2		+2	
7	1	/	x	5						1	-2	+1	-1	
9	-	/	x	6		1					-3		-3	
7	-	/	x	3		2					=		=	

											POINTS		
FAM	GP	H	W	CNW	CW	YW	AW	KW	KNW	L	FAM	GP	TOTAL
FRAMEWORK KNITTERS (CONTINUED)													
										Pauper			
6	1	/	x	2	2					1	+1	=	+1
6	-	/	x	4							-1		-1
9	-	/	x	4	3						-1		-1
7	-	/	/	5							=		=
7	-	/	/	4	1						+1		+1
6	-	/	/	2	1	1					+3		+3
8	-	/	/	4	1	1					+1		+1
6	-	/	/	4							+1		+1
9	-	/	/	5		2					=		=
8	-	/	/	2	3	1					+3		+3
6	2	/	/	3		2		1	1		+3	-1	+2
8	-	/	/	1	3	2					+4		+4
7	-	/	/	2	3						+3		+3
8	-	/	/	3	3						+2		+2
8	-	/	/	3	3						+2		+2
11	-	/	/	3	1	4	1				+2		+2
8	-	/	x	1	1	3	1				+2		+2
6	-	/	/	3	1						+2		+2
10	-	/	/	2	3	2	1				+3		+3
7	-	/	/	4	1						+1		+1
6	1	/	x	4				1			-1	=	-1
6	3	/	x	4				2	1		-1	-1	-2
8	-	/	x	3	3						=		=
6	-	/	x	-	2	2					+5		+5
9	-	/	x	3	1	3					=		=
6	-	/	/	2	1	1					+3		+3
6	-	/	/	4							+1		+1
10	-	/	/	5	3						=		=
7	-	/	/	3	1	1					+2		+2
6	-	/	/	-	2	1	1				+5		+5
6	-	/	/	2	1						+2		+2
7	-	/	/	5							=		=
6	-	/	/	4							+1		+1
6	-	/	/	3	1						+2		+2
8	2	/	/	3	1	2		1	1		+2	-1	+1
6	-	/	x	4							-1		-1
7	-	/	/	3	2						+2		+2
6	-	/	/	3	1						+2		+2
6	1	/	x	-	2	2			1		+3	-1	+2
6	-	/	x	1	3						+2		+2
6	-	/	/	4							+1		+1
7	-	/	/	1		4					+4		+4
7	2	/	/	1	3	1				2	+4	+2	+6
6	-	/	/	3			1				+2		+2
7	-	/	x	2	1	2					+1		+1
6	-	/	x	4							-1		-1
6	-	/	x	4							-1		-1
7	1	/	/	3	2			1			+2	=	+2
7	-	/	/	4	1						+1		+1
7	-	/	/	2	1	2					+3		+3
6	-	/	x	3		1					=		=

											POINTS		
FAM	GP	H	W	CNW	CW	YW	AW	KW	KNW	L	FAM	GP	TOTAL
FRAMEWORK KNITTERS (CONTINUED)													
8	-	/	x	3	1	2					=		=
6	-	/	x	3	1						=		=
7	-	/	x	3	1	1					=		=
6	-	/	x	2	1	1					+1		+1
7	-	/	x	2	1	1	1				+1		+1
10	3	/	x	4	2	2				3	-1	+3	+2
6	1	/	x	3		1			1		=	-1	-1
6	-	/	/	1	3						+4		+4
7	-	/	x	4	1						-1		-1
9	-	/	/	2	1	2	2				+3		+3
9	2	/	x	5	2			1	1		-2	-1	-3
7	-	/	x	5							-2		-2
8	1	/	x	3		2	1		1		=	-1	-1
10	1	/	x	3	1	3	1		1		=	-1	-1
11	-	/	x	7		2					-4		-4
6	-	/	x	4							-1		-1
7	1	/	x	2	1	2			1		+1	-1	=
7	-	/	x	3	2						=		=
6	-	/	x	2		2					+1		+1
6	-	/	/	4							+1		+1
7	-	/	x	3	1	1					=		=
6	-	/	/	2	2						+3		+3
6	-	/	x	1	1	1	1				+2		+2
7	-	/	x	-	2	1	2				+3		+3
8	-	/	/	4	1	1					+1		+1
7	-	/	/	3	2						+2		+2
6	2	/	x	1		3				2	+2	+2	+4
7	-	/	x	3	2						=		=
10	-	/	x	6		2					-3		-3
9	-	/	/	4	3						+1		+1
7	-	/	x	5							-2		-2
7	-	/	/	4	1						+1		+1
6	1	/	/	2	1	1		1			+3	=	+3
GENERAL LABOURERS													
7	3	/	/	3	2					3	+2	+3	+5
6	1	/	x	4					1		-1	-1	-2
									Pauper				
7	1	/	/	4	1				1		+1	=	+1
8	-	/	x	3	2		1				=		=
6	1	/	/	1		1	2			1	+4	+1	+5
9	-	/	x	5		2					-2		-2
6	-	/	x	2	2						+1		+1
7	1	/	/	1		2	2	1			+4	=	+4
9	-	/	/	4	2	1					+1		+1
6	-	/	x	3	1						=		=
6	1	/	x			2	2	1			+3	=	+3
7	-	/	x	3	1						-1		-1
7	-	/	x	4		1					-1		-1
6	4	/	x	4						4	-1	+4	+3
6	2	/	/	1		3				2	+4	+2	+6
6	-	/	x	3	1						=		=

POINTS

FAM	GP	H	W	CNW	CW	YW	AW	KW	KNW	L	FAM	GP	TOTAL
-----	----	---	---	-----	----	----	----	----	-----	---	-----	----	-------

GENERAL LABOURERS (Continued)

7	-	/	x	3	2						=		=
8	1	/	x	3	2	1		1			=	=	=
6	-	/	x	3		1					=		=
8	-	/	x	4	2						-1		-1
6	-	/	x	4							-1		-1
6	2	/	x	1		3				2	+2	+2	+4
6	-	/	x	4							-1		-1
6	-	/	/	4							+1		+1
7	-	/	x	5							-2		-2

FARM LABOURERS/GARDENERS

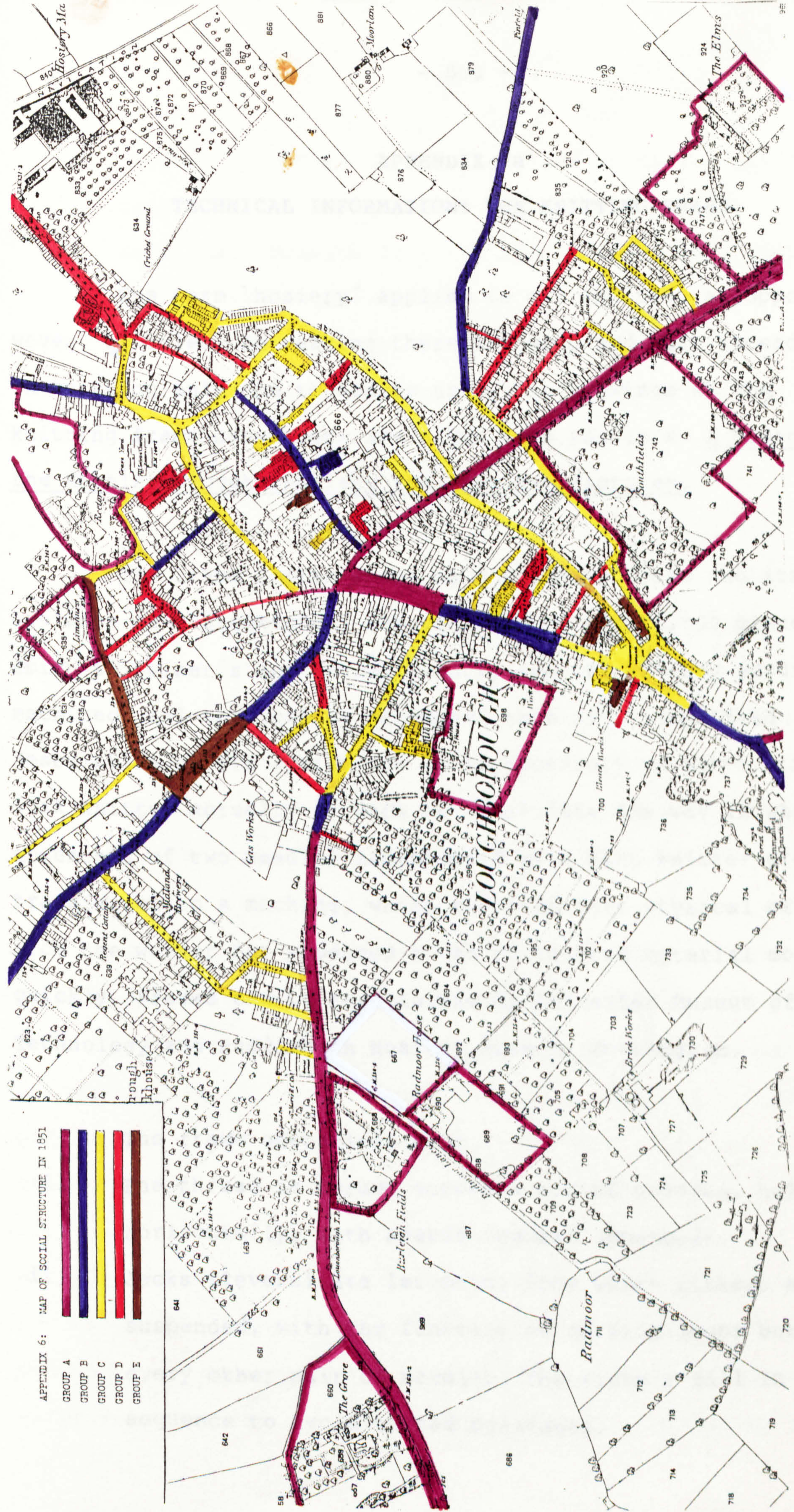
6	-	/	x	3	1						=		=
6	-	/	/	2	2						+3		+3
8	-	/	/	3	2	1					+2		+2
6	-	/	x	1	1	2					+2		+2
6	-	/	/	4							+1		+1
6	-	/	/	4							+1		+1
8	-	/	x	3		3					=		=
6	1	/	/	3	1					1	+2	+1	+3
6	-	/	/	2	1	1					+3		+3
6	-	/	x	3	1						=		=
7	-	/	/	1	1	1					+2		+2
9	1	/	/	2	1	2	2			1	+3	+1	+4
6	-	/	x	-		2	2				+3		+3
6	-	/	x	4							-1		-1
6	-	/	x	4							-1		-1
6	-	/	/	2	2						+3		+3
6	-	/	x	4							-1		-1
10	-	/	x	3	2	2	1				=		=
8	-	/	x	6							-3		-3
7	-	/	x	1		3	1				+2		+2
6	-	/	x	3	1						=		=
8	-	/	x	4		2					-1		-1
8	1	/	x	4	1	1		1			-1	=	-1
6	-	/	x	4							-1		-1
8	-	/	x	3	2	1					=		=
8	-	/	x	6							-3		-3
9	-	/	x	7							-4		-4
7	-	/	x	2	3						+1		+1
6	-	/	x	2		1	1				+1		+1
9	-	/	x	4	1	2					-1		-1

ANCILLARIES - SERVICE TRADES

7	1	/	/	4	1					1	+1	+1	+2
6	-	/	/	3	1						+2		+2
8	-	/	x	2		1	3				+1		+1
6	-	/	/	4							+1		+1

9

NAME OF STREET OR YARD	NUMBER OF HOUSE- HOLDERS	POSITIVE FACTORS										NEGATIVE FACTORS										TOTAL	REVISED A	FINAL RATING
		MALE SERVANTS		FEMALE SERVANTS		ELECTORS		SELF-EMPLOYERS SUPPORTING		WIDOWS NOT S.S.		FEMALE SINGLE H. NOT S.S.		LOW PAUPERS OCCS		LODGERS		TOTAL	REVISED A	FINAL RATING				
		R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A				R			
QUEEN STREET	27	1	4	2	7	-	-	-	-	3	11	-	-	2	7	5	19	11	-37	-26	C			
RECTORY PLACE	33	J	3	10	30	-	-	2	6	4	12	1	3	2	6	3	4	39	-21	18	C			
REGENT STREET	83	-	-	5	6	9	11	7	8	8	10	1	1	1	1	3	4	25	-26	-1	C			
RUSHES	80	-	-	11	14	6	8	6	8	13	16	1	1	3	4	67	84	33	-116	-83	E			
SALMON STREET	13	-	-	1	8	3	23	2	15	1	8	1	8	1	5	8	62	54	-93	-39	D			
SOUTH STREET	22	-	-	1	5	-	-	-	-	2	9	1	5	1	5	6	27	10	-55	-45	D			
SOUTHFIELDS LANE	17	1	6	2	12	2	12	1	6	1	6	1	6	1	5	29	42	-35	7	C				
SPARROW HILL	63	2	3	8	13	2	3	5	8	7	11	2	3	8	10	16	29	-38	-9	C				
SPRING GARDENS	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	NIL	20	20	C			
STEEPLE ROW	22	-	-	-	-	1	5	-	-	5	23	1	5	1	5	11	5	5	-38	-33	D			
SWAN STREET	35	1	3	12	34	4	11	1	3	6	17	2	6	1	7	31	77	-57	20	20	B			
SYDNEY TERRACE	6	-	-	1	17	-	-	-	-	-	-	-	-	-	-	-	17	NIL	17	17	C			
UNION STREET	29	-	-	1	3	3	10	-	-	3	10	-	5	17	-	5	17	13	-44	-31	C			
WARWICK ROW	14	-	-	1	7	7	9	2	4	1	7	1	7	1	2	19	35	7	-14	-7	C			
WARDS END	55	1	2	4	7	-	-	2	4	5	9	1	5	1	2	17	33	33	-57	-24	C			
Dog & Gun Yard	6	-	-	-	-	-	-	1	17	-	-	-	-	-	-	-	17	17	-17	NIL	C			
Wheatshaf Yard	11	-	-	-	-	-	-	-	-	1	9	3	5	19	20	173	NIL	NIL	-182	-182	E			
WELLINGTON STREET	61	1	2	3	5	-	-	1	2	5	8	3	7	6	27	33	9	9	-57	-48	D			
WELSH HILL	22	-	-	1	5	-	-	-	-	1	5	1	5	3	27	27	10	10	-37	-27	C			
WILLIAM STREET	11	-	-	-	-	1	9	-	-	1	9	2	2	3	27	35	9	9	-54	-45	D			
WOOD GATE	89	-	-	3	3	7	8	1	11	5	6	2	4	2	31	35	24	24	-49	-25	C			
Mason's Yard	9	-	-	-	-	-	-	-	-	1	11	-	2	2	1	11	NIL	NIL	-22	-22	C			
Attenborough's Yard	6	-	-	-	-	-	-	-	-	2	33	-	1	3	11	11	NIL	NIL	-82	-82	E			
Bass's Yard	9	-	-	-	-	-	-	-	-	2	33	-	1	1	11	11	NIL	NIL	-11	-11	C			



APPENDIX 6: MAP OF SOCIAL STRUCTURE IN 1951

GROUP A	Dark Red
GROUP B	Blue
GROUP C	Yellow
GROUP D	Red
GROUP E	Brown

APPENDIX 7a

TECHNICAL INFORMATION: THE KNITTING FRAME

The term 'hosiery' applies to all knitted, as opposed to woven, articles. In weaving there are warp and weft threads, but in knitting only one thread is used. The drawings of the knitting frame shown here are taken from Felkin's A History of the Machine Wrought Hosiery and Lace Manufactures.

The frame (often known as a stocking frame and its operator as a stockinger) was composed of over 2,000 pieces of smith's, joiner's and turner's work, some of it very accurately machined. All that can be attempted here is a simplified description of its operation; it is necessary to watch a frame work knitter actually at work to appreciate the way in which the movements of two needles manipulated by a hand knitter are transferred to a machine, which requires more physical effort from the worker but produces a web of knitted material more quickly. Frames can be seen in use at Leicester Museum of Technology and Ruddington Hosiery Museum, Nottingham.

The frame operations are:

- i) The thread is thrown across a row of needles, held horizontally, with beards (hooks) uppermost.
- ii) Jacks (levers) are let down, from which sinkers are suspended, with the function of forming loops between every other pair of needles. The sinkers fall in sequence to avoid thread breakages.

- iii) Another set of sinkers is let down to divide the loops between all the needles. The loops are now all equalized. Drawing 1, fig.3, shows the jacks, sinkers and needles in position.
- iv) The loops are brought to the needle head. This is done by the sinkers. Drawing 1, fig.2, shows one line of loops made and another in the beards of the needles (R on the drawing).
- v) The web (the work already knitted) is at the stem of the needle, see Drawing 1, fig.2 at point S . The beards are depressed by the presser (Drawing 1, fig.1) and the web is taken by the sinkers over the needle heads.
- vi) The web, which now includes as its top row the line of thread thrown over in operation (i) above, is taken back by the sinkers to the stem of the needle.
- vii) Another course of thread can now be laid.

Drawing 2 shows in context the parts of the machine already mentioned and the mechanism through which they are controlled by the operator, whose hands, eyes and feet are kept in constant action. Felkin said that feet moved at the rate of one hundred yards in a minute but this seems to be an exaggeration. Keen eyesight was needed to notice any irregularities in the web, which affected the price paid for the article. Felkin thought that the exercise was 'favourable to the health' of the framework knitter. Operators worked in cramped conditions, however. Although daylight was provided by long stretches of window, light was poor for part of the day for much

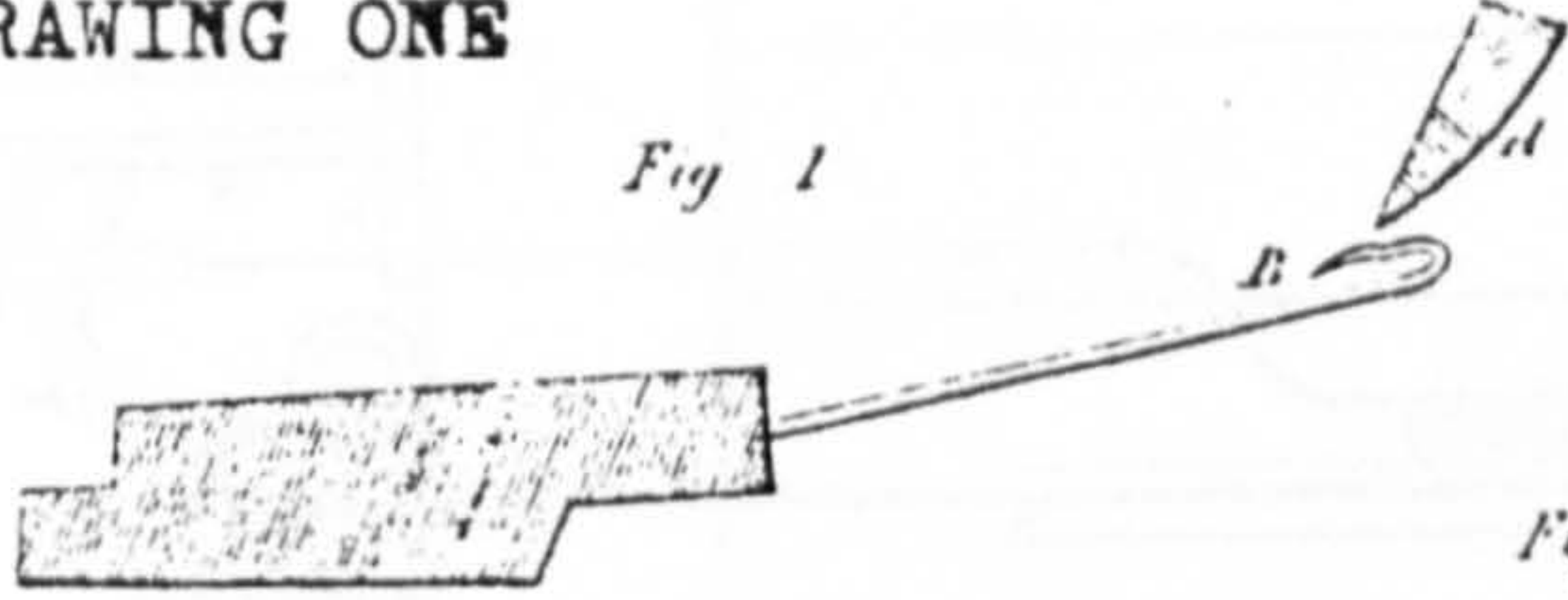
of the year. The apparent complications of the operation become routine quite quickly and Felkin said that a youth ten or twelve years old could soon learn the work. The higher wages were earned by stronger men.

The product is a flat article which needs making-up, a child's or woman's work in the nineteenth century. Fashioning, or 'narrowing' as it is called, is a matter of reducing the number of needles in use on either side of the work. Widths that can be knitted range from under twenty inches on a narrow frame, producing a fashioned article, up to fifty inches on a wide frame; the material here is unfashioned and was used in the nineteenth century to be cut up into a number of unfashioned pieces.

The weaving loom was adapted for steam power before the knitting frame, which first required a radical revision of its structure. The belief was widely held that steam could never drive it, because of the varied movements of the hands and legs, and the need for close observation of the knitting process by the operator.

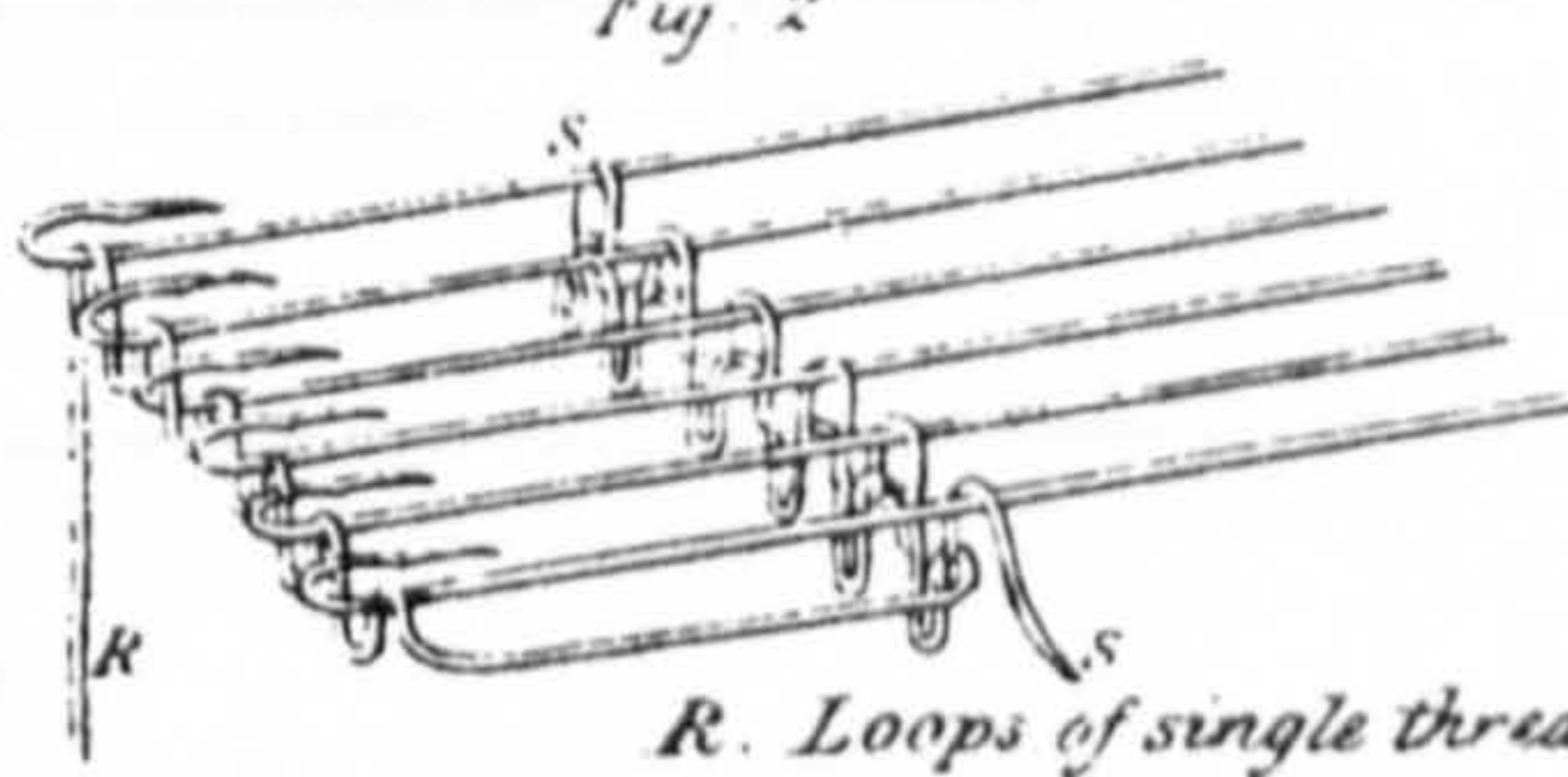
DRAWING ONE

Fig. 1



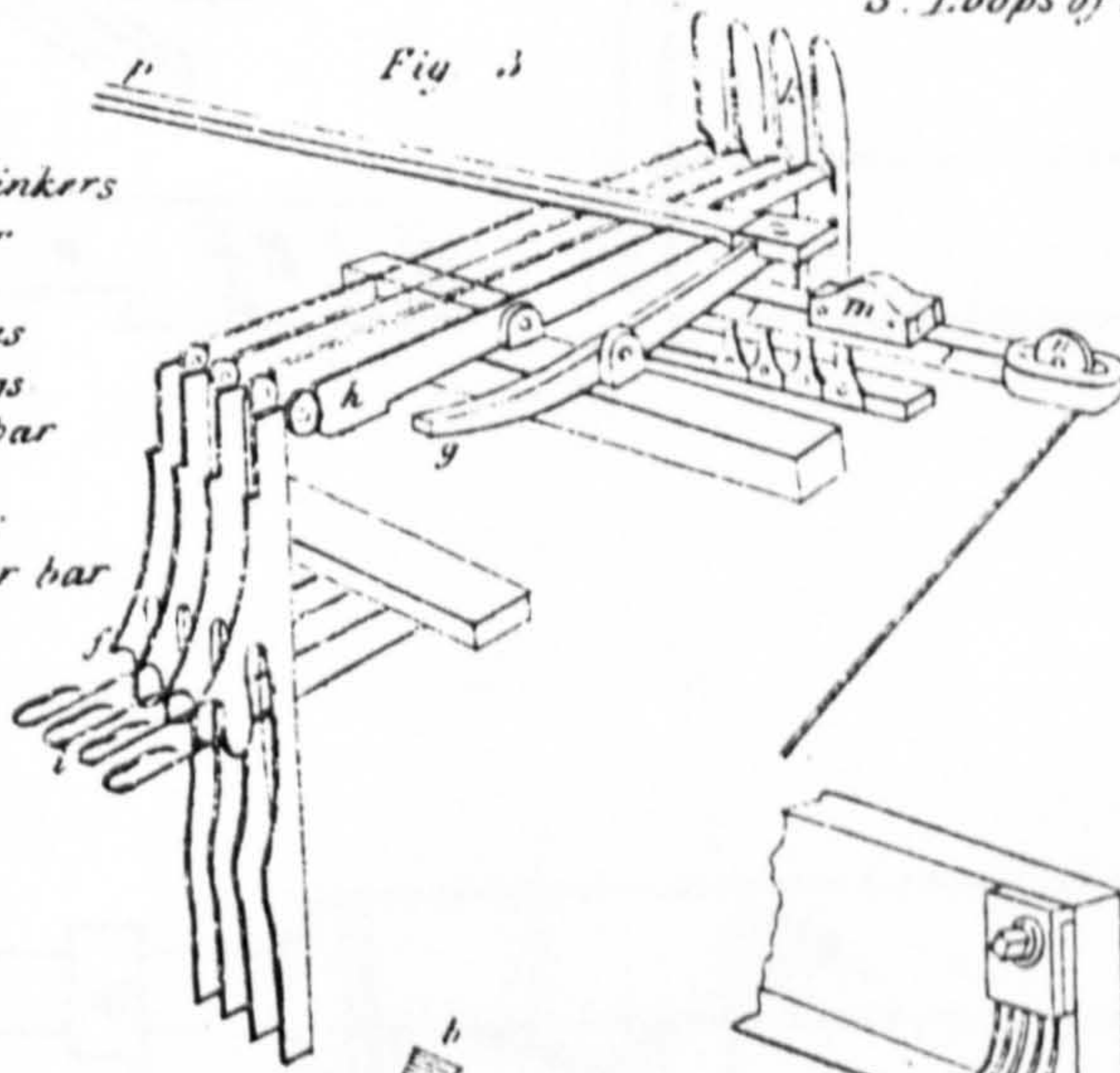
A. Section of Presser bar to act on B. Needle beard.

Fig. 2



R. Loops of single thread
S. Loops of web to pass over beards.

Fig. 3



- f. Jack Sinkers
- g. Locker
- h. Jacks
- i. Needles
- k. Springs
- l. Slur-bar
- m. Slur
- n. Pulley
- p. Locker bar

Fig. 4

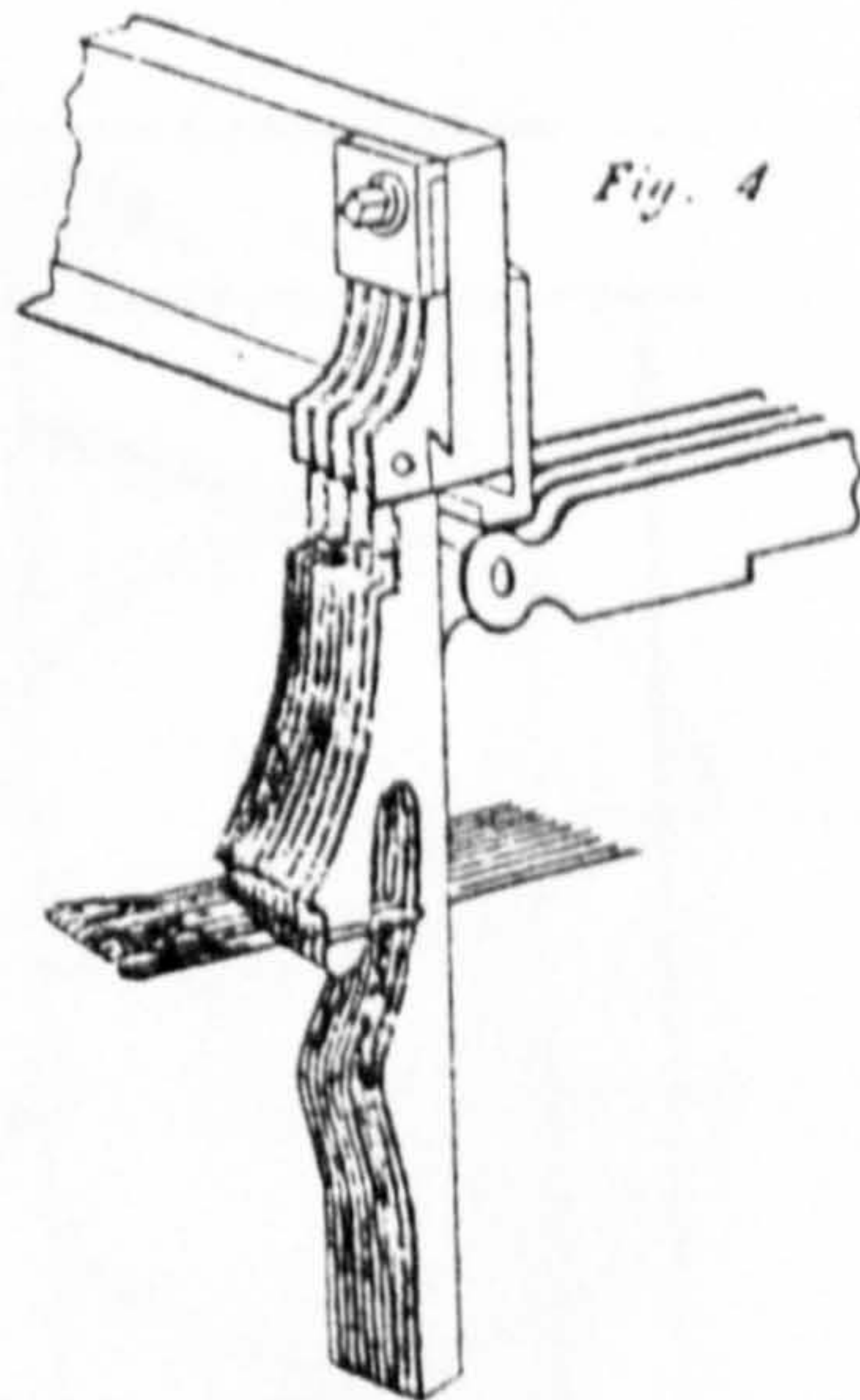
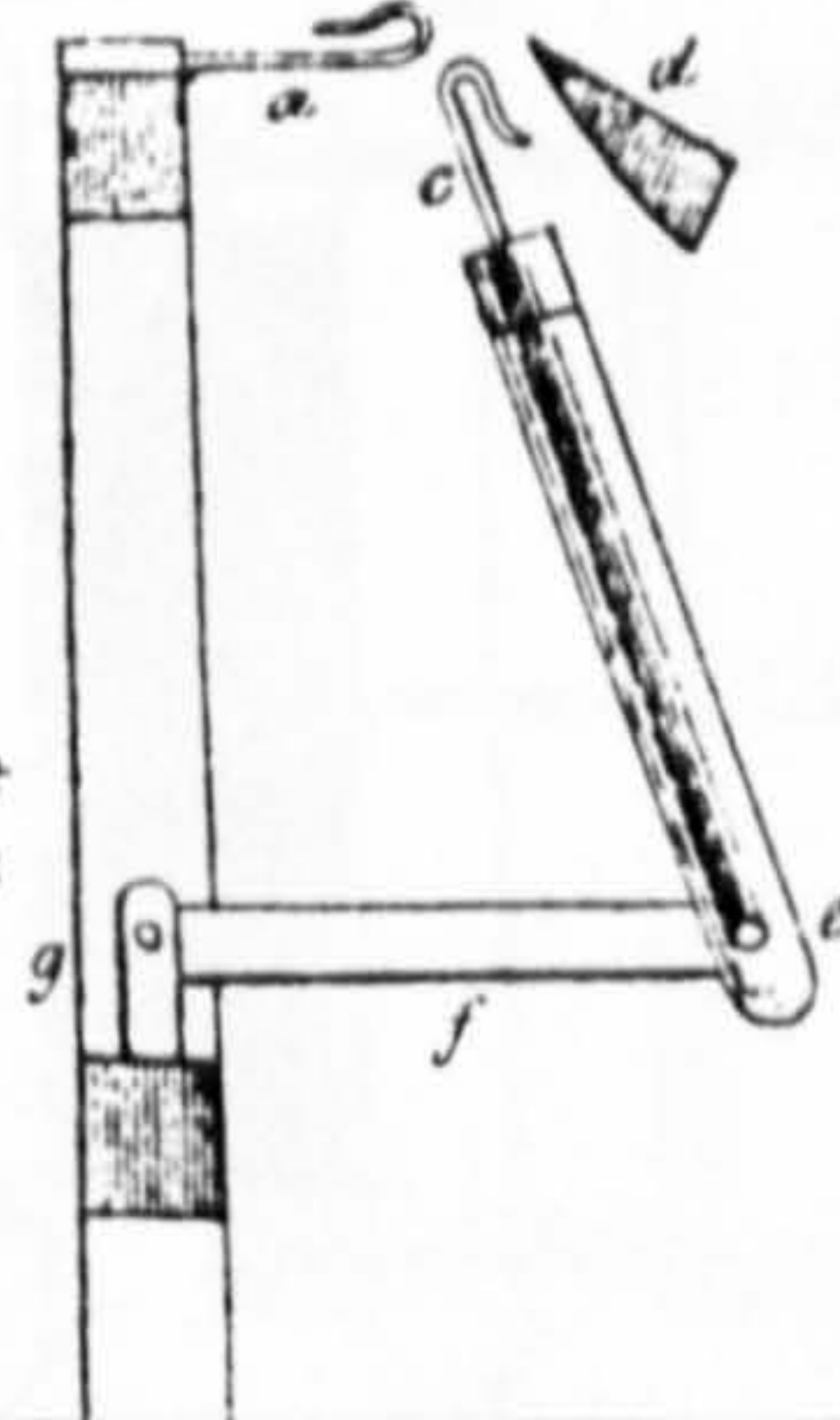


Fig. 5

SECTION OF LEE'S FRAME.

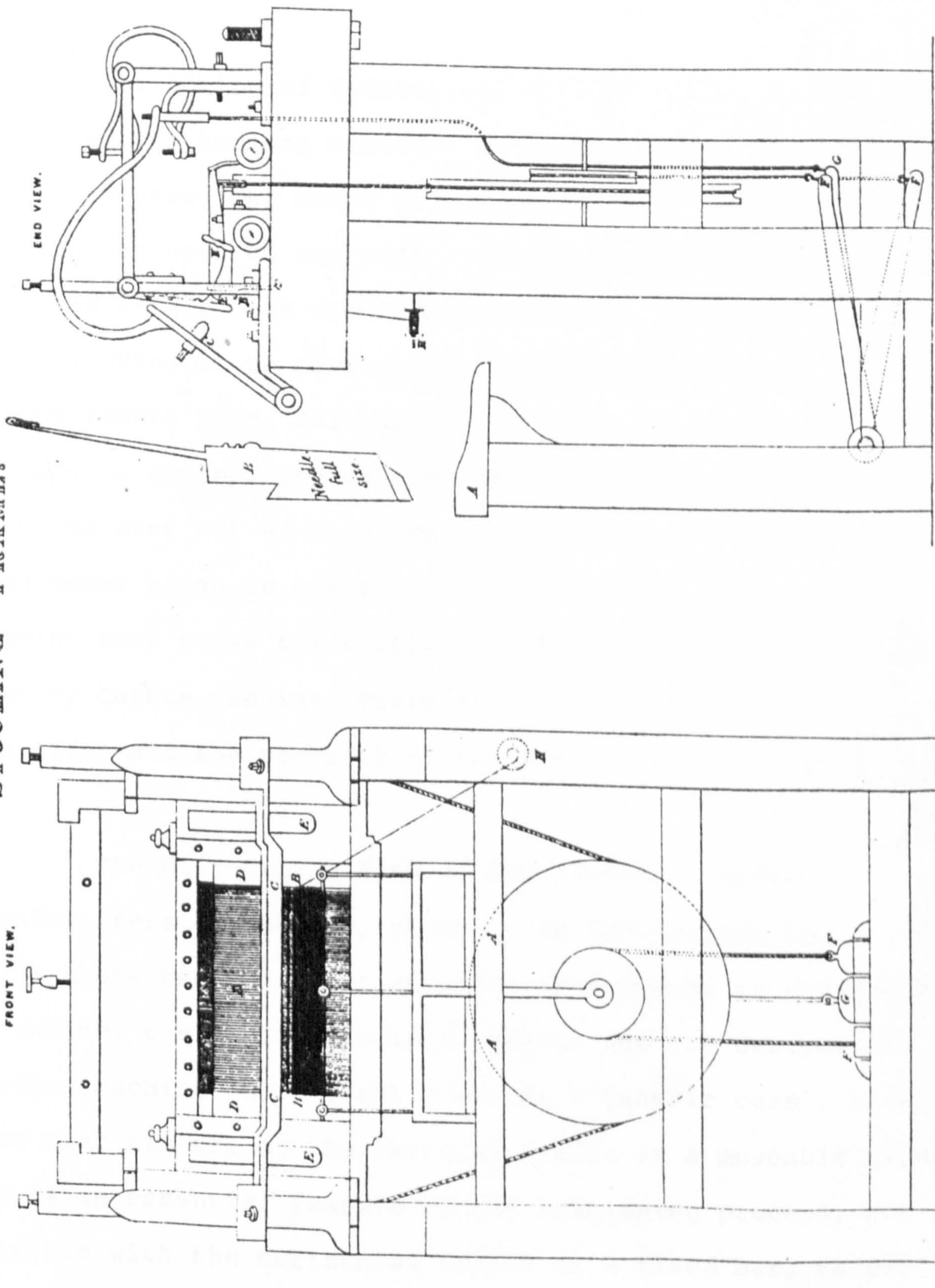
- a. Needles
- b. Presser
- c. Needles
- d. Presser
- e. Moveable Joint
- f. Vibrating Arm
- g. Standard

STRUTT'S MACHINE.



DRAWING TWO

STOCKING FRAME.



A. Workman's Seat.
 B. Needles or hooks.
 C. Presser.

D. Sinkers.
 E. Frame handles.
 F. Treddles for drawing Jacks.

G. Treddie to force down the Presser.
 H. Bobbin supplying yarn.
 K. Jacks from the cords of which sinkers D are suspended.

APPENDIX 7b

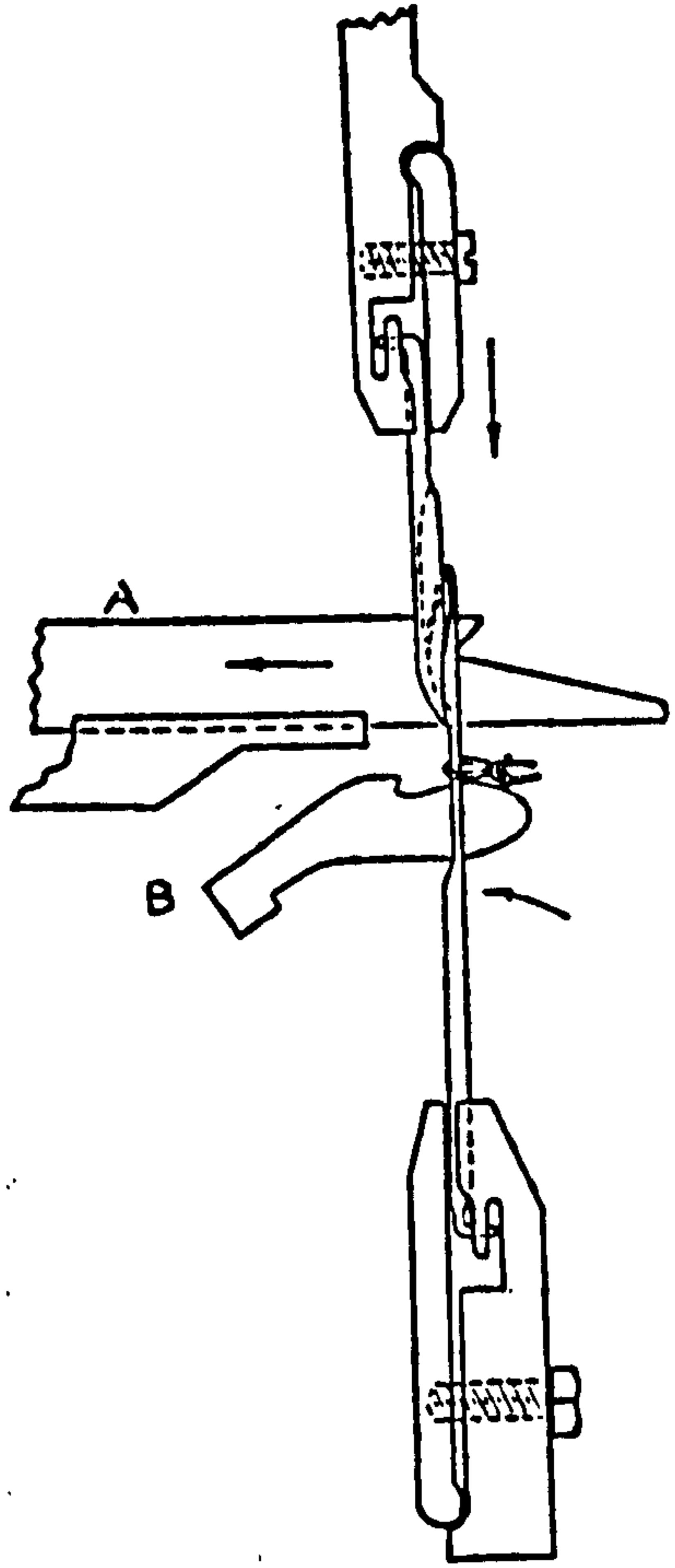
TECHNICAL INFORMATION: THE AUTOMATIC FASHIONING OF HOSIERY

The action of fashioning, or loop transfer, is carried out on modern hosiery machines by 'shaping boxes' moving above the needle-row. The boxes hold fashioning points, rather like needles but open on one side. The appropriate point descends over the needle, the open side accommodating the needle beard, thus allowing it to move along the shank of the needle to pick up the fabric loop. This action is shown on Drawing Three. The process is accompanied by the movements of the sinker A and the knocking-over bit B, on which the fabric loop rests. The box then moves along to transfer the loop to the needle selected. Drawing Four shows the shaping boxes in position on a modern Bentley-Cotton machine. There are four in this instance because the sides and the vee-neck of the garment require fashioning.

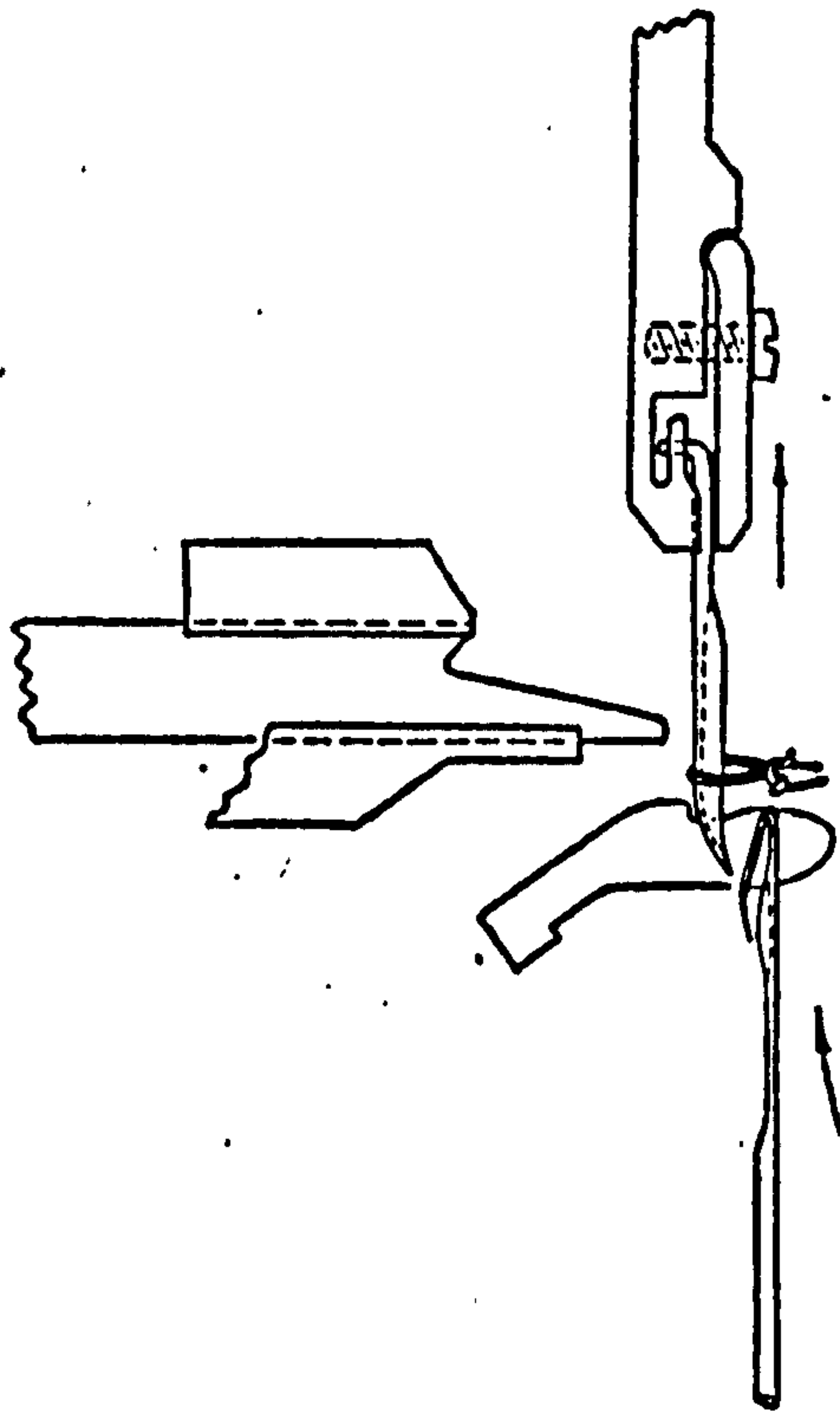
The West German firm of Groz-Beckert, modern manufacturers of needles, state in an information leaflet that, while there has been much detailed improvement to the Cotton invention, the basic principle remains and the designation 'Cotton Machine' has 'rightly become a generic term'. It will be seen that his use of the vertical needle in a moveable needle bar is an essential feature of the fashioning process, not possible with the horizontal needle in a fixed bar, as used on the hand knitting frame.

N.B. The Paget machine patented in 1857 used a bar which made a swinging movement in front of the needle row. This bar carried the fashioning points.

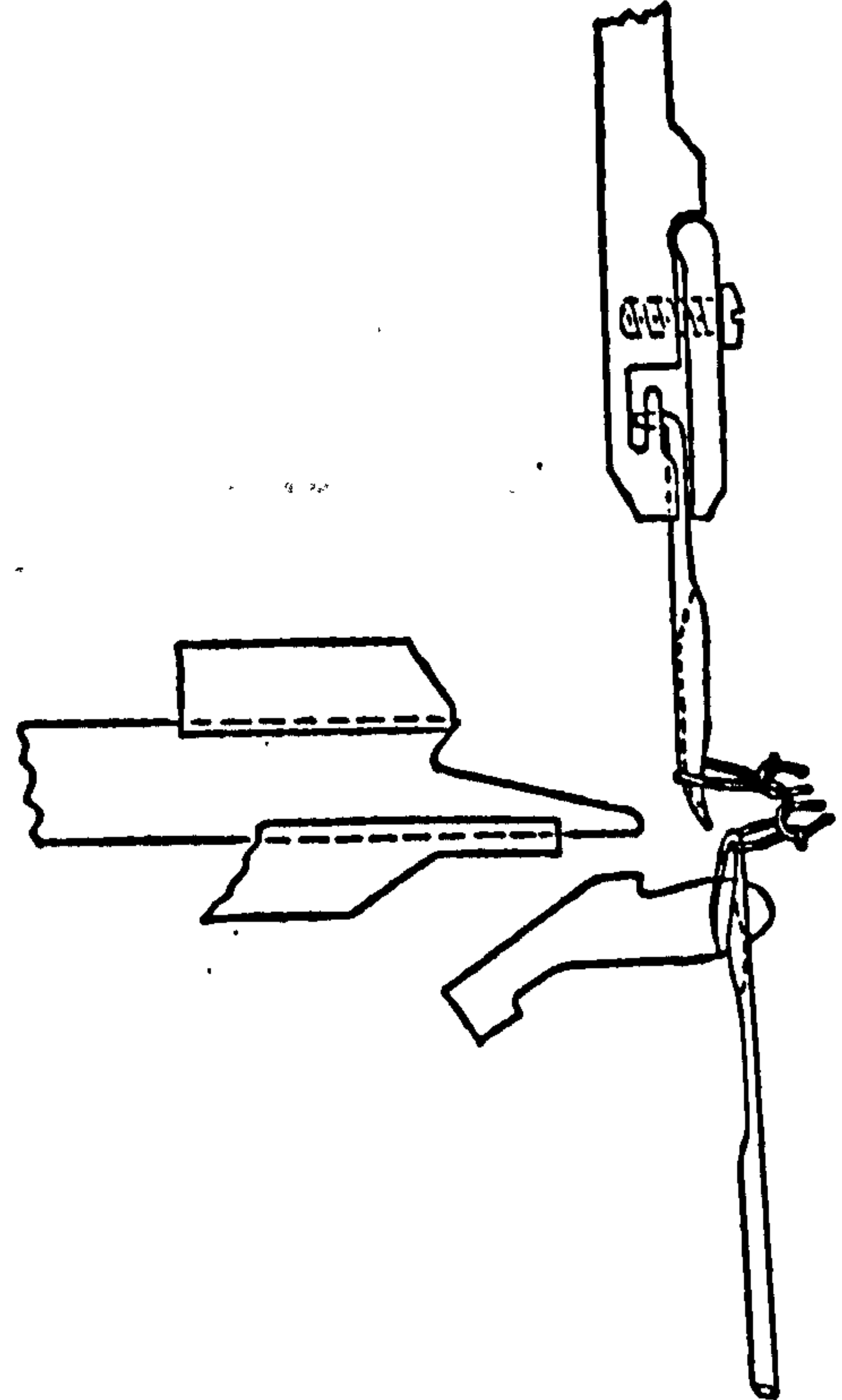
DRAWING THREE



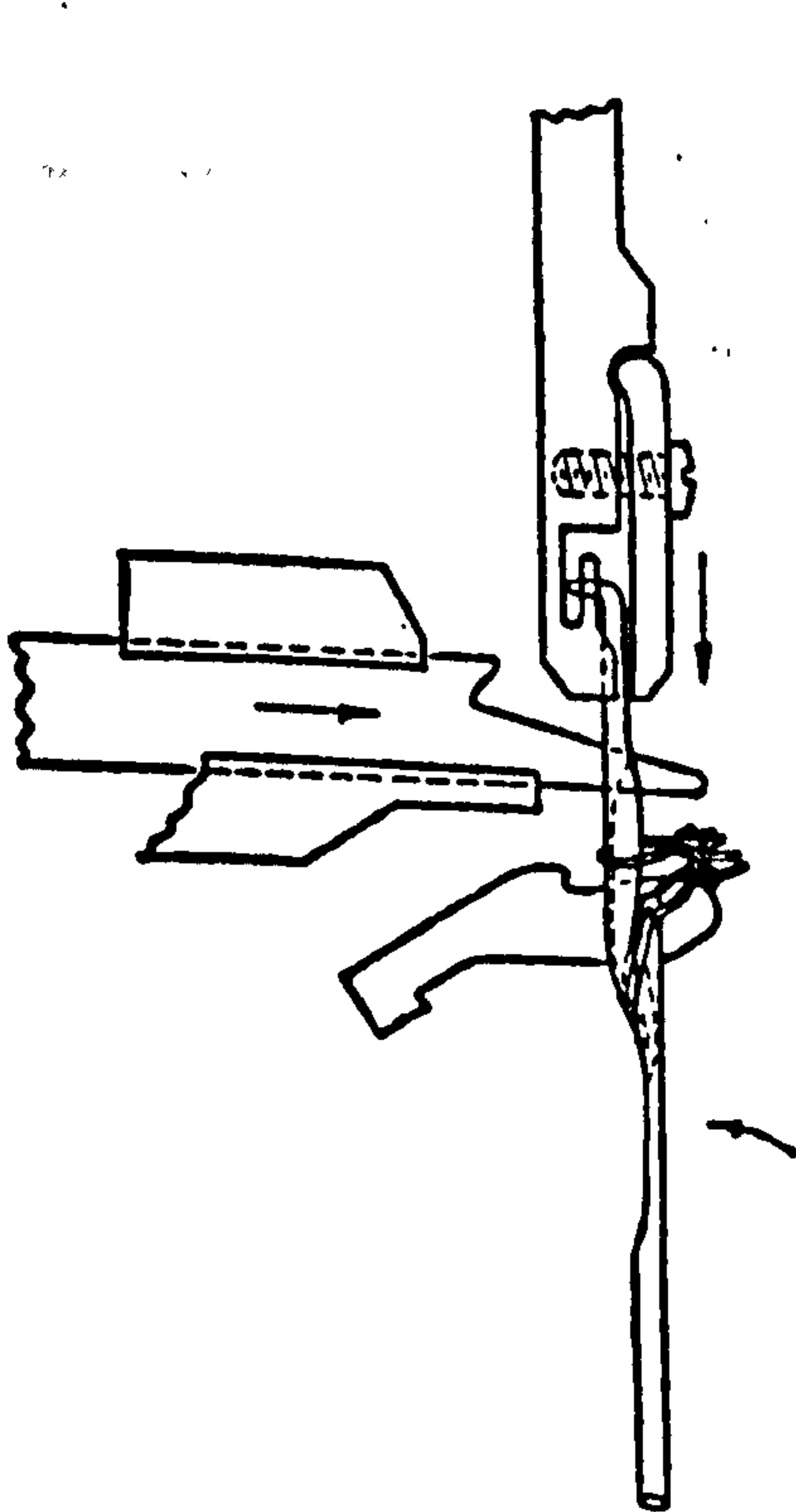
Fully-fashioning action
—stage 1



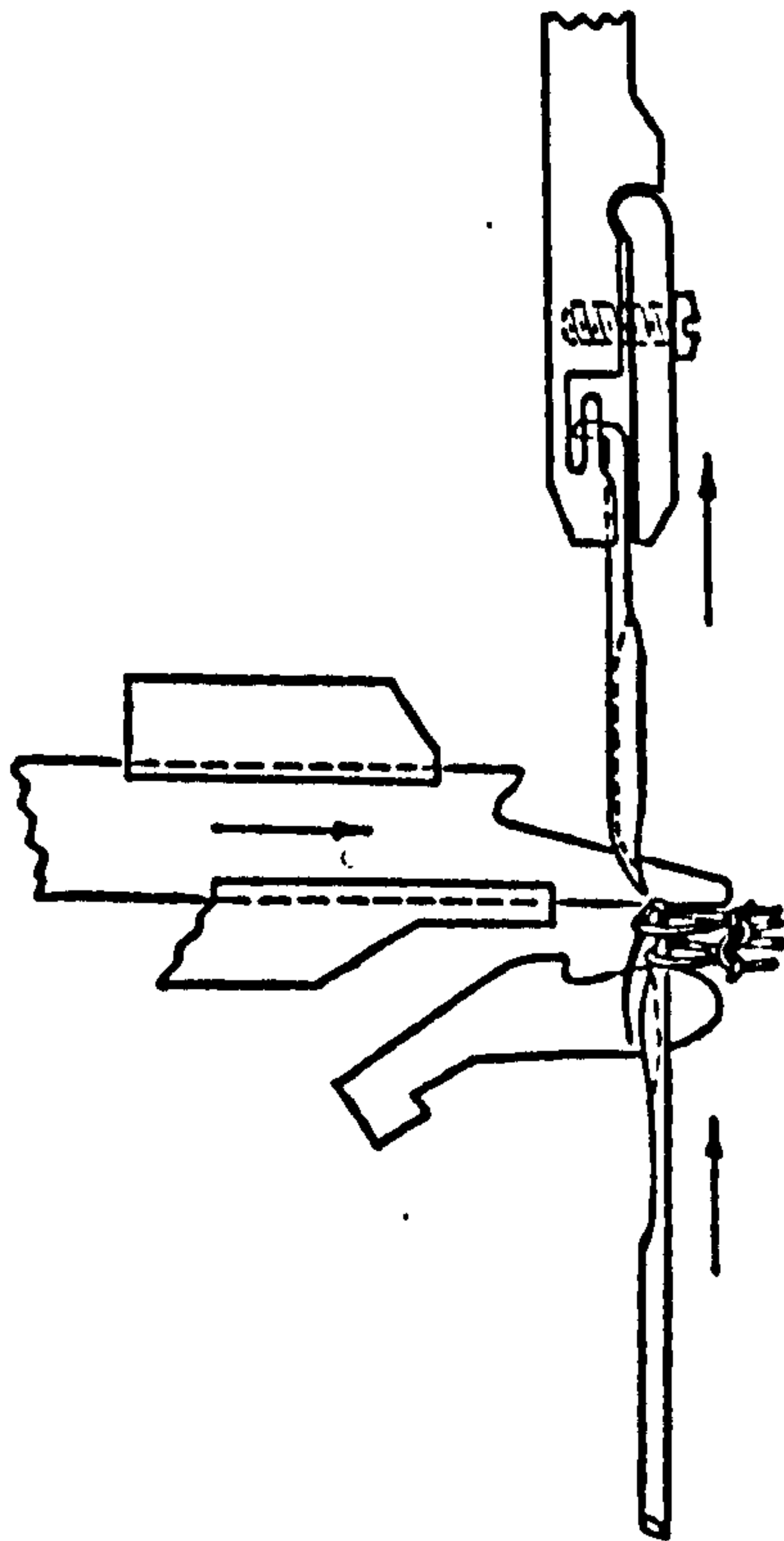
Fully-fashioning action
—stage 2



Fully-fashioning action—stage 3

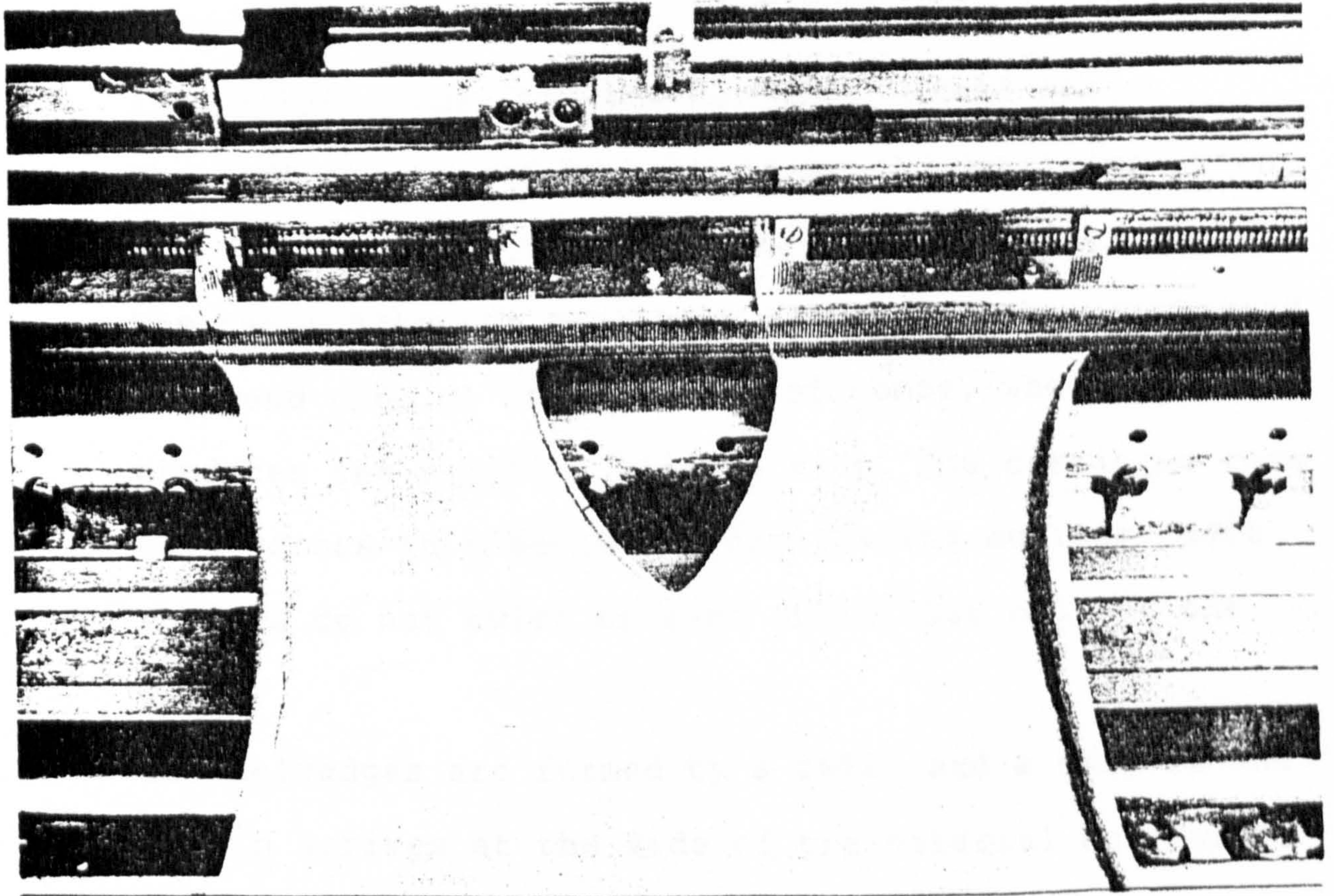


Fully-fashioning action
—stage 4



Fully-fashioning action
—stage 5

DRAWING FOUR



Shaping a two carrier or fully-fashioned vee-neck.

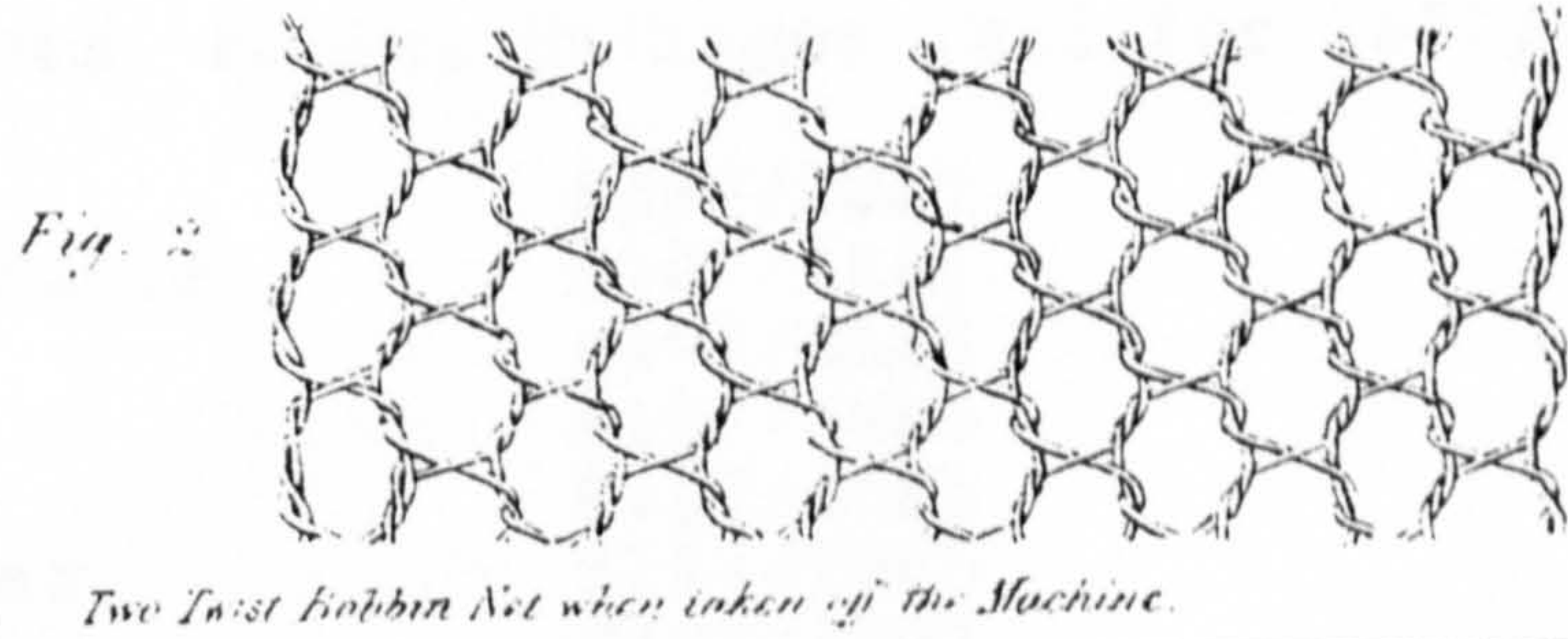
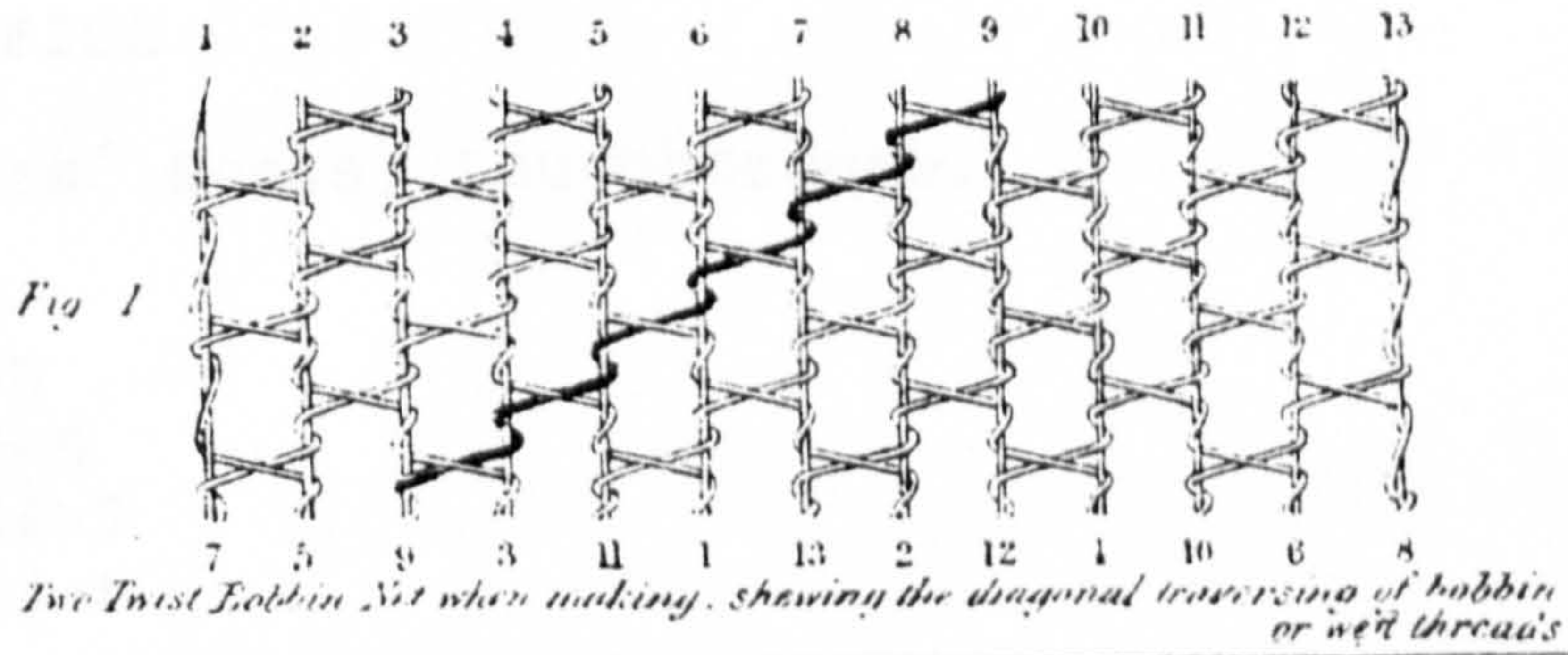
(By courtesy of Bentley Cotton Ltd.)

APPENDIX 7C

TECHNICAL INFORMATION: THE BASIC PRINCIPLE OF THE BOBBIN NET
LACE MACHINE

1. Warp threads are stretched from a lower roller to an upper work beam.
2. Drawing Five (Fig.1) shows lace in the making, the warp is held firm but the weft goes diagonally across it, from either side (see the darkened thread 9).
3. The weft is carried by bobbins set in carriages which are moved by bars divided into grooves, called combs. The combs take the carriages across to the warp thread and send them on the next set of combs, whose action produces the twist of weft on warp. The carriages thus move across in a series of oscillating motions. Weft threads do not twist on each other, but only on the warp.
4. The selvages are formed by a twist and a half as the bobbin arrives at the side of the material and turns back to travel in the other direction.
5. Drawing Five (Fig.2) shows how the warp relaxes when the lace is removed from the machine, and so forms the lace net.
6. Fig. 3 shows the bobbin, its carriage and the combs used on the Heathcoat machine.

DRAWING FIVE



BOBBIN & CARRIAGE OF HEATHCOATS

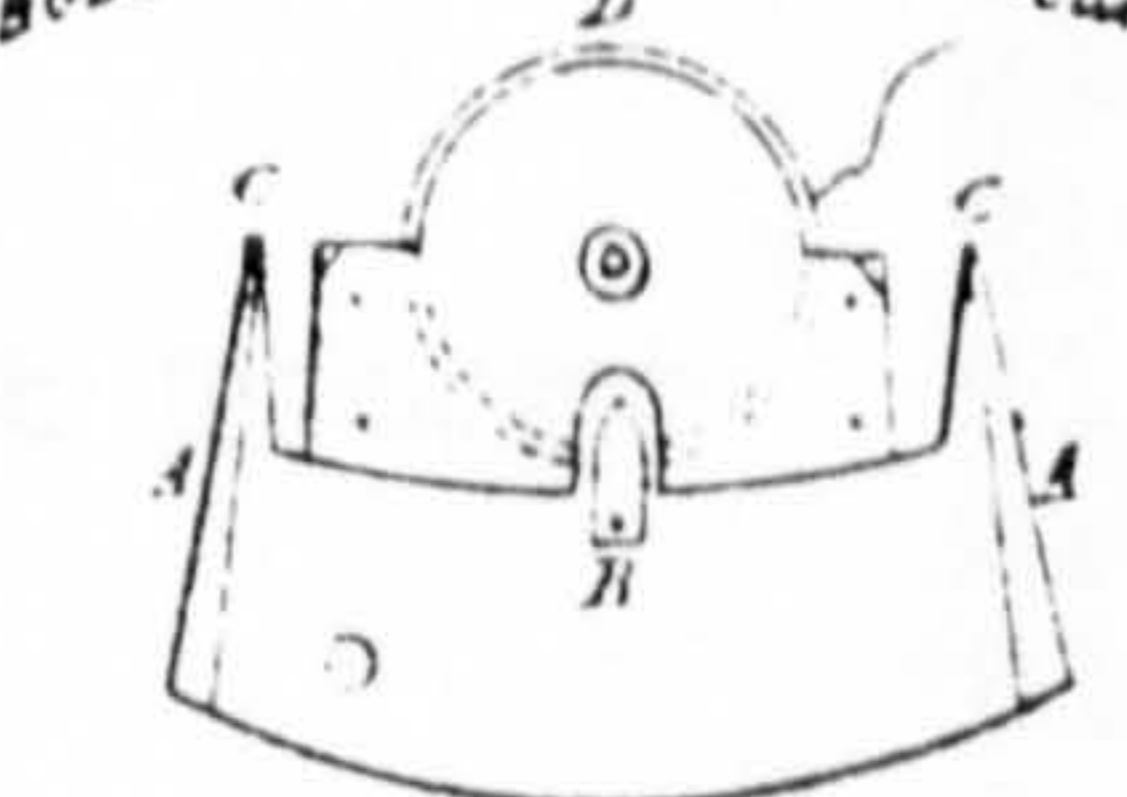
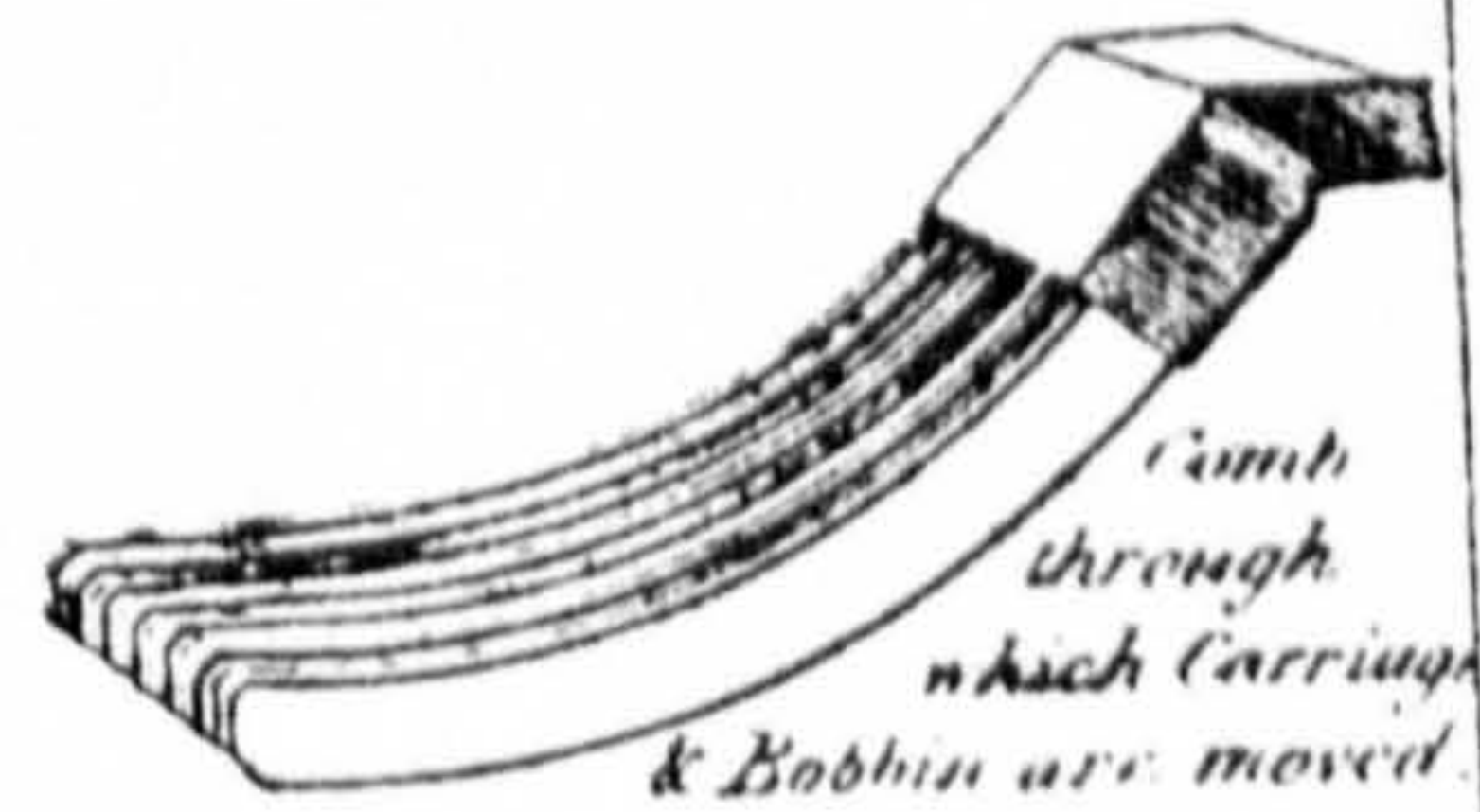


Fig. 3



NET A MACHINE.
A. Carriage B. Spring
C. Catches D. Bobbin

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MISCELLANEOUS

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PERSONAL CONVERSATION

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